

Cryptography and Network Security with Google Classroom

Google Classroom is a free web service developed by Google for schools that aims to simplify creating, distributing, and grading assignments. The primary purpose of Google Classroom is to streamline the process of sharing files between teachers and students.

Google Classroom integrates **Docs, Sheets, Slides, Gmail, and Calendar** into a cohesive platform to manage student and teacher communication. Students can be invited to join a class through a private code, or automatically imported from a school domain. Teachers can create, distribute and mark assignments all within the Google ecosystem. Each class creates a separate folder in the respective user's Drive, where the student can submit work to be graded by a teacher. Assignments and due dates are added to Google calendar, each assignment can belong to a category (or topic). Teachers can monitor the progress for each student by reviewing revision history of a document, and after being graded, teachers can return work along with comments and grades.

Features

Google Classroom ties Google Drive, Google Docs, Google Sheets, Google Slides, Google Forms, Google Sites, Gmail, and more together to help educational institutions go to a paperless system was later integrated to help with assignment due dates, field trips, and class speakers. Students can be invited to classrooms through the institution's database, through a private code that can then be added in the student's user interface or automatically imported from a school domain.^[18] Each class created with Google Classroom creates a separate folder in the respective user's Google Drive, where the student can submit work to be graded by a teacher.

Assignments

Assignments are stored and graded on Google's suite of productivity applications that allow collaboration between the teacher and the student or student to student. Instead of sharing documents that reside on the student's Google Drive with the teacher, files are hosted on the student's Drive and then submitted for grading. Teachers may choose a file that can then be treated as a template so that every student can edit their own copy and then turn back in for a grade instead of allowing all students to view, copy, or edit the same document. Students can also choose to attach additional documents from their Drive to the assignment. Set assignments appear on the 'To do' list.

Grading

Google Classroom supports many different grading schemes. Teachers have the option to attach files to the assignment which students can view, edit, or get an individual copy. Students can create files and then attach them to the assignment if a copy of a file wasn't created by the teacher. Teachers have the option to monitor the progress of each student on the assignment where they can make comments and edit. Turned in assignments can be graded by the teacher and returned with comments to allow the student to revise the assignment and turn back in. Once graded, assignments can only be edited by the teacher unless the teacher turns the assignment back in.

Communication

Announcements can be posted by teachers to the class stream which can be commented on by students allowing for two-way communication between the teacher and students. Students can also post to the class stream but won't be as high a priority as an announcement by a teacher and can be moderated. Multiple types of media from Google products such as videos and Google Drive files can be attached to announcements and posts to share content. Gmail also provides email options for teachers to send emails to one or more students in the Google Classroom interface. Classroom can be accessed on the web or via the Android and iOS Classroom mobile apps.

