

Review research paper

## STUDENTS' PERCEPTIONS ON THE USE OF GOOGLE CLASSROOM IN LSP LEARNING AND ITS EFFECTS ON DEVELOPING LINGUISTIC COMPETENCES

Jelena Basta, Slavica Pejić

Faculty of Economics, University of Niš, Republic of Serbia

**Abstract:** *The use of digital technologies is an integral part of teaching and learning languages for specific purposes (LSP), as well as language in general. Google Classroom represents one of the most popular educational platforms and its application to the teaching and learning process of LSP is inevitable. Since the pandemic of COVID-19 has brought about the shift of entire teaching to the digital sphere, this platform seems to be an acceptable means of achieving intended learning outcomes. Yet, very little research on attitudes of students as end users of the Classroom to its usefulness has been done. The aim of the paper is to analyse the perceptions of the students who attend LSP classes at the Faculty of Economics, University of Niš. The research deals with three aspects – the ease of use and the usefulness of Google Classroom and the effects of the use of Google Classroom on the development of four linguistic competences. The quantitative data were obtained by a survey (with an application of the five-point Likert scale), while the qualitative aspect of the survey was accomplished by means of analysing answers to one open-ended question. The research results point to the fact that majority of respondents have positive attitudes in terms of the ease of use and usefulness of this platform. It can be concluded that Google Classroom represents a very useful teaching and learning tool. It is up to the students to use their own motivation and self-regulation to do their best and reach the maximum of the teaching and learning potential of this platform.*

**Key words:** *Google Classroom, students' perceptions, ease of use, usefulness of Google Classroom, linguistic competences, reading, writing, listening, speaking*

### 1. INTRODUCTION

In the modern globalized world, the use of digital technology has been on the rise. Developments can be observed in almost all spheres of life. Technology has been applied to various fields, such as economy, politics, and education. Many people seem to have become dependent upon information and communication technologies. Many managers use them to make predictions in their professional areas (Laudon and Laudon 2014). IT professionals are becoming increasingly dedicated to innovations within the computer sector, hoping to facilitate the lives of other people and everyday activities, such as sending messages, solving tasks, communicating online, searching for and purchasing various

---

Submitted April 21<sup>st</sup>, 2023, accepted for publication May 14<sup>th</sup>, 2023

Corresponding author: Jelena Basta, Faculty of Economics, University of Niš, Republic of Serbia

E-mail: [jelena.basta@ekonomski.rs](mailto:jelena.basta@ekonomski.rs)

commodities via the internet, ordering fares, etc. Therefore, many aspects of human life have been influenced by information about technological development, whereby one of these aspects is related to the educational process.

The lockdown and closure of educational institutions worldwide and the implementation of the social distancing policy as the main preventive measure against the spread of the COVID-19 virus put aside the traditional method of teaching, according to which students are expected to attend classes in a physical classroom. Online teaching/learning took precedence in most educational institutions, including primary, secondary, and higher education. The use of new information technologies also affected language classrooms, where interaction between students and teachers had always been crucial to the successful mastery of the teaching/learning materials.

Nowadays, higher education students are becoming increasingly reliant on new technologies when it comes to reading and learning, and this fact has encouraged web designers to take advantage of this situation and develop new technologies. Although new technologies are viewed as positive and desirable by most students (Al Bataineh et al. 2019), they require changes in personal lifestyles, which seems intimidating at first glance. For instance, some studies have shown that many students do not have much free time for new requiring technologies; consequently, they are more concerned with time constraints than with actual educational opportunities (Staford 2011). Keeping all this in mind, online learning and teaching platforms are considered to be the most appropriate time-saving tool teaching students social skills, encouraging self-directed learning and self-reflection, and motivating users to keep up with the latest technological trends (Taylor et al. 2011). It has been proved that technology both promotes active student participation in the teaching process and improves learning outcomes (Kuh and Hu 2001). Unlike traditional methods, which, in most cases, make students passive learners, the use of technology while teaching turns students into active participants in the teaching process (Basta 2017). Hence, a large number of teacher- and student-friendly applications have recently emerged.

Instead of taking place in the real world through physical and social interaction, learning can now take place online (Dhawan 2020). Online learning refers to educational experiences in synchronous and asynchronous environments using different devices (e.g., mobile phones, computers) (Singh and Thurman 2019). The utilisation of online teaching is getting more prominent nowadays, as students and teachers participate in the learning process through various activities, such communicating via applications and communication platforms, sharing teaching/learning materials, etc. Moreover, quizzes and homework assignments that teachers post online, grade and return to students are gaining more importance. At the same time, students can access teaching materials at any time without time constraints, submit homework assignments, and communicate with each other (Lonn and Teasley 2009).

The aim of this study is to explore the attitudes of students who attend language for specific purposes courses (LSP) at the Faculty of Economics in Niš. Specifically, this study investigates the use of Google Classroom as an online educational platform. The paper will present the results of a quantitative and descriptive research conducted through a questionnaire, while one open-ended question was used for a qualitative analysis. The research was based on the following questions:

1. Do the LSP students find Google Classroom easy to use?
2. Do the LSP students find Google Classroom useful for learning LSP?
3. Do the LSP students believe that the use of Google Classroom positively affects the development of linguistic competences – writing, reading, listening, and speaking?

## 2. THEORETICAL BACKGROUND

### 2.1. Google Classroom

One of the most popular forms of online learning management systems is Google Classroom. The application was developed by Google for academic and educational institutions, and was officially launched on August 12, 2014. Google Classroom provides a free platform for students and teachers to connect and communicate within and beyond the limits of the walls of a physical classroom. Recent data show that during the first six months of the use of Google Classroom over thirty million assignments were posted on this platform, indicating that it is a useful educational tool (Iftakhar 2016).

