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The Impact of Google Classroom on Academic Achievement-Teacher and Student Perceptions

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Article Info	Abstract
	Google Classroom has been introduced to staff and students of the University of Tetovo in the second semester of the year 2019. Teachers and learners have been provided with some guidelines on how to use the platform and it has been used for only one semester. Having included it for only such a short period of time, its effect on learning and teaching, thus academic achievement is debatable. Seeking to analyze its influence on learning progress, this paper reports on a study conducted at the Faculty of Philology at the University of Tetovo (UT), North Macedonia. Acknowledging convenience sampling, the subjects who participated in this study were students and teachers at the English Language and Literature Department. Data were collected using questionnaires, via Google Doc, in which participants were asked to reflect back on their experience on the platform throughout their one semester of their university studies. Responses were subjected to a modified content analysis to identify the main themes and topics. Semi-structured interviews with volunteers were undertaken to substantiate the essential findings of content analysis. The results of the study have shown that there is insufficient indication to show its effect on academic achievement. Therefore, it is suggested that an extended study over a longer period of time, with a larger sample, would be required to generalize these results.

INTRODUCTION

Foreign language learning and teaching is now almost universally supported with Computer Assisted Language Learning (CALL). In what ways teachers decide to incorporate the computer and technology depends on the context they are teaching in and the sources offered to them.

Each educational setting has the potential to provide a range of opportunities for learning language skills across the core developmental areas of reading, writing, listening, speaking while, at the same time, extending learning access to the sub skills of pronunciation, and grammar (Kamberi, 2009). Merging setting and computer assisted language teaching and learning with classroom approaches, which is called *Blended Learning*. It refers to combining face-to-face instruction with computer mediated instruction and contributes to the modernization of teaching. Blended learning does not only refer to teaching languages and other school subjects but also to business and training related matters. For example, Bersin (2004) has focused her study on the use of blended learning to refer to the business trainings of staff and the preparation of other activities related to professional training. Bersin claims that "the biggest problem with instructor-based training is lack of scale. If you need to train thousands of students, Bersin argues, there are, traditionally, only two options: large class or lots of travel. Large class sizes greatly reduce effectiveness, and travel is very expensive (p. 3). As an alternative, he proposes blended learning as a more efficient strategy.

Successful teaching and learning is every teacher's dream no matter what level of education; primary, secondary or tertiary. Starting from the Grammar -Translation method in the early 20th century up to

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the present *age of internet*, various scholars have come up with different theories and approaches on how to make learning easier for their students.

Some like Bergman & Sams (2012), have talked about "flipped learning" where they propose that learning should take place outside the classroom, in a way of homework. What they suggest is assigning the lessons/lectures as homework in online recordings, in the form of power point presentations, and go over the difficult concepts in the classroom. The analyses they have made in their science classes have been surprising to everybody- students improved much more by using this 'flipped learning' (p.5) by combining on site and online teaching.

Even though everyone is focusing on technology and technological aided learning and teaching, there is an ongoing debate over the effect of technological support in language teaching; some arguing against and some supporting it; while others holding a neutral position. In one of her earlier studies (Kamberi, 2009), conducted a comparative study with students at the South-East European University trying to see the outcome of using a traditional classroom approach to teaching idioms and a computer aided one. The study showed that there was no significant difference among the two approaches.

Later on, after a period of two years (Kamberi, 2013) decided to revise the study hypothesizing that the retrieval rate was higher using computer aided approaches, compared to the traditional method. The study revealed that respondents could retrieve a significantly larger number of the idioms they had studied in the lab, compared to those in the traditional classroom. Based on the interview responses, it was assumed that this was due to the visual aid of the lab idioms compared to the paper-pencil ones. This was an indication that except the motivation that was higher in both studies, the retrieval rate was higher, which is an indication that computer aided learning is more beneficial than traditional ones.

More recently, a new tool has been introduced by Google to support on-site teaching learning, called Google Classroom. It is a free web service, developed by Google for schools, with the aim of aiding teachers in their teaching as well as sharing documents among them, instead of paper-based feedback.

Azhar & Iqbal (2018) conducted a study on the effect of the platform based on teacher perceptions. The study was qualitative and used semi-structured interviews to collect data. The participants of the research were twelve higher education teachers who have implemented Google Classroom for at least one semester in their classroom. The study revealed that teachers perceived the tool as an aid for managerial purposes only but inefficient for teaching and learning. Based on teacher responses, 'lack of user-friendly interface' was the main reason for this finding.

Similarly, Harjanto & Sumarni (2019) reported a study on teacher's perception of the use of Google Classroom as a learning medium. As with Azhar & Iqbal's (2018) study, this was a qualitative research design which applied interviews as a tool for data collection. Seven high school teachers in Tangerang Selatan, Indonesia, who had incorporated Google Classroom in their teaching for at least 1 year participated in the study. Findings showed that teachers perceived the use of Google Classroom was very helpful, however, they needed to learn how to use other features of Google Classroom as they hadn't explored all the features which would surely bring benefits for their professional development.