Originality Report

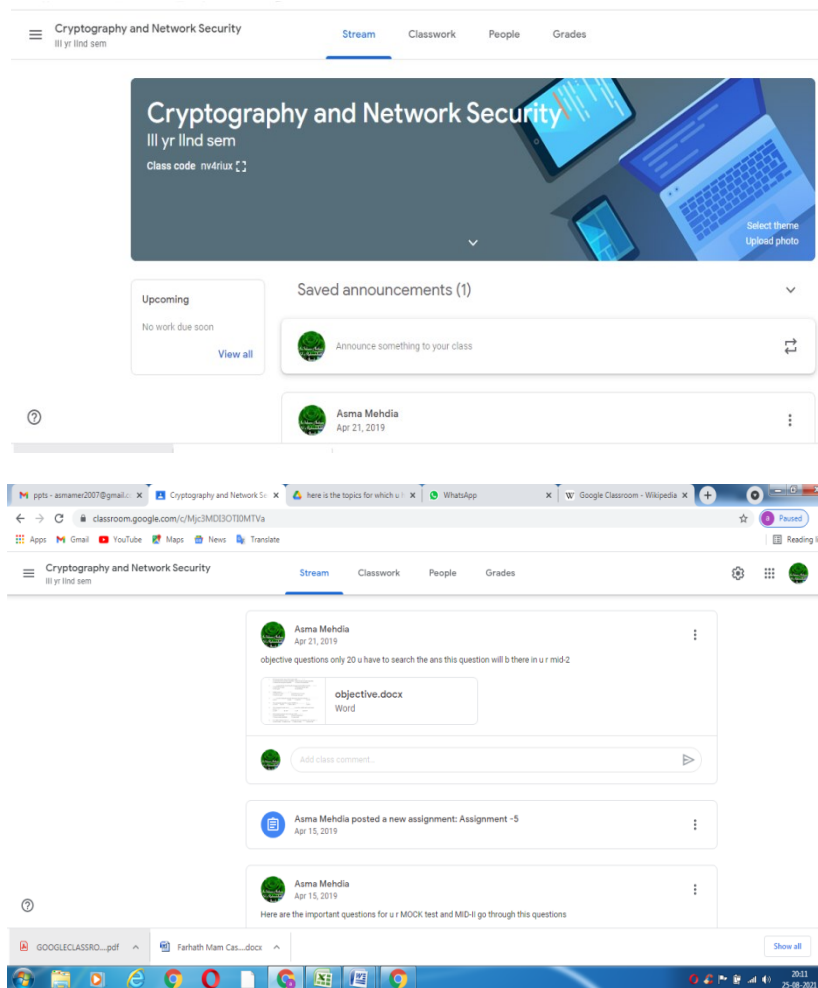
Originality report was introduced in January 2020. It allows educators and students to see the parts and sections of the submitted work which contains the exact or similar wording to that of another source. For students, it highlights source materials and flags missing citation to assist the student in improving their writing. Teachers can also view the originality report, allowing them to verify the academic integrity of the student's submitted work. On G Suite for Education (free), teachers can turn on originality report for 3 assignments but have limited cloud storage. This restriction is lifted on G Suite Enterprise for Education (paid).

Archive course

Classroom allows instructors to archive courses at the end of a term or year. When a course is archived, it is removed from the homepage and placed in the Archived Classes area to help teachers keep their current classes organized. When a course is archived, teachers and students can view it, but won't be able to make any changes to it until it is restored.

Mobile applications

Google Classroom mobile apps, introduced in January 2015, are available for iOS and Android devices. The apps let users take photos and attach them to their assignments, share files from other apps, and support offline access



Stream Classwork People Grades

Asma Mehdiya
Apr 15, 2019

Here are the important questions for u r MOCK test and MID-II go through this questions

NETWORK SECURITY gc.d...
Word

Add class comment...

Asma Mehdiya
Apr 11, 2019 (Edited Apr 11, 2019)

No one have submit u r assignment 4th till yet i need it by today evening

Add class comment...

GOOGLECLASSRO...pdf Farhath Mam Cas...docx

2012 25-08-2021

Stream Classwork People Grades

Asma Mehdiya posted a new assignment: Video upload n submit with u r query n others have L...
Apr 11, 2019

Sandhya
Apr 10, 2019

1)What are SNMP components?
2)what are basic commands of SNMP?
3)Explain benefits in SNMP?
4)What are limitations in SNMP?
5)Explain security of SNMP?

INTRODUCTION TO SNMP ...
YouTube video 10 minutes

1 class comment

pu duru divya Apr 10, 2019

2A) 1.GET
2.GET NEXT
3.GET BULK

GOOGLECLASSRO...pdf Farhath Mam Cas...docx

2013 25-08-2021

Stream Classwork People Grades

1 class comment

pu duru divya Apr 10, 2019

2A) 1.GET
2.GET NEXT
3.GET BULK
4A) 1.SIMPLICITY
2.SECURITY
3.ALTERNATIVE

Add class comment...

pu duru divya
Apr 7, 2019

Answer the following after watching the video.

