

# Compendium of Augmented Blended Teaching & Learning for Open Pedagogic Tools

Blended Learning Tool Evaluation – Google Classroom

### www.acadigia.eu



Co-funded by the Erasmus+ Programme of the European Union

The European Commission support for the production of this publication does not constitute an endorsement of the contents, which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein. (Project Nº. 2020-1-PT01-KA226-HE-095042).



# Blended Learning Tool Evaluation – Google Classroom









# Table of Contents

1.	Introduction
2.	Testing and evaluation of the tool5
3.	Functionalities supporting blended learning
4.	Tutorial Video and PowerPoint slides







# **Report Overview**

This document describes Google Classroom as a tool to support blended learning. Following testing and evaluation, it discusses the functionalities and how the tool supports educators in their professional activities, namely:

- Professional Engagement
- Digital Resources
- Teaching & Learning
- Assessment
- Empowerment of Learners
- Facilitating Learners' Digital Competence







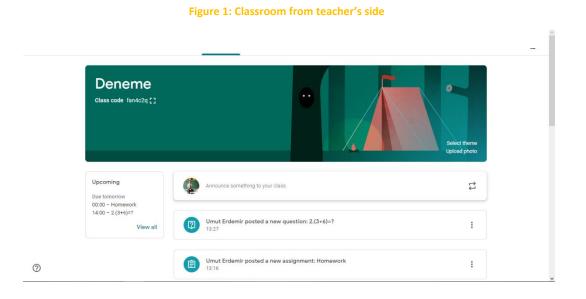
## 1. Introduction

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

It is designed to make it easier for education professionals to conduct virtual lessons. It allows teachers to create and organise lessons, while also allowing communication with students, and the submission of work by students, and all within the same platform, without having everything scattered across different accounts and services.

Google Classroom is an application for creating an inclusive virtual classroom for students and teachers. Also, it has so many tools that collaborate with Google's other applications like Google Meet, Gmail, Google Calendar, Google Forms, and Google Drive etc.

Google Classroom is recognised to be one of the most efficient and simple ways to take learning online for both in-class and remote studying. It is free to use and easy to get started. Google Classroom is a wieldy-to-use application for both students and teachers. Creating and managing a classroom is easy, but there are some problems, particularly in teacher's side.



Google Classroom is very easy to use for someone who had used other applications for meeting. It has simple pages for everyone (see figure below). The application has popup tutorials for each activity that you try to do. After a 30 minutes lesson (maximum) everyone can use Google Classroom smoothly, even the teachers who are not very good with technology.

# 2. Testing and evaluation of the tool

A real live test has been performed with more than 16 hours of work, and divided in 2 different accounts to prove the main functionalities of Google Classroom.

The accounts had different roles in classroom.

• **Teacher role:** Same role as in real life but virtually. They have the option to upload materials, homeworks and of course exams. Also, they are responsible of planning online lessons and







inviting students to them, and grading homework. They are giving materials, homework and of course exams. Also, they are responsible with planning online lessons and inviting students to it, and grading homework

• **Student role** it was also same as real life. Their biggest responsibility is following their assignments and joining online lessons. The student role went through the process of creating posts, using a blackboard, filing, and uploading an assignment, etc...

Google Classroom is all about students. Teachers have permission for everything, but students have permissions too. Students can create posts about whatever they want. They can use Jamboard as they wish without any permission. Teachers must be alert against the situation of any inappropriate behaviour or gloating student. So that is a big flaw in Google Classroom. When teachers gave homework or exams via Google Forms there is a problem to take the grades from there. Talking about pros of Google Classroom we can say that the notification system is good for both students and teachers. Collaboration with other applications of Google makes the Google Classroom fluent.

# 3. Functionalities supporting blended learning

## 3.1 Supporting Professional Engagement

## Usability and readiness for use:

- Google classroom is perfect for those organizations looking for a ready-made learning platform that's extremely simple to navigate, works across numerous devices, and integrates with other tools.
- It is recogonised as one of the easiest ways to transition online, since many teachers and students will own the hardware to get up and running and the school won't have to worry about IT support.
- For teachers, this is particularly important and is recognised as a minimal way to plan and carry out lesson resource sharing, assignments, and grading. Everything is clearly displayed and easily accessible across multiple devices. There's even Google Hangouts support for live video interactions with the class.