More recently, Subandoro & Sulindra (2019), analyzed the impact of Google Classroom on collaborative learning based on learners' perceptions. The students employed the collaborative features in Google Classroom to 'go beyond the limit of conventional learning', as they stated, referring to notions such as time, space, and distance. The study was conducted with students taking English Business Correspondence Class of Widya Mandala Secretarial Academy Surabaya, in Indonesia. Their study revealed that Google Classroom was proven a supportive learning management system according to the students' beliefs by claiming that it felt like mobility in learning and that they improved their writing.

The study results Azhar& Iqbal (2018) and Subandoro & Sulindra (2019) offer contradictory results. While the former recognizes some management value but complains about inefficacy, the latter reported more positive outcomes. It can be assumed that teachers and learners have different perceptions on the effect of the platform. While teachers complain, students are motivated. It can also be assumed that lack of teacher training on how to use the platform more effectively could have had a substantial influence on their beliefs. For this reason, many books have been dedicated to promoting either the platform or other *Goolge Apps* (see Frazel, 2009; Scholl, 2019; Brumbaugh et. al, 2017). They either focus on instructions on how to teach using the platform or on activities that are useful while using it. For example, Zhang (2016) has devoted himself to trying to help teachers around the globe to use Google Classroom. His book offers a possibility to include parents in the class and offering more advanced teaching ideas to adapt the subject matter.

As we witness in the classrooms of the 21st century various mobile devices, such as laptop and phones have become indispensable tools in learners' lives while technology supported teaching is increasing and desired by learners. Trying to keep up with the trend, the UT has incorporated *Google Classroom,* as a tool to support classroom instruction. Apart from attendance, participation, mid-term exam 1, mid-term exam 2 and presentation, it has become one grading component in the university's grading scale. This paper is a preliminary effort to analyze the outcome of the platform, more specifically its impact on learning and teaching.

Research Questions

1. What are learners' perceptions on Goggle Classroom?
2. What are teachers' perceptions on Goggle Classroom?
3. What is the effect of Google Classroom on academic achievement?

METHODS

In an effort to help students learn more easily and to introduce more strategies for them to become successful learners, Google Classroom has been introduced, as a learning opportunity. The purpose of this paper is to identify differences in students' and teachers' attitudes towards Google Classroom in practice. Seeking to analyze its influence on learning progress, this study reports on a study of English teachers and students at the University of Tetovo (UT), Northern Macedonia on the effectiveness of this learning aid on learning outcomes.

Participants

Acknowledging convenience sampling, the subjects who participated in this study were students and teachers from the seventh semester of the UT, at the English Language and Literature Department. The questionnaire was sent to 20 teachers, only 5 (n=5) of whom responded (35% of the possible cohort). Also, the questionnaire was sent to 60 students 24 (n=24) responded 40% of the possible cohort.

Instruments

Seeking to analyze the effect of Google Classroom on academic achievement, participants were invited to complete an online questionnaire sent to the participants via Google Docs (see appendix A and B2). The questionnaire, consisting of 11 questions of multiple choice and open ended types, required respondents to reflect on their experiences using the platform. After preliminary quantitative analysis of the results, semi-structured interviews with volunteers were undertaken to substantiate the essential findings of the analysis.

Data Analyses

Student responses were subjected to a modified content analysis (Silverman, 2005) to identify the main themes and topics. Semi-structured interviews with volunteers were undertaken to substantiate the essential findings of content analysis.

FINDINGS

The questionnaires invited students and teachers to express their attitudes with regard to the effectiveness of using the Google Classroom platform. The questionnaires were followed by semi-structured interviews seeking to determine student and teacher attitudes to their learning and teaching experience, the relative values and the perceived effectiveness in meeting learning needs.

Data from the questionnaires were quantified and analyzed using frequency statistical procedures. Following the questionnaire, students were invited to offer their perceptions of the learning experiences they had with regard to developing listening skills. Three of the 24 students and two of the teachers agreed to take part in stage 2 of the study (semi-structured interviews). Initial results from the quantitative section of this study suggest that there are some differences and similarities between teacher and student perceptions with regard to the usage and success of applying the strategy in teaching English as a foreign language.

The question which required students to state whether teachers had uploaded the syllabus showed some major differences between the two study groups: 100% of the teachers and only 58% of students gave a positive response. It could be anticipated that the teachers who responded to the questionnaire were the more responsible ones and have uploaded it; on the contrary, those who did not respond probably had not.