1) What exactly firewall is?
2) What are the types of firewall?
3) What does packet filter firewall does?
4) What are the design principles of firewall?
5) Any one limitation of firewall?

GOOGLECLASSRO...pdf Farhath Mam Cas...docx

2014 25-08-2021

Google Classroom interface for the class "Cryptography and Network Security". The class is in the "Stream" tab. A post by puduru divya, dated Apr 7, 2019, contains the following questions:

- 1) What exactly is a firewall?
- 2) What are the types of firewall?
- 3) What does packet filter firewall do?
- 4) What are the design principles of firewall?
- 5) Any one limitation of firewall?

A video titled "Introduction to Firewall: Ty..." is attached to the post. Below the video, there is a comment by Sandhya, dated Apr 10, 2019, listing the types of firewalls:

- 2A) 1. PACKET FILTERING
2. APPLICATION LEVEL
3. CIRCUIT LEVEL
4. HYBRID
- 5A) Cannot protect against attacks that pass the firewall

Google Classroom interface for the class "Cryptography and Network Security". The class is in the "Stream" tab. A post by Asma Mehdi, dated Mar 23, 2019, contains the following questions:

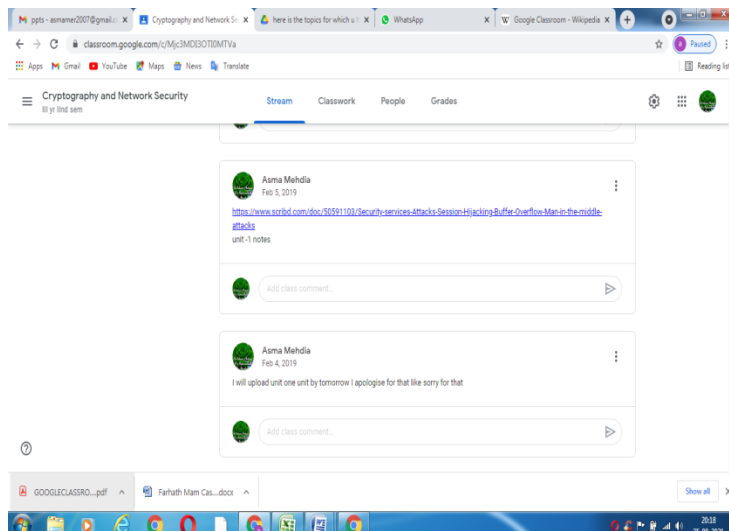
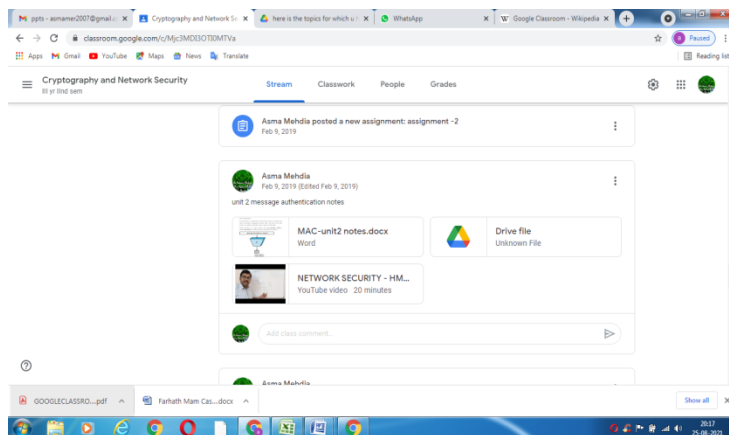
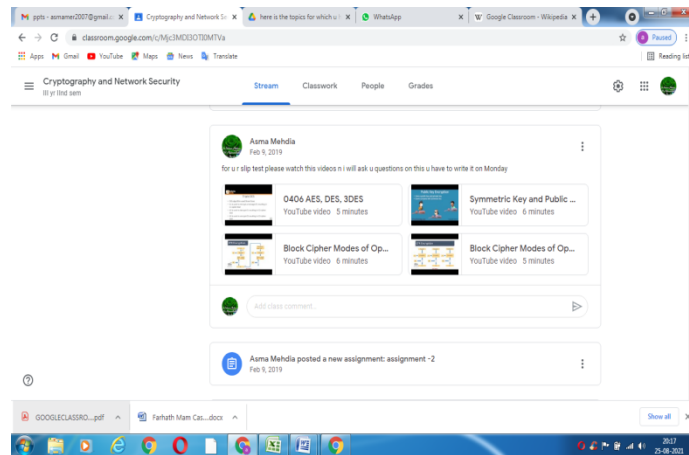
- 1) Discuss digital signatures?
- 2) Describe the following:
 - a) Digital signature standard b) Elliptic curve cryptography
- 3) Explain how public keys are certified in RSA and Diffie-Hellman key exchange algorithm?
- 4) Discriminate how X.509 certificate is revoked?
- 5) Formulate on what basis Zimmermann has developed PGP for e-mail security?