It is a newly recognised, innovative, and one of the best online learning and teaching platforms. The educational community has embraced the use of Google Classroom, hoping to improve the process of e-learning, i.e., distance learning. This platform integrates technology into the traditional classroom environment. The widespread use of this revolutionary technology has led to an increased interest among researchers in this educational area, and thus to a greater number of data sources and references on this topic. Teachers can enhance and supplement their live classes with online teaching/learning through Google Classroom (Halverson et al. 2017).

Google Classroom is very useful and efficient, and it represents a real challenge to both teachers and students. First of all, it is available to everyone around the world as a part of the tools and applications comprising the Google Apps for Education package (Gmail, Google Drive, and Google Docs) (Northey et al. 2015). Secondly, Google Classroom is known for its ease of use (Janzen, 2014) and its simple task-organisation method and a time-saving aspect (Northey et al. 2015), as it can be easily accessed from laptops, computers, tablets and mobile phones. In addition to this, it is designed to make teachers' lives easier and more organised, since it is paperless (Hulse 2019). Finally, online learning platforms, including Google Classroom, provide flexibility in class scheduling, eliminate travel costs, and can be accessed by anyone with an internet connection.

Google Classroom automatically creates a folder on Google Drive for each task assigned, so that students can easily track their assignments and check whether all the tasks have been completed or not, and what the due date is. Teachers can check students' homework, grade it, and provide direct comments in real time. Students can complete their tasks from different devices. In addition to this, both students and teachers receive notifications about new comments on the class stream, so that all participants in the educational process are kept up-to date.

Google Classroom is easy to manage and teachers can invite students directly or provide a code to join a newly-created classroom. When it comes to classroom organisation, it only takes the teacher a few minutes. Furthermore, paperless tasks save money and time, and enable teachers to create and design, review, and grade assignments in one application. Moreover, students can easily access their assignments and instructional materials (such as documents, images, and videos) that are automatically saved in folders on Google Drive (which is also time-saving, since the participants in the educational process do not need to allocate additional personal time for data storage). Google Classroom also saves teachers' physical space, as all assignments are done without using paper, which used to be stored at both teachers' work and home. Additionally, teachers can check who has and who has not done their homework, and provide individual comments to each student. This platform gives teachers an opportunity to provide real-time notifications, ask questions, and interact with students. Students can use the class stream

to share additional materials, exchange information with their peers, or ask questions. Finally, it is important to notice that the platform itself is not burdened with advertisements, and the contents that teachers share cannot be used for commercial purposes.

Although the use of this modern platform seems to provide benefits to both teachers and students, opinions regarding the effectiveness of implementing this tool are conflicting. Some researchers (Heggart and Yoo 2018; Northey et al. 2015) attach great importance to this platform; yet, others believe that the traditional teaching method is irreplaceable (Pienta, 2016; Henrie et al. 2015). However, it seems that blended learning could be a solution to creating a student-oriented teaching/learning environment supported by both curricular and extracurricular activities (Northey et al. 2015). Although digital teaching materials have been proved to encourage students to actively participate in blended learning environments, Pienta (2016) expresses concern about such a great number of opportunities and assistance at students' disposal that could make completing tasks too easy, thereby reducing the effectiveness of learning. This could be a serious problem as the teacher might not be evaluating the work of the student, but someone else's work. Halverson (Halverson et al. 2017) identifies various challenges associated with the implementation of Google Classroom, including students' privacy concerns and differences between the educational goals of students and the educational institution.

The challenges related to the implementation of Google Classroom in the LSP classroom are also numerous. The question arises whether LSP teachers can successfully use this platform to teach all four language skills – reading, writing, listening, and speaking – and whether students can develop these competences to a sufficient extent through independent work and with the support of this platform. The fact is that LSP instruction focuses on the development of functional literacy, i.e. the usage of vocabulary and grammatical structures within a specific professional context, with a particular emphasis on the development of communicative writing and oral skills. Therefore, the outcome of using Google Classroom in LSP classes is often uncertain, as both the teaching materials and tasks need to be adapted to this type of learning. Unlike the myriad of general language sources available on the internet, ready-made LSP materials cannot be easily found and posted on the platform to serve as the backbone for further student work. Therefore, teachers are supposed to design the materials themselves and adapt them to the textbooks that students use.

## **2.2. Student attitudes towards Google Classroom**

Several studies have been conducted to examine students' attitudes towards Google Classroom as a learning management system. One study (Al-Marouf and Al-Emran 2018) shows that the simple use and technological benefits positively affect users' behavioural patterns, which implies that this statement could also be applied to the use of Google Classroom. Another study that examines students' attitudes towards Google Classroom as a mobile learning platform (Kumar and Bervell 2019) highlights a significant non-linear relationship between motivation and habit. Students readily accept Google Classroom and have positive attitudes towards their habit of using it, motivation for work, and expectations for the outcome of using this platform. In addition, research (Munasinghe and Percy 2016) confirms that ease of use and the benefits of the application significantly influence positive attitudes towards Google Classroom.

### 3. METHODOLOGY

For the purpose of this study, research has been conducted to investigate how the LSP students perceive the use of new technology in terms of the usefulness and the ease of use of Google Classroom. The usefulness of the platform measures the degree of improvement in the students' performance after using the platform, while the ease of use measures the degree of simplicity to access the new technology. In addition, the third part of the research focuses on examining the LSP students' personal attitudes towards the impact of Google Classroom on four language competences – reading, speaking, listening and writing.

The research data were obtained from two sources. The first source is a five-point Likert-scale questionnaire. Each questionnaire item is measured on a scale ranging from 1 to 5: strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agree (5). As the results obtained from this Likert scale may not provide the clearest insight into the students' attitudes, it was necessary to calculate the mean value of the results obtained. For the purposes of this analysis, the obtained values were interpreted using following Table 1:

Table 1. Interpretations of mean values obtained using a five-point Likert-scale questionnaire

Mean value	Interpretation
1 to 1.80	strongly disagree
1.81 to 2.60	disagree
2.61 to 3.40	neutral
3.41 to 4.20	agree
4.21 to 5.00	strongly agree

*Source:* Sözen and Güven, 2019

The second source is one open-ended question at the end of the questionnaire; as a matter of fact, the students were expected to describe how Google Classroom helped them acquire language skills in their field of study, as well as the challenges and obstacles they faced using this platform.