## Interoperability and standardization:

- It is not is a competitor for full LMS offerings such as Blackboard, D2L Brightspace, Moodle, or Instructure Canvas. It is more like Schoology or Edmodo, which are also free to use. Even if Google Classroom might not be a full LMS but it does meet Learning Tool Interoperability (LTI) standards so it can be used with another LMS as an add-on. It will also work with other freeto-use offerings such as Schoology and Edmodo as needed.
- At its simplest Google Classroom is the face of Google Workspace for Education, pulling it all together in one place for easier and quicker use of the various Google tools. While this is a great way to get teaching online, especially in a pinch, it is not a full classroom replacement. But in the case of no availability of budget nor infrastructure, it is hard to beat.

### Security and data protection:

• Google ensures high levels of safety and security for students by only allowing to create a class when the school or university has first signed up for a free Google Workspace for Education account. This is when the institution can decide which services students can use.







- It also offers a chance to look at and personalize the privacy and security settings to best suit the groups being taught. This is when accounts are setup for students, since they are not allowed to use their personal accounts to access the services. Access is limited to the virtual space, keeping it secure.
- Google assures users of Classroom that it keeps all data secure, there are no ads, it supports compliance with industry regulations and best practices.

#### Accessibility:

 Google Classroom is super easy to access and and is compatible with iOS, Android, Windows, Mac, Chrome, and pretty much any other device that can get a browser window running within it. Alternatively, if you don't have access to a computer, you can use gaming consoles which also have a browser. This means you can access Google Classroom on the Xbox or PlayStation.

**Administration**: Google classroom include some functions oriented to support either administrator or professional engagement. The most important are:

- **Roster Import:** This feature is made for admins who need to setup classes in large numbers as it automates this, syncing with an SIS, and works using Clever. This platform does not have an automated roster system, but you are able to integrate with third-parties such as rosterSync using a CSV file. Sure, it requires a manual sync, but then this is free compared to the automated offerings from a dedicated LMS.
- **Classroom Add-ons:** These have been added as a way to integrate useful content easily within Classroom. Admins can pre-install for teacher ease.
- Protect data and set permissions for your users.
- Set up classes and rosters.
- Add or remove students and teachers from classes.
- Get 24/7 support.

### 3.2 Supporting Digital Resources

Google Classroom allows and easy and direct interaction with all google Suite of applications. It uses the Google ecosystem of tools like Docs and Slides for easy materials sharing, what is an advantage as it simplifies student evaluation. However, at the same time the Google ecosystem is limited, and more Google Meet integration needed

Particularly useful for blended learning are:

- Google Workspace for Education (formerly G Suite for Education),
- Google Meet
- Chromebooks.
- Gmail.
- Google Calendar.
- Google Forms.
- Google Drive
- Jamboard etc.





Google Meet is a basic but useful platform for schools. With its basic interface (see figure below), especially teachersare able to use it. Jamboard is a tool in Google Meet (see figure below). Using it is not complicated but a little different because it needs some practice with the mouse. Using Jamboard is not as easy as real-life whiteboards, but it is more practical. You can incude pictures, write with keyboard and you can open several pages in Jamboard.

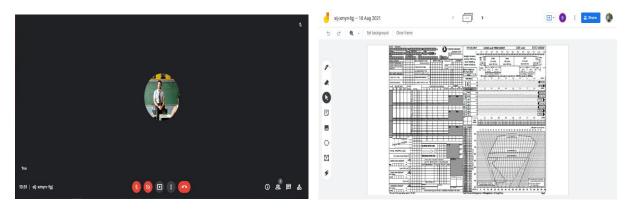
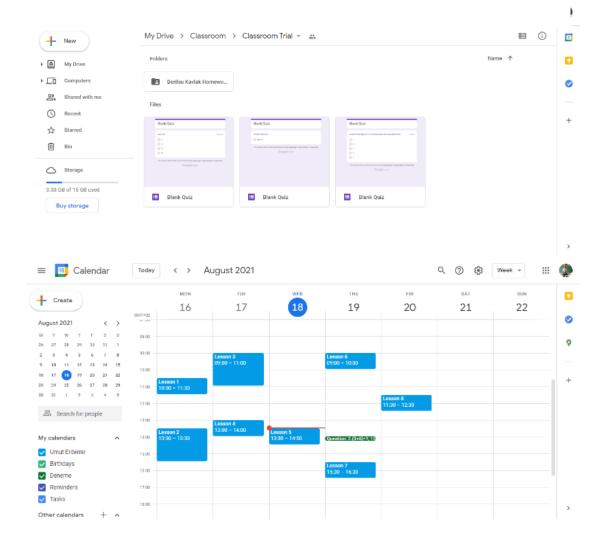


Figure 2: Google meetings and Google Jamboard

Collaboration with other Google apps like Drive (see figure below) or Calendar (see figure below) helps teachers to manage class.