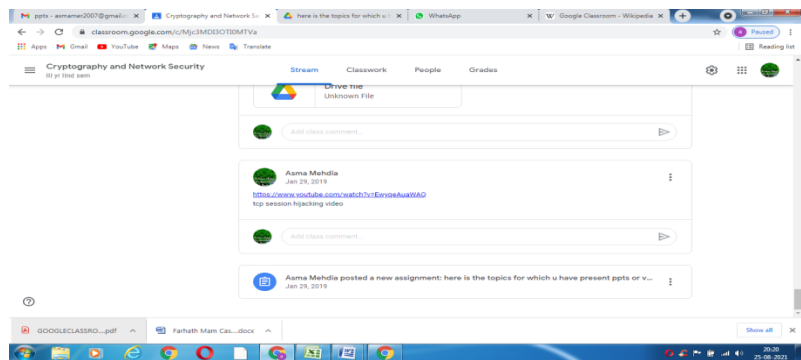
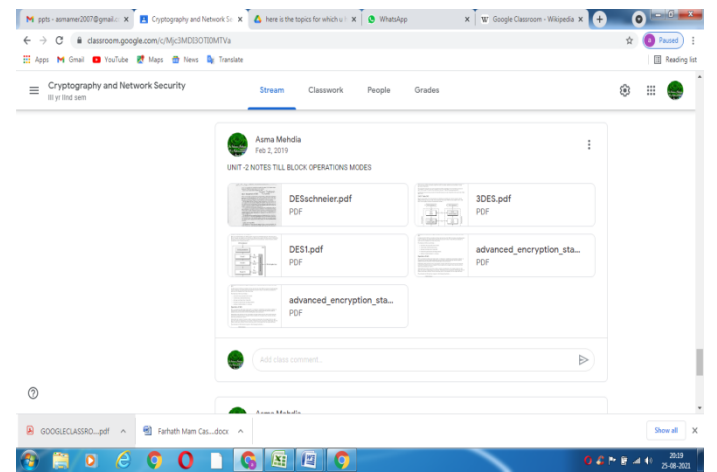
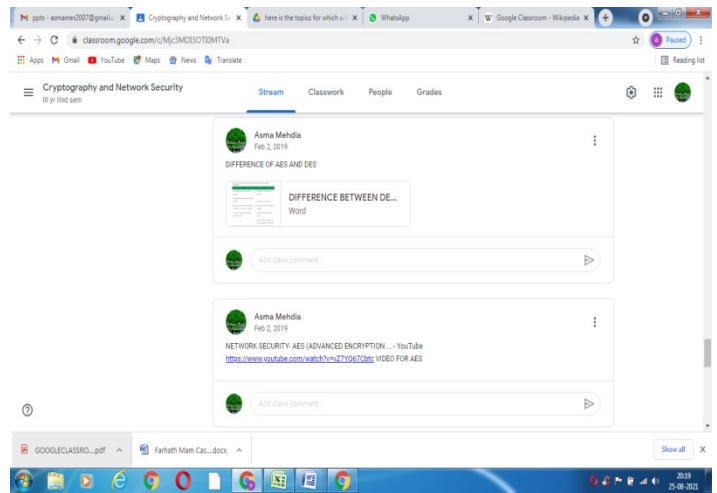
Below the post, there is a comment by Asma Mehdi, dated Feb 14, 2019, with the text "bit questions".