#### 3.1. Respondents and research context

The research was conducted at the Faculty of Economics, University of Niš, after the completion of the 2019/20 school year and the termination of the state's Covid-19 State of Emergency. The study involved only the second- and third-year students (aged between 20 and 22) who attended an LSP course for the first time. The research sample included 100 students. The students attending the LSP courses used the textbook materials written by professors at the universities of the Republic of Serbia. All the texts in the textbooks, as well as the accompanying exercises, are economics- and economy-related. As the classes during the state of emergency (from March to May 2020) were conducted through various online platforms, the LSP teachers had to find a way to work with the students to help them successfully master the LSP courses and develop all language skills. Google Classroom appeared to be an excellent solution to such an unexpected situation, as the teachers could post various materials and assign different types of homework. When it comes to the materials found on the platform, the teachers posted various PowerPoint presentations that offered the students explanations related to the vocabulary and grammatical structures that accompany the textbook units. Additionally, the teachers recorded audio and YouTube

video clips concerning the contents from the presentations. The students could access them when they wanted to, at any point of time, and this was considered a great advantage because they did not have to attend live lectures. Regarding homework, the students were required to regularly read the texts from the textbooks and solve the exercises accompanying the given texts. A special challenge to the students was homework in the form of audio and video recordings. Namely, the students were expected to record a short video on a specific topic (as a segment of a pre-reading assignment), answering the questions posed by the teachers in Google Classroom. Furthermore, they were required to summarize and retell the lessons after reading them, record them, and post them to the platform, as well as write short texts and essays on given topics. All these activities were conducted to develop all four linguistic competences of the LSP students: reading texts was supposed to encourage the development of reading skills; audio recordings and YouTube presentations provided by the teachers were aimed at encouraging listening skills; audio and video recordings recorded by the students themselves were intended to develop speaking competences, while writing short texts and essays was expected to develop writing skills.

### 3.2. Data Collection

The data was collected through a questionnaire consisting of two parts. The first part contained 13 statements related to: 1) the ease of use and 2) the benefits of using the application. The second part consisted of 22 statements regarding students' attitudes towards improving their own language skills, including: 1) writing, 2) reading 3) listening and 4) speaking. The responses obtained through the questionnaire were complemented with an open-ended question, aimed at adding to the qualitative aspect of the research. Here the students were able to elaborate on their feelings and provide critical opinions regarding the analysed attitudes.

## 4. RESEARCH RESULTS

To examine the attitudes of the LSP students towards the use of Google Classroom (GC), it was necessary to start with several questions. The first question was: Do the LSP students find Google Classroom easy to use? Student attitudes were examined through quantitative research using a section of the questionnaire consisting of six statements. Table 2 provides an overview of the students' attitudes.

Table 2. Attitudes of LSP students about the ease of use of GC

Statement	Mean	Interpretation
GC is easy to sign in.	4.80	strongly agree
Learning materials are easy to access.	4.36	strongly agree
Assignments are easy to receive.	4.72	strongly agree
Assignments are easy to submit.	3.93	agree
GC is easy to use.	4.19	agree
It is easy to understand the GC system.	4.37	strongly agree
Mean of all statements.	4.395	strongly agree

Source: Individual research

As it can be inferred, the students have absolutely positive attitudes regarding the ease of use of the classroom, which is not surprising because modern generations are becoming increasingly familiar with the use of technology in everyday life. The statement which shows the highest value is that the platform is easy to access (4.80), while the statement that assignments are easy to submit (3.93) has the lowest value. The mean of all responses is 4.395, which indicates that the students have no doubt about the ease of use of Google Classroom.

The second question that the research needs to answer is: Do the LSP students find Google Classroom useful for LSP learning? The answer to this question can be obtained by means of a quantitative analysis of the data obtained by examining the students' attitudes towards seven statements, which can be seen in Table 3.

Table 3. Attitudes of LSP students about the usefulness of GC

Statement	Mean	Interpretation
GC activities are useful.	3.67	agree
GC represents an excellent means of social interaction.	3.29	neutral
GC enables more regular and timely assignment submission.	4.48	strongly agree
The teacher gives useful feedback on submitted assignments in GC.	4.16	agree
GC provides a useful grading and follow-up system.	3.90	agree
GC provides a clear subject description.	4.11	agree
GC should be used in higher education.	4.36	strongly agree
Mean of all statements	4.00	agree

Source: Individual research

The obtained results suggest that the students have positive attitudes regarding the benefits of using Google Classroom; and yet, to a slightly lesser extent compared to the ease of use of the application itself. This can be justified by the fact that the students at the Faculty of Economics in Niš were introduced to Google Classroom as a teaching platform for the first time during the pandemic and had no prior experience in this type of teaching. The statement that Google Classroom enables more regular and timely assignment submission shows the highest value in the table is (4.48), while the statement that Google Classroom is an excellent means of social interaction has the lowest value (3.29). This means that the students prefer using other applications such as Viber, WhatsApp, Facebook, and Instagram to Google Classroom for communication. Despite this, the mean of all statements (4.00) points to the fact that Google Classroom provides significant benefits to students acquiring language skills.

The research was also supposed to answer the question: Does the use of Google Classroom have a positive impact on the LSP students' development of linguistic competences – writing, reading, listening, and speaking? To achieve this, it was necessary to offer four groups of statements that the students were expected to express their opinions about. The first group of statements (seven of them) related to the writing competence, and the quantitative values related to these attitudes can be seen in Table 4.