This does meet Learning Tool Interoperability (LTI) standards so it can be used with another LMS as an add-on. It will also work with other free-to-use offerings such as Schoology and Edmodo when needed.

## 3.3 Supporting Teaching & Learning

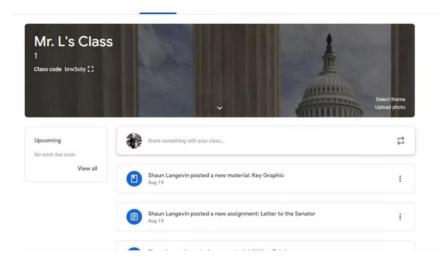
Google Classroom is primarily focused on personalizing the learning experience of students rather than managing it.

Google Classroom also provides a lot of tools for educators to create and share lessons, to manage and organise students and run classes. The way in which lessons are created and run will come down to the individual schools or teachers and how they plan to teach those lessons, with Google Classroom providing plenty of flexibility in the structure of those lessons.

There are four main areas in the Google Classrooms workspace that students can interact with. While the teachers have access to all the tools in the workspace, for students the interface focuses on the information they need to access to.

Google Classroom offers a home page on which activity is clearly shown in a feed with posts students have made, newly added materials, assignments, and more. Across the top of the page are four major headers - **Stream, Classwork, People and Grades**. Now we will quickly detail what each of these areas will do.

• **Stream** is the social part of the class all about communication. For small classes that are entirely virtual, this might be widely-used for discussion, but for larger classes replacing physical lessons, it might be that commenting by students in the Stream is just too much to manage.



#### Figure 4: Main class tab in Google Classroom

• **Classwork** allows teachers to upload materials, create assignments and quizzes using Google Forms, and ask questions. This is where the student actually finds the work that there is to do and the place, he will spend most of his time on Classroom.







Classwork is a folder where students find the assignments that their teacher has set for them. A range of different document types can be shared on Google Classroom - documents for information, documents for people to share which are editable by all (perhaps a class register), or individual documents to be edited by each student. Images, instructions, videos and so on can all be put in Classwork to support assignments.

	+ Create	Coogle Calendar	Class Drive folder
All tagette	Creative Process Framework		Posted Apr 4
Constive Process Screenplays	Autric		fotol Apr 4
introduction to small.	Screenplays		I
Elset Ficture	() Screenplay	Writing Projects	Durr Apr 16
	Creative process brainstorming worksheet	Autourk	Due Apr 13
	(i) In-class writing prompt 3	In class work	Dve Apr 15, 510 PM
	() Creative process brainstorming worksheet	Terroret.	Due Apr 14
	(1) Knowledge check	Ext Subst.	Dve Api 18, 510 PM
	Creative process homework	terreserk.	Due Apr 18
	Creative process quiz	ber .	Dave Age 17, 5:00 PM
	Creative Process		1
	Ecreenplay formatting homework	Hermitered	Due Apr 16

#### Figure 5: Classwork tab

• **People** shows all the learners and educators, including those who haven't responded to the invitation to join. There is a People tab in Google Classroom and this will give access to all the people in a class and it should also present contact details for teachers and details of all the other members of the class.

		rigure	b: People	tab		
	Stream	Classwork	People	Grades		
Teachers					2+	
Krista Weller					:	
PDAlice Keele	r					
Students					**	
Actions	~	Email	all guardians		Invite students AJZ	
Vand	a Aiken	Kate G	ancy		:	

• **Grades** is a chart that shows assignments and students and is where the teachers enter grades — which is shared with each student privately. Depending on the settings, students are able to comment on one another's posts, which can support collaboration.







#### Figure 7: Grades tab

= 🛃 Math		Strea	m Classwor	k People	Grades		0 🕸	₩ ¢	8
Sort by last r	name 👻 Overall Grade	Oct 15 Comparison of Macbeth Ad out of 100	Oct 12 Discussion participation out of 5	Oct 10 Journal 3 out of 10	Oct 5 Discussion participation out of 5	Oct 3 Reflective Essay Outline out of 20	Sept 27 Journal 2 out of 10	Sept 26 Presenting an interview narr out of 100	Sept 1 Discu partic out of
Class average	pe 78.08%		4	8.86	5	17.22	8.9	86.72	4.67
Michael Mor	gan 88.88%		/5	9	5	20	7	72 Done late	5
Maria Benne	tt 66.67%	/100	0	10	5	Not assigned	10	60	5
6 Gregory Cox	95.69%	75	Return	8	5	18	10	99	5
Erika Daniels	84.35%		View submission View rubric	10	5	18	8	86	5
Ruby Davis	