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Below the post, there is a comment by Asma Mehdi, dated Feb 13, 2019, with the text "here are the question for u r mock and mid 1 questions".





ASSIGNMENTS in Google Classroom

As a Teacher: I created an assignment in Google Classroom. The assignment has a link to a Google form in which there is a section for students to upload a PDF.

I expect students to fill the form and upload the PDF from within the form and submit. I expect to see the Assignment as 'turned in' in Google classroom after the student submits the form.

What I see is that the assignment is marked as missing and no attachment at all.

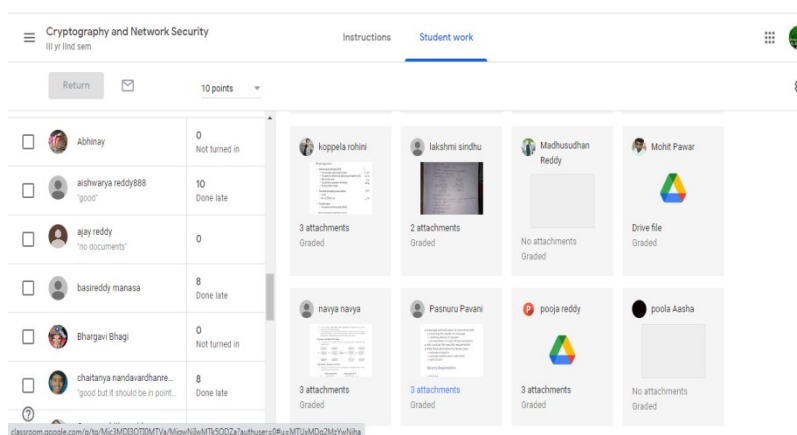
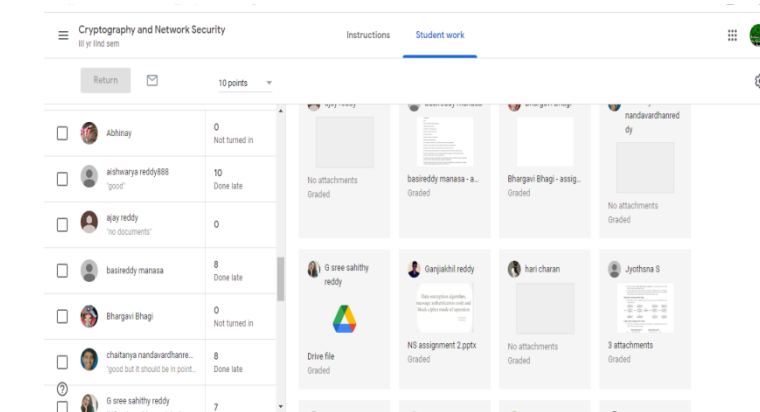
However, if I check the Response folder in the respective Google drive the uploaded file is present there.

Submit of Assignment

As a Student: I go to the classroom, click on the link to the form. I fill-up the form and then upload the PDF. Then I click submit. All I see is the form header with a button that says open assignment. I click open assignments. This takes me to the particular assignment page in google classroom. On the top right-hand corner, it says 'No work attached', 'Unsubmit'. The end result is I cannot 'Turn in' my assignment.