In reporting attitudes to the frequency of posts, although the majority of teachers (50%) stating having posted something every week, another 25% claiming only the syllabus, and the remaining ones of them having posted something every month, students seemed to be divided in how frequently teachers posted their responses. For example, 33% stating once a week and almost the same 29% claiming only once a month. Once again, as in the previous question, it can be assumed that the teacher respondents are the ones who posted once a week, considering the small number of teacher respondents, while the rest who did not respond, could be the ones referred to by student responses.

The question related to contact between teacher and student via *Google Classroom* gave similar responses by both groups. The majority of teachers claimed that they had been contacted by students during the semester; likewise, students claimed the same. The results indicate that there had been some sort of contact between the two study groups.

Table 1. Reasons for using Google Platform

Students	Teachers
Announcements /Schedules	Informing them about my absence
Results	Sending them evaluation comments about their end-of-the-year presentations.
Syllabus	inviting them to join Google classroom
Answering questions	for additional explanation about certain topics
Providing materials/ activities	Sending extra materials
Sending assignments	Giving assignments
They don't contact us via G.C	

One of the most controversial question asked students to reflect back on the reason of student- teacher contact via the platform. On one side there are some students who claim that "I have been never contacted via the platform" or "just for the syllabus" while others assert, "Providing materials/ activities" or "Sending assignments", "announcements ". Teachers, in contrast, almost all agreed with the second group by claiming that they send announcements, remarks, extra materials and additional explanations about certain topics.

To reflect back on how beneficial the platform had been to them generally, on one side there are some students who claim that it was very beneficial (48%) and almost the same reporting very little or not at all. Presenting a contrary stance, none of the teachers could see any benefit from the platform. Given the disparity between student and teacher reporting on this question, it seems clear that further research with larger groups is necessary, including other departments and faculties, to substantiate what is really happening and how it is affecting learning development. Question ten required students and teachers to state the ways in which they believed Google Classroom benefits students and teachers. Table 2 is a summary of their responses.

Table 2. Benefits of using Google Platform

Students	Teachers
Only the syllabus (20)	Quick access to information about the class, anytime, anywhere- as long as they were connected to the internet.
Being informed (7)	they were informed about the material and the deadlines for their assignments
Exam results/schedules (4)	they had chances to discuss and clarify different issues about the subject
Extra input/explanations about the subject (5)	Writing in English, revising the content of the lesson by answering the assignment, *googling* on the topic to find out the assignments etc.
Access to material (3)	Encouraged collaboration between students and teachers
No benefit (4)	Providing online feedback
Making course transparent (1)	
Assignments (3)	

Justifying a contrary stance, teachers who previously reported (question nine) that there were no benefits from using the platform, contradicted themselves with statements such as, "Quick access to information about the class, anytime, anywhere- as long as they were connected to the internet" Or, "Writing in English, revising the content of the lesson by answering the assignment, 'googling' on the topic to find out the assignments etc.". Students, on the other hand, were more transparent with their responses by giving replies consistent with their previous ones (see table 1 and 2 above).

When asked about suggestions for improvement, the majority of students (80%) suggested that teachers should use it more often. Some believed that it fosters teacher-student relationship by stating "there should be more interactions between teachers and students because we need to build a relationship between us, and then we will have an effective education." It is believed that these are the more introverted ones who have difficulties in face-to-face interaction. Some believed it was not useful at all, whereas a small number had no suggestions at all.

Unfortunately, only a small number of teachers responded to this question and they were not sure what to suggest. This is an indication that there is lack of information on how to use the platform and what activities one can do with it. This shows the struggle of teachers on updating their technological skills and following every trend.

As previously stated, the second, qualitative, phase of this study involved informal interviews (Silverman, 2005; Fraenkel & Wallen, 2003). Following stage 1 online questionnaire, respondent students and teachers were invited to discuss their learning and teaching experiences in a confirmatory discussion. Respondents were informally involved to discuss what they believed about the effect of the platform.

The replies of both students and teachers were similar to those identified in the questionnaire. For example, students confirmed that teachers should use the platform more often and post activities and interact with leaners; while teachers were inexperienced and needed more time and probably more training on how to make it more interactive, some even how to use different tools of it. Additionally, based on the responses of both groups, it can be inferred that there is little to no indication of any identifiable academic achievement at this stage.

DISCUSSION

The questionnaire results which form the basis for the quantitative section of this study suggest that there is little achievement from using the platform as an additional tool in the foreign language classroom. These results confirm earlier studies (Kamberi, 2009; Azhar & Iqbal, 2018; Yigit, 2020) but contradicting with the increasingly consistent results of more recent studies suggesting significant effects (Kamberi, 2013; Subandoro & Sulindra; 2019).