It can be concluded that the statement *GC has positively affected my writing competence* carries the highest value (4.63), which means that the students themselves recognise substantial improvements in acquiring this skill through the use of this platform. The statement that the students pay more attention to the discourse management when writing assignments in Google Classroom than in a traditional classroom setting has the

Table 4. LSP students' attitudes about the effects of GC on the writing competence

Statement	Mean	Interpretation
I more willingly do my writing assignments in GC than in the real classroom.	4.36	strongly agree
I pay more attention to the word order when I do my writing assignment in GC than in the real classroom.	3.95	agree
I pay more attention to the vocabulary I use when I do my writing assignment in GC than in the real classroom.	4.29	strongly agree
I pay more attention to the discourse management when I do my writing assignment in GC than in the real classroom.	3.62	agree
I pay more attention to the use of formal vocabulary when I do my writing assignment in GC than in the real classroom.	4.60	strongly agree
I pay more attention to spelling when I do my writing assignment in GC than in the real classroom.	4.56	strongly agree
GC has positively affected my writing competence.	4.63	strongly agree
Mean of all statements	4.24	strongly agree

Source: Individual research

lowest value (3.62), indicating that the technological environment has not changed their awareness of the discourse management, despite the availability of numerous online tools for organizing a text. The mean of all statements is 4.24, which is almost a borderline value for a verbal, descriptive interpretation of the results (4.21). However, it is of crucial importance to note that Google Classroom has an extremely positive impact on the development of the writing competence.

Table 5 provides an overview of the students' opinions on the impact of Google Classroom on their reading competence.

Table 5. Students' attitudes about the effects of GC on the reading competence

Statement	Mean	Interpretation
I more willingly do my reading assignments in GC than in the real classroom.	4.37	strongly agree
I pay more attention to the new vocabulary I come across in the text when I do my reading assignment in GC than in the real classroom.	4.66	strongly agree
I pay more attention to the sentence structure when I do my reading assignment in GC than in the real classroom.	3.25	neutral
I am more focused when I do my reading assignment in GC than in the real classroom.	4.38	strongly agree
I can better understand the text when I do my reading assignment in GC than in the real classroom.	4.79	strongly agree
GC positively affected my reading competence.	4.72	strongly agree
Mean of all statements	4.36	strongly agree

Source: Individual research



The statement *I pay more attention to the sentence structure when I do my reading assignment in GC than in the real classroom* shows the lowest value (3.25). This implies that the students do not pay attention to the actual organization and structure of individual sentences within the text, but rather to the text as a whole, and that they are more focused on interpreting the entire text rather than individual sentences as separate syntactic units. The statement that the students can better understand the text when they do it as a reading assignment in Google Classroom than in a real classroom shows the highest value (4.79). The average value of all statements is 4.36, which means that the students have positive attitudes towards the impact of Google Classroom on the development of this language competence.

Three statements related to the development of listening skills and their quantitative results are presented in Table 6.

Table 6. Students' attitudes about the effects of GC on the listening competence

Statement	Mean	Interpretation
I pay more attention to the explanations presented in videos posted in GC than to the ones presented by the teacher in the real classroom.	4.62	strongly agree
I better understand the contents of the videos presented in GC than the very teacher in the real classroom.	3.78	agree
GC positively affected my listening competence.	4.22	strongly agree
Mean of all statements	4.21	strongly agree

Source: Individual research

The presented results indicate that the statement with the highest value in this set of statements is *I pay more attention to the explanations presented in videos posted in GC than to the ones presented by the teacher in the real classroom* (4.62). The statement with the lowest mean is that the students better understand the contents of videos presented in Google Classroom than the very teacher in the real classroom (3.78). The reasons for this are numerous, and some of them will be explored in greater detail in the subsequent discussion. The mean of all statements is 4.21, which, similar to writing skills, presents a borderline for a verbal interpretation of the results as absolutely positive. Nevertheless, it is evident that the impact of Google Classroom on developing the listening competence is substantial.

Finally, Table 7 provides an overview of the students' attitudes towards the impact of Google Classroom on the speaking competence, by offering the analysis of seven statements and the average quantitative values on the Likert scale.

The obtained results suggest that the statement with the lowest value is *I pay more attention to the sentence structure and word order when I do my speaking assignment in GC than in the real classroom* (3.28). It can be observed that similar mean values can be seen in other statements about the sentence structure (pertaining to other linguistic competences), which means that the students are least attentive when it comes to the syntactic analysis, and that the "production" phase of language occurs intuitively rather than in an organized, systematic and sensible manner. The statement that the students more willingly do their speaking assignments in Google Classroom than in the real classroom has the highest value, totalling 4.75. The mean of all statements (4.17) is just below the borderline for the verbal interpretation of results as absolutely positive. This means that the students are extremely aware of the beneficial impact of Google Classroom on developing the speaking skills.

Table 7. Students' attitudes about the effects of GC on the speaking competence

Statement	Mean	Interpretation
I more willingly do my speaking assignments in GC than in the real classroom.	4.75	strongly agree
I pay more attention to the vocabulary richness, primarily specialised vocabulary, when I do my speaking assignment in GC than in the real classroom.	3.63	agree
I pay more attention to the sentence structure and word order when I do my speaking assignment in GC than in the real classroom.	3.28	neutral
I pay more attention to grammar when I do my speaking assignment in GC than in the real classroom.	4.19	strongly agree
I have less stage fright when I do my speaking assignment in GC than in the real classroom.	4.72	strongly agree
I speak more fluently when I do my speaking assignment in GC than in the real classroom.	4.36	strongly agree
GC positively affected my speaking competence.	4.27	strongly agree
Mean all statements	4.17	agree

## 5. DISCUSSION

### 5.1. The students' attitudes to the ease of use of Google Classroom and its usefulness for the teaching/learning process.

The first two questions regarding the usefulness and ease of use of Google Classroom have also been examined in many recent studies (Al-Marouf and Al-Emran 2018; Heggart and Yoo 2018; Iftakhar 2016), and all of them point to the positive effect of this platform.