The image shows two screenshots of the Google Classroom interface. The top screenshot displays a list of students under the 'Cryptography and Network Security' class. All students listed (Likitha Pasumarthy, MALLESH YADAV, Naveen Mudhiraj, pattabhi venkanna, PAVAN KUMAR, and poola Aasha) have a status of 'Missing'. The right side of the screenshot shows a summary of the assignment: 'here is the topics for which u have present ppts or videos', with 1 turned in, 17 assigned, and 21 graded. Below this, individual student work areas are shown for chaitanya nandavardhanreddy, Abhi Srivatsasa, Abhinav, and APARNA REDDIGARI, all marked as 'Missing' with 'No attachments'.

The bottom screenshot shows the details of an assignment titled 'assignment -2' by Asma Mehdiya, created on Feb 9, 2019, worth 10 points, and due on Feb 14, 2019. The instructions state: 'watch all these videos n write some points or summary on this n submit it'. Two YouTube videos are listed: 'NETWORK SECURITY - DES (...)' (49 minutes) and 'Network Security - Block Cl...' (11 minutes). At the bottom, there is a section for 'Class comments' with an 'Add class comment...' input field.



Google Classroom Review: Pros And Cons Of Using Google Classroom In eLearning

How would you like to be a part of a classroom hub where you could communicate with your learners, provide them with constructive feedback whenever they needed it, and streamline the sharing of classroom documents and assignments? Google Classroom does exactly that; it is Google's ambitious addition to online education as well to the Learning Management System industry, and it aims to make classrooms all over the world not only paperless, but also more effective. Google Classroom is available through Google Apps for Education, as at the moment it is aimed at academic institutions only, and not corporate training. In this article, I'll share a Google Classroom review by mentioning 8 advantages and 8 disadvantages, in order to help you decide whether Google Classroom is suitable for your eLearning courses.

Survey results

The results from the direct observations indicate that teachers are active and motivated to use the proposed innovation. They responsibly participate in the training course, and are highly motivated to introduce technology into their work. Evidence of this is both the results of the survey and their activity in the system.

Students are also active and motivated. They use the system for learning, materials, tests for self-control, its ability to communicate with teachers and classmates.

Quality analysis of the survey with teachers

The results show that most of the teachers did not use cloud technologies in their work prior to the training course on the subject. The course has helped clarify the role of this technology and increase their motivation to use it in their work. They approve the possibility to spread teaching materials. Google Forms is a desirable tool for getting feedback from students. Everyone appreciates communication through Google Classroom as convenient for discussing methodological questions and sharing resources. Teachers appreciate the efficiency of classroom management through this technology. Most of them intend to use the innovation, both for teaching and for testing.

Some of the teachers' questions and the results obtained are presented in Figure 1, Figure 2 and Figure 3.

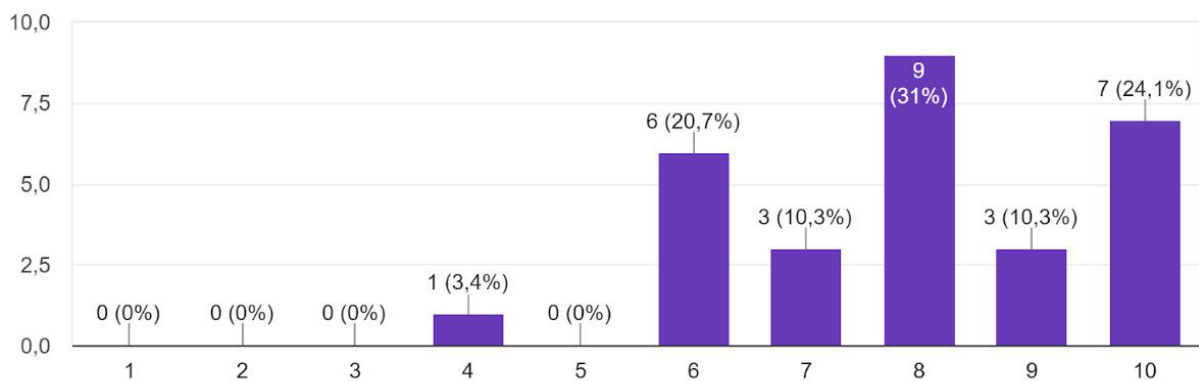


Figure 1. How do you evaluate the effectiveness of classroom management (communication with students and parents) through Google Classroom? – 29 replies