More importantly, the results reported from the qualitative stage of the study confirm the quantitative ones. Several major explanations for these results deserve further exploration. The first, and possibly the most obvious explanation for these results, relates to the small number of teacher respondents. If more teachers had responded to the questionnaire, we would perhaps have different results.

Further, although we can infer that students are more motivated by the use of the platform because of their dependence on technology and technological devices, there is no concrete evidence of progress or academic achievement.

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CONCLUSION AND RECOMMENDATIONS

Sample size is recognized as a substantial barrier to meaningful quantitative interpretation of the data from this study to this point. While analysis suggests that there may be some significant differences in student and teacher perceptions, it appears likely that students have a more positive attitude towards the platform and view it as a modern technique and strategy for learning/teaching, while their teachers are still adhering to more traditional ones. As a consequence, it is suggested that teachers might benefit from applying needs analyses with their students (Ellis and Barkhuisen, 2005) with the aim of identifying and responding to their students' needs and expectations. Perhaps using a task-based approach to language teaching, in which students in groups could suggest activities would be a promising way towards future improvement.

Content analysis of stage 2 interviews suggests that student attitudes and expectations of the Google Platform differ markedly from their teacher's perceptions on many aspects including the ways it should be used, the frequency and the motivation to use it.

It is recommended that institutions, provide some training for staff on how to use the platform in order to help learners increase their motivation and achieve higher academic goals. For example, there are many tools on the platform (Zhang, 2016) which need some preparation before being used by staff, especially more senior ones who have never used additional technological aid in their classes. Also, even though students are young and the majority of them have grown with a computer or cell phone, still some training on using the platform is necessary.

Another recommendation is, accompanying Google Classroom with additional technological tools. For example, a study reported by Olagbaju & Popoola (2020), showed that using YouTube and WhatsApp enhanced academic achievement. Another strategy recommended by (Yigit, 2020) is using digital story-telling by using programs like Windows Movie Maker or IMovie. Therefore, combining the aforementioned strategies with Google Classroom would raise student interest and motivation, and with this enhance learning and cognition.

In conclusion, before substantial expenditure is made to using Google Platform as an aid for foreign language acquisition, future research in this area needs to address the potential for quasi-experimental and mixed methodological research designs conducted over an extended period of time and with a larger sample to confirm factors potentially affecting student and teacher beliefs. The growing body of research available internationally supports aspects identified in this paper and seems likely to shed light on future pedagogical approaches.

ACKNOWLEDGEMENTS OR NOTES

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APPENDIX A- STUDENT QUESTIONNAIRE

You are invited to participate in a brief survey about your experiences using Google Classroom (GC) in the previous semester, 2018/2019.   Thank you for your time and cooperation.

1. Gender
a) Male
b) Female
2. Did teachers upload the syllabus on Google Classroom in the previous semester 2018/2019?
a) Yes
b) No
3. Did you face any problems while using Google Classroom?
4. How often have teachers posted on Google Classroom last semester?
a) Every day
b) Every week
c) Only the syllabus
d) Other:
5. Have you ever been contacted by your teachers via Google Classroom?
a) Yes
b) No
6. Have you ever contacted your teachers via Google Classroom?
a) Yes
b) No
7. The reasons for you contacting teachers were:
a) Excuses for missing classes
b) Issues related to materials
c) Sending Assignments
d) Other:
8. What was the reason for teachers contacting you via Google Classroom?
9. How beneficial was Google Classroom for your classes/courses?
a) Not at all
b) A little
c) Very much
10. In what ways did you benefit from Google Classroom in your courses?
11. What suggestions for improvement do you have for Google Classroom as a learning/teaching aid?

APPENDIX B- TEACHER QUESTIONNAIRE

You are invited to participate in a brief survey about your experiences with using Google Classroom (GC). Your responses to this survey will help us evaluate the effectiveness of (GC) so that we can make suggestions for improvement. Your participation is voluntary and all of your responses will be kept confidential. Thank you very much for your time and cooperation.
 Your gender
a) Female
b) Male

2. Did you upload your syllabus on Google Classroom in the previous semester 2018/2019?
a) Yes
b) No
3. Did you face any problems while uploading the syllabus?
a) Yes
b) No
Other:
4. How often have you posted on Google Classroom last semester?
a) Every day
b) Every week
c) Only the syllabus
d) Other:
5. Have you contacted students via Google Classroom?
a) Never
b) Yes
Sometimes
6. Have students contacted you via Google Classroom?
a) No
b) Yes
c) Other:
7. The reasons for students contacting you were:
a) Excuses for missing classes
b) Issues related to materials
c) Sending Assignments
d) Other:
8. What was the reason for you contacting students via Google Classroom?
9. How beneficial was Google Classroom for your classes?
a) Not at all
b) A little
c) Very much
d) Other:
10. In what ways did your students benefit from Goolge Classroom in your courses?
11. What suggestions for improvement do you have?