When it comes to ease of use, the students stated that the platform is extremely easy to sign in (4.80) because they only need to click the code provided by the teacher. Teaching materials are available to students in the section dedicated to teaching materials, and there is a symbol clearly distinguishing them from other types of assignments. They are sorted by teaching units so that no time is wasted searching for particular materials. Therefore, the students also stated that teaching materials are easy to access (4.36). The tasks set by the teachers are also easily received (the score of 4.72 on the Likert scale) because the very moment the teacher assigns them, the students receive a cellular phone/computer notification about the new task along with a due date. The students' general impression is that the platform is easy to use (4.19) and that they understand the Google Classroom system (4.37) because it is rather simple and transparent. The students can also see which tasks have not been submitted or have been submitted with a delay. It appears that the statement that assignments are easy to submit scores the lowest value (3.93) because, as it could be induced from the answers to the open-ended question, the students do not have an access to the Internet all the time and everywhere. Additionally, they do not understand all the prerequisites for submitting the tasks. Namely, to successfully submit an assignment, it is necessary for both the teacher and the student to have enough space on their Google Drives. Otherwise, students will not be able to submit the task, which can be frustrating. One solution to overcome this problem is to form a special Google email account that will be used exclusively for Google Classroom purposes.

As far as the usefulness of Google Classroom is concerned, by examining the mean of all statements in this set (4.00), it can be concluded that this platform is a useful tool for teaching/learning any LSP. Students agree that Google Classroom activities are useful (the mean value of 3.67). In spite of the fact that Google Classroom cannot replace a real classroom and provide numerous forms of activities, it can still be of great help to students while learning. Most students remain undecided about the statement that this platform is an excellent means of social interaction (3.29). Although it is possible for students to ask questions, respond to each other, and communicate with the teacher on the stream, Google Classroom seems not to be the best means of social interaction. It has also turned out that the teachers do not receive notifications for the messages that students leave on the stream, so the responses that students expect may be received belatedly. It is certain that Google Classroom brings together a social and academic discourse, but students more frequently opt for other social networks to make social contacts. In addition to this, Google Classroom enables regular and timely assignment submission (4.48) because, as we have already stated, students can see the due date at any time. This makes the students be more dedicated to task completion and pay more attention to deadlines if notifications about missing tasks are in view. Dedication to learning (Mercer and Dörnyei 2020) is one of the major factors that affects students in such a way so as to become less distracted by unproductive activities on other social networks such as Facebook, Instagram, Twitter, etc. The teachers testify that the students were so dedicated to completing the assignments that they submitted them even late at night. After the due date, the teachers grade homework, assigning an appropriate number of points to each student. Students can track their points for each completed task, which means that Google Classroom provides them with a useful and clear grading and follow-up system (3.90). When reviewing and grading the assignments, the teacher has an opportunity to write personal messages to each student, draw attention to their mistakes, as well as highlight positive aspects of the student's work. Due to all this, the students claim that Google Classroom provides useful feedback on submitted assignments (4.16). As the students have no doubts about the organisation of the subject itself (LSP in this case) within Google Classroom (because everything is presented in a straightforward manner)<sup>1</sup>, it can be concluded that this platform provides a clear subject description (4.11). In line with the above-mentioned, the students believe that this platform should also be used for teaching other subject in higher education (4.36).

In a response to the open-ended question, the students wrote that the biggest drawback of using Google Classroom is the inability to access the internet from every place and at any time. During the Covid-19 state of emergency many students decided to stay in the countryside, where the internet access is often poor and limited. Furthermore, several students mentioned that they felt frustrated because whenever they wanted to access Google Classroom, they were distracted by other events on social media and other platforms. Therefore, although a modern access to contemporary technologies offers many benefits, some students have not been able to make use of them because we, human beings, are constantly exposed to other various irrelevant resources (Sulissusiawan and Salam 2017). However, many students who are optimistic about learning have managed to achieve a high degree of self-control and resist challenges outside of Google Classroom.

---

<sup>1</sup> The previously conducted studies point to the good organization of Google Classroom. Kakouli Constantinou's research (2018) also indicates that Google Classroom enables keeping all the material and assignments organised chronologically and thematically, making the materials easy to find.

## **5.2. The students' attitudes to the impact of Google Classroom on the development of linguistic competences**

When it comes to the impact of Google Classroom on the development of linguistic competences, it can be noticed that there are only few studies related to this topic, which is why this research represents a novelty in the methodology of LSP.

Due to the integration of online/distance learning in the teaching/learning processes, an access to interesting and educational materials is crucial to the entire educational environment (Janzen 2014; Iftakhar 2016). Students actively participate in activities related to the development of writing skills because Google Classroom (accessible from various devices such as desktop and laptop computers and mobile phones) enables student participation at any time and place. This platform helps students write their assignments paperlessly and this has been confirmed by the students' responses to the open-ended question in the questionnaire. All of this is in accordance with the claim that Google Classroom is an educational tool that facilitates both the process of paperless writing and grading (Sepyanda 2018).

The research results indicate that the students prefer doing writing assignments in Google Classroom to doing them in a traditional setting of a real classroom because they have an access to many computer tools that facilitate the writing process. Since writing is not just about expressing and organising ideas but also about creating linguistically comprehensible text (Tangermpoon 2011), mastering lexical units and basic principles of good discourse management is a fundamental precondition for writing a good text. All of this can be achieved through the use of digital technology because various programs that students use for writing assignments substantially and drastically improve, stimulate, and develop writing skills. To submit a writing assignment to Google Classroom, the students use all of these programs and tools. For example, word processing programs/tools significantly simplify the composition and check-up of writing assignments by pointing to spelling and grammar mistake and offering synonyms and better syntactic solutions (Pennington 2004). Therefore, it is perfectly logical that the students pay more attention to word choice, spelling, and grammar rules. Since word processing programs/tools do not offer extensive discourse management solutions, it is obvious that the students are almost neutral regarding the statement that they pay more attention to the discourse management when writing an assignment posted in Google Classroom rather than in a traditional, real-time classroom.