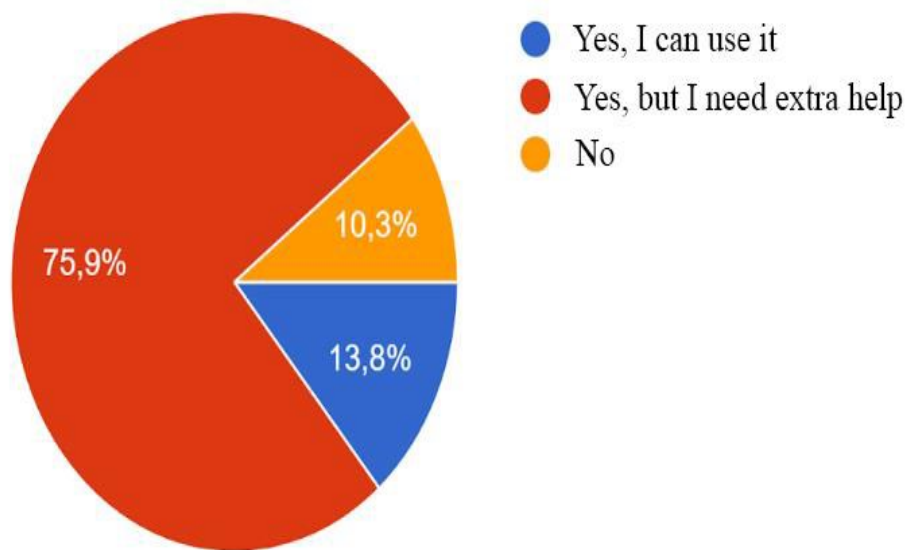


Figure 2. Do you intend to use Google Classroom for teaching? – 29 replies

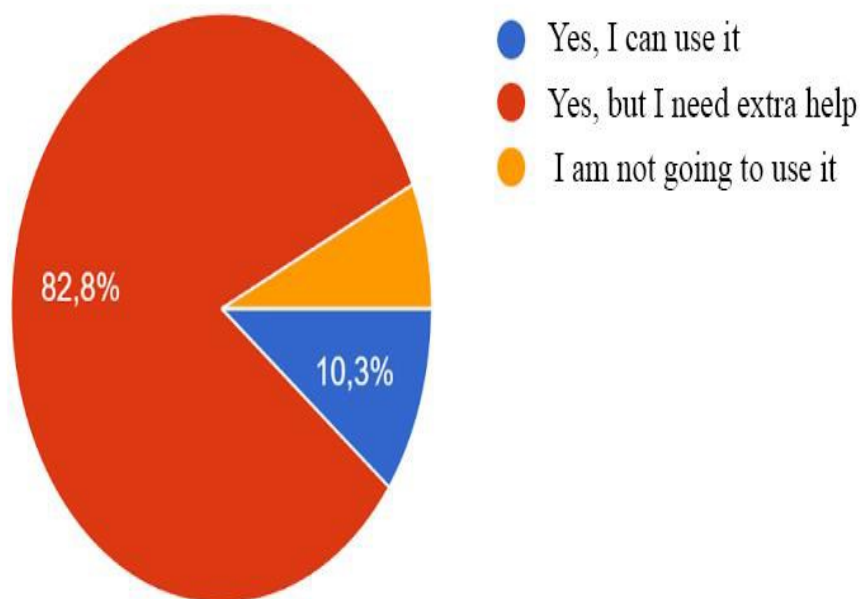


Figure 3. Do you intend to use Google Classroom for testing? – 29 replies

Quality analysis of the survey with students

The obtained results show that for most students the system is not difficult to use. They want to use it both for studying and for testing. About a quarter of them find the subject matter essential. The availability of electronic materials makes teaching easier for nearly all students. For most of them, Google Classroom forms a positive attitude towards the learning process. The role of communication with teachers and classmates is essential. A large number of students want to be able to check the knowledge they have acquired after their own preparation. About 15% of them prefer to use the system only for learning, but not for testing. Students can use a computer and a mobile device – a smartphone as a technical tool.