Moreover, the fact that students use a computer to write their essays leads to a more careful usage and selection of the register. Namely, when students write their assignments within the constraints of the real classroom, they tend to forget about the register they use owing to the pressure they feel. The very social surrounding makes them feel emotionally involved (a characteristic not acceptable at the tertiary-level education), which brings about the wrong usage of the register (Butler 2006). The application of Google Classroom changes this situation to a great extent, since, when students write their assignments from home, alone, there is no influence of other factors, and they can be completely committed to doing their tasks and focused on the selection of the register they will use. If students are unsure whether a word is formal or informal, they can easily check it via the internet or by looking up the word in a thesaurus. This dramatically increases the students' awareness of the use of the formal register, as highlighted by this research.

All the above-mentioned factors strongly affect students' motivation and make them become active participants in the educational process (Bozdogan 2012). In this sense, the

use of Google Classroom, along with various tools for writing and processing a text, gives students the freedom to learn from their own mistakes without being afraid of the teacher's reaction, as the written text is firstly checked by the computer and then by the teacher. Therefore, it is evident that Google Classroom has a positive influence on the development of the writing competence.

Reading accompanied by the use of various electronic devices is considered to be a highly effective and productive activity. Hence, the research results imply that the use of Google Classroom can be highly beneficial to developing reading skills and this is what the students confirmed by stating that it has a positive impact on this competence (the mean of 4.72). The research conducted so far has shown that the reading competence solely depends on self-motivation, while it is up to the teacher to boost students' confidence in this skill (Ali et al. 2020). Based on the responses obtained from the study, it can be concluded that the students are more motivated and prefer to do reading assignments outside the real classroom (4.37) because they have more time to read the assigned text, attentively look up the unknown words (the mean of 4.66), analyse the sentence structure (average value 3.25), think about the text and try to understand it. Google Classroom (as a form of computer-assisted language learning) yields positive results because it facilitates student interaction with the text and is adjusted to different learning styles (Bensalem 2018). It is a friendly environment that enables an individualised approach to the text, tailored to the needs and abilities of the students. For all these reasons, this platform helps develop reading skills, including identifying and understanding words, decoding and remembering the text (Hassan Taj et al. 2017). It is easier for the students to focus on the learning material if there is no time pressure, which is, otherwise, present in the real classroom. In addition, LSP classes at the Faculty of Economics in Niš take place early in the morning, so most students are sleepy or fidgety and unable to follow the teaching materials. The use of Google Classroom allows them to choose the time when they will be most focused on the texts they need to read.

It can be concluded that Google Classroom, along with other digital technologies, has a positive impact on students' motivation and attitudes towards learning, as well as towards reading as a distinct linguistic competence. The reason for this lies in the fact that the improvement of motivation is inherent in the computer-assisted environment of Google Classroom. The use of digital technologies provides an affective sensation – a sense of security that enables students to boost their self-confidence and their reading competences, as well as a sense of personal control and responsibility and accountability for their own learning (Keezhatta and Omar 2019). Therefore, this research confirms the findings of other recent similar studies (Albashtawi and Al Bataineh 2020), indicating that Google Classroom has a positive impact on students' reading abilities.

The importance of developing the listening competence cannot be diminished or neglected in any way. As a basic receptive skill, listening is defined as the ability to correctly interpret and comprehend messages in the communication process. Through language reception, people internalise linguistic information, without which language production would not be possible. Students with stronger comprehension skills are able to participate more successfully in classes (Emerick 2018).

When it comes to the listening competence, it may seem almost impossible to improve it by using Google Classroom. However, the obtained results show the opposite. As stated earlier, the teachers regularly presented grammar and vocabulary explanations they recorded themselves and uploaded to YouTube. It was up to the students to watch and listen to them carefully in order to successfully complete the assigned tasks. As these recordings

were the only source of the teaching/learning content, the students were obliged to pay closer attention to them (the mean of 4.62). In other words, the students had to listen attentively to the video recordings, thus acquiring basic knowledge about the materials which would enable them to actively and successfully participate in Google Classroom. The fact that the students' success in doing assignments was exclusively dependent upon the comprehension of the presented video recordings steeply increased the students' dedication to developing the listening competence. Therefore, the students were encouraged to do tasks and activities independently prior to the implementation of other segments of the class. All of this can be associated with LSP learning autonomy (Lee and Wallace 2018). Self-control in learning among students stimulates and directs learning activities, so that students become active participants in their own educational process (Silva et al. 2018).

The research has shown that students better understand the content, i.e. the video recordings in Google Classroom than the teachers' live explanations (score of 3.78). The reason for this is that students working from home have more time to focus on the task and are able, if necessary, to relisten to the educational content presented in the video recording, which leads to the better understanding of it. Additionally, while listening to these explanations, the students can take notes on what is important. Furthermore, working in Google Classroom enables them to implement various learning strategies corresponding to their personal needs and preferences.

The open-ended question revealed that students are often not attentive enough to listen to the lectures early in the morning and would rather follow the video recordings in Google Classroom because they can independently choose the time, place and pace of learning.

Finally, speech represents an interactive process of creating meaning that involves information production, reception, and processing. Various factors influence the development of the speaking competence among the students, and some of these include poor reading habits, unequal participation in foreign language conversation, practicing speaking inside and outside the classroom, and the incorrect application of grammar rules (Sayury 2016). Therefore, as the speech competence is conditioned by an inevitable interaction among interlocutors, it is essential to create such a language teaching/learning environment that will enable this. When it comes to online teaching, interaction can certainly be achieved by using various programs, such as Zoom, Google Meet, Microsoft Teams, Google Hangouts, since the interlocutors can see each other and exchange ideas synchronously. However, Google Classroom itself does not leave space for such interactions.<sup>2</sup> There is even a prevailing belief among methodologists that developing speech and listening competences within Google Classroom is impossible.

As teaching during the COVID-19 state of emergency did not take place in person, one of the biggest challenges to teachers was how to improve students' speaking competence. Considering the fact that synchronous communication software was not used at that time in the educational system of Serbia, which would, among other things, bring about uninterrupted communication and development of the students' speaking skills, the use of video recordings that students were supposed to make themselves seemed to be the only acceptable solution. Therefore, video recordings were used as a means of recording the students' speaking competence. The research results show that the video recordings made

---

<sup>2</sup> The Google Meet option appeared later, in April 2020, and did not enter a common use until the beginning of the next school year.

by the students were an excellent tool for improving the speaking competence. It can be concluded that students feel more relaxed when they record tasks than when they speak live – they have less stage fright (the mean of 4.72). This leads to the fact that they do homework more often in the Google Classroom than in the real classroom (4.75). Namely, previous studies have shown that students in a real classroom are worried, anxious, frightened, and have stage fright whenever they have to speak (Darmawati et al. 2022). This was confirmed by the responses to the open-ended question in our research. The students state that it is much easier to speak when they are alone and when they record videos themselves using a mobile phone or computer camera than when they speak in front of their peers in the classroom, putting forward the idea that the fear of being ridiculed if they make a mistake is the dominant factor. In the absence of a wide audience, students feel more relaxed, less worried, which makes them speak more fluently and unhesitantly (the mean of 4.36).

These video recording assignments, aimed at developing the speaking competence, can be done anywhere and at any time, not just within the classroom, and this is what the students emphasise as a major advantage of Google Classroom over a real classroom. Talking about any economic topic seems much easier when it takes place in a familiar, friendly, and comfortable student-friendly environment.

Before recording the video, the students have time to do research on the topic they will talk about and possibly make notes that they will refer to during the recording. This means that the students can deal with all lexical and grammatical aspects of the topic they are addressing. It, therefore, becomes understandable why they pay more attention to the richness of vocabulary (3.63) and grammar (4.19) when doing tasks in Google Classroom compared to a physical classroom. Additionally, after recording the video, the students have an opportunity to watch it again and decide whether they made mistakes, which they can easily correct using various video editing tools. This is in line with the claim that videos provide the students with the opportunity to self-reflect on their thoughts and develop critical thinking that induces deep learning (Cheng and Chau 2009).

## 6. CONCLUSION

Digital technology has brought about the use of many applications that have facilitated the educational process in the modern world. Therefore, it is essential to understand students' attitudes towards these new teaching/learning tools.

Based on the results of this study, it can be concluded that Google Classroom is an innovative and highly effective platform for learning both LSP and general language. The conducted research shows that Google Classroom is easily accessible, and its use provides multiple benefits. It is especially noteworthy that students believe that this platform contributes to the development of all four language competences: writing, reading, listening, and speaking.

The fact that Google Classroom was the only teaching method used during the COVID-19 state of emergency indicates that the research results themselves are reliable, as there were no other factors affecting the results.

However, it is important to outline some limitations to the conducted research. Firstly, it would be desirable to expand the sample of respondents, which would result in more reliable statistics. In addition, it is necessary to take into consideration the gender of the students and their personal attitudes towards technological literacy, as men are generally

more interested in technology than women (Zhou and Xu 2007). In this sense, it is expected that female students, who are less interested in new technologies, may have more difficulties in using Google Classroom.

All of the above suggests that the use of Google Classroom is a useful tool and provides many advantages to both language teaching and learning, and it should be given even more attention in the future.

#### REFERENCES

- Al Bataineh, K. B., Banikalef, A., Abdullah, A. E., and Albashtawi, A. H. "The Effect of Blended Learning on EFL Students' Grammar Performance and Attitudes: An Investigation of Moodle." *Arab World English Journal (AWEJ)* Volume 10 (2019): 324-334.
- Albashtawi, A. H., and Al Bataineh, K. B. "The effectiveness of google classroom among EFL students in Jordan: An innovative teaching and learning online platform." *International Journal of Emerging Technologies in Learning* 15 (11), (2002): 78-88.
- Ali, M. M., Asad, Z., and Moghal, S. "Utilizing Mobile Assisted Language Learning (MALL) for Teaching English to Non-Formal Learners in Pakistan." *Journal of Arts & Social Sciences (JASS)* 7(2) (2020): 70-81.
- Al-Marouf, R. A. S., and Al-Emran, M. "Students Acceptance of Google Classroom: An Exploratory Study using the PLS-SEM Approach." *International Journal of Emerging Technologies in Learning* 13(6) (2018): 112-123.
- Basta, J. "Role of Case Studies in Teaching English for Business and Economics." *The Journal of Teaching English for Specific and Academic Purposes*, 5 (3) (2017): 553-566.
- Bensalem, E. "Foreign language anxiety of EFL students: Examining the effect of self-efficacy, self-perceived proficiency and sociobiographical variables." *Arab World English Journal* 9(2) (2018): 38-55.
- Bozdogan, D. (2012). "English language teaching students' perceptions of computer-assisted language learning." *Journal of Education and Future*, 2, 63-74.
- Butler, H. G. *A framework for course design in academic writing for tertiary education*. Pretori: University of Pretoria. 2006.
- Cheng, G., and Chau, J. "Digital video for fostering self-reflection in an ePortfolio environment." *Learning, Media and Technology*, 34 (4) (2009): 337-350. DOI: 10.1080/17439880903338614.
- Darmawati, D., Amin, B., and Akib, E. "The Strategies in Reducing the Students' Anxiety in Speaking English at SMA Pergis Yapki Maros. EDUTECH." *Journal of Education and Technology* 5 (3) (2022): 722-742.
- Dhawan, S. "Online learning: A panacea in the time of COVID-19 crisis." *Journal of Educational Technology Systems* 49(1) (2020): 5-22.
- Emerick, M. R. "Explicit teaching and authenticity in L2 listening instruction: University language teachers' beliefs." *System* 80 (2018): 1-13.
- Halverson, L. R., Spring, K. J., Huyett, S., Henrie, C. R., and Graham, C. R. "Blended learning research in higher education and K-12 settings." *Learning, design, and technology: An international compendium of theory, research, practice, and policy* (2017): 1-30.