The answers that are not in favour of the working hypothesis are few and most of them are dictated by the lack of enough experience with Google Classroom, which is the reason for its further and more effective use.

Some of the students' questions and the results obtained are presented in Figure 4, Figure 5 and Figure 6.

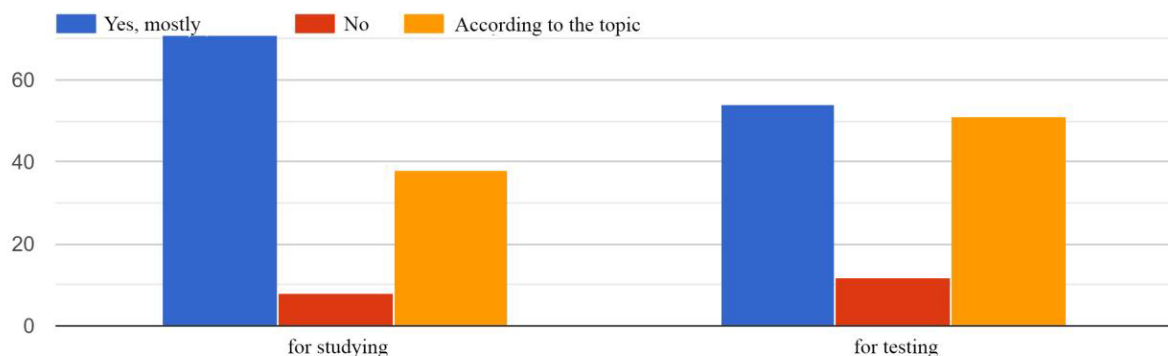


Figure 4. Do you want to use such a practice for studying and testing?

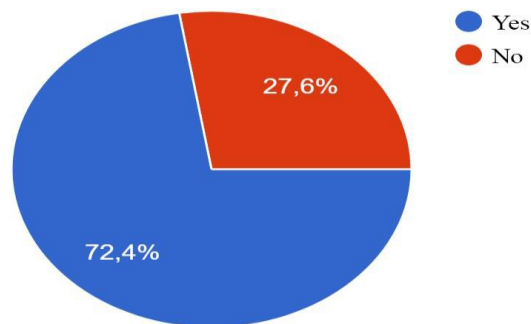


Figure 5. Do you use the system for contacting teachers and classmates in the learning process? – 116 replies

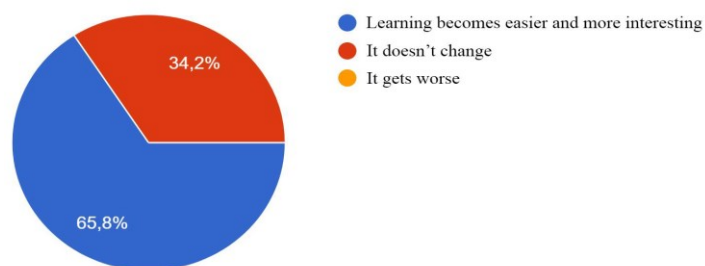


Figure 6. Does the use of Google Classroom change your attitude to learning? – 117 replies

Conclusions from the study

The obtained results confirm that the goals of the experimental study are achieved:

1. Students and teachers are convinced that introducing Google Classroom as an aid to learning is helpful;
2. Teachers do not have any particular difficulty working with this cloud technology after their training course;
3. Students are more interested in using the technology and are ready to be trained and tested through it;
4. This type of training helps to improve the learning of the subject matter in different subjects. From the obtained results it can be concluded that the working hypothesis is correct.