- Hassan Taj, I., Ali, F., Aslam Sipra, M., and Ahmad, W. "Effect of technology enhanced language learning on vocabulary acquisition of EFL learners," *International Journal of Applied Linguistics & English Literature* 6 (3) (2017): 262-272.
- Heggart, K. R., and Yoo, J. "Getting the Most from Google classroom: A pedagogical framework for tertiary educators." *Australian Journal of Teacher Education* 43(3) 9 (2018): 140-153.
- Henrie, C. R., Halverson, L. R., and Graham, C. R. "Measuring student engagement in technology-mediated learning: A review." *Computers & Education* 90 (2015): 36–53.
- Hulse, R. "The use and implementation of Google Classroom in a Japanese university." *The Center of the Study of English Language Teaching Journal* 7 (2019): 71-105.
- Iftakhar, S. "Google Classroom: What works and how?" *Journal of Education and Social Science* 3(2) (2016): 12-18.
- Janzen, M. "Hot Team: Google Classroom," 2014, <<http://tlt.psu.edu/2014/12/04/hot-team-google-classroom/>>.
- Kakoulli Constantinou, E. "Teaching in Clouds: Using the G Suite for Education for Delivery of Two English for Academic Purposes Courses." *The Journal of Teaching English for Specific and Academic Purposes*, 6 (2) (2018): 305-317.
- Keezhatta, M. S., and Omar, A. "Enhancing Reading Skills for Saudi Secondary School Students through Mobile Assisted Language Learning (MALL): An Experimental Study," *International Journal of English Linguistics* vol. 9, no. 1 (2019): 437-447.
- Kuh, G. D., and Hu, S. "The relationships between computer and information technology use, selected learning and personal development outcomes, and other college Experiences." *Journal of College Student Development* 42 (2001): 217-232.
- Kumar, J. A, and Bervell, B. "Google Classroom for mobile learning in higher education: Modelling the initial perceptions of students." *Education and Information Technologies* 24 (2019): 1793–1817.
- Laudon, Kenneth C, and Jane P. Laudon. *Management Information Systems: Managing Digital Firm*. 13<sup>th</sup> ed. New Jearsey: Pearson Education Inc, 2014.
- Lee, G., and Wallace, A. (2018). "Flipped learning in the English as a foreign language classroom: outcomes and perceptions." *TESOL Quarterly* 52 (1) (2018): 62–84.
- Lonn, S., and Teasley, S. D. "Saving time or innovating practice: Investigating perceptions and uses of Learning Management Systems." *Computers and Education* 53(3) (2009): 686-694.
- Mercer, S. and Zoltán, D. *Engaging Language Learners in Contemporary Classrooms*. Cambridge: Cambridge University Press, 2020.
- Munasinghe, P. G., and Percy, W. W. 2016. "Attitudes of students when using learning management systems." Paper presented at *The Academy for Global Business Advancement (AGBA), 13th Annual World Congress, The First Sebelas Maret Conference on Entrepreneurship, Innovation and Community Development (SMARTCEIC), Ins., November 2016*.
- Northey, G., Bucic, T., Chylinski, M., and Govind, R. "Increasing student engagement using asynchronous learning." *Journal of Marketing Education* 37 (3) (2015): 171-180.
- Pennington, M. "Electronic media in second language writing: An overview of tools and research findings." In: S. Fotos and C.M. Browne, eds. *New Perspectives on CALL for Second Language Classrooms* (pp. 69-92). Mahwah, NJ: Lawrence Erlbaum, 2004.
- Pienta, N. J. "A "flipped classroom" reality check." *Journal of Chemical Education, ACS Publications* 91 (1) (2016): 1–2.

- Sayuri, S. "Problems in speaking faced by EFL students of Mulawarman university." *Indonesian Journal of EFL and Linguistics* 1(1) (2016): 47–61. <https://doi.org/10.21462/ijefll.v1i1.4>
- Sepyanda, M. "Students' Attitude Toward the Use of Google Classroom on Translation Subject in English Department of FKIP UMMY Solok." *English Language Teaching and Research* 2(1) (2018): 180–188.
- Silva, J. C. S., Zambom, E., Rodrigues, R. L., Ramos, J. L. C., and Da Fonseca De Souza, F. "Effects of learning analytics on students' self-regulated learning in flipped classroom." *International Journal of Information and Communication Technology Education* 14(3) (2018): 91-107.
- Singh, V., and Thurman, A. "How many ways can we define online learning? A systematic literature review of definitions of online learning (1988-2018)." *American Journal of Distance Education* 33(4) (2019): 289-306.
- Sözen, E. and Guven, U. "The Effect of Online Assessments on Students' Attitudes Towards Undergraduate-Level Geography Courses." *International Education Studies* 12 (10) (2019): 1-8.
- Stafford, G. "The unexpected transformations of Chinese international students in Australia," (Doctoral dissertation) 2011, <<https://digital.library.adelaide.edu.au/dspace/bitstream/2440/66098/8/02whole.pdf>>.
- Sulissusiawan, A., and Salam, U. "Students' Use of Online Resources to Enhance Learning Endeavors." *International Journal of Virtual and Personal Learning Environments* 7(2) (2017): 44-53.
- Tangermpoon, T. "The use of computer in improving writing skills," *Wordpress.com*, 2011, <<http://neeyhapuzee.wordpress.com/2011/01/30the-use-of-computer-inimproving-writing-skills/>>.
- Taylor, S. A., Hunter, G. L., Melton, H., and Goodwin, S. A. "Student Engagement and Marketing Classes." *Journal of Marketing Education* 33 (2011): 73-92.
- Zhou, G., and Xu, J. "Adoption of Educational Technology: How Does Gender Matter?" *International Journal of Teaching and Learning in Higher Education* 19(2) (2007): 140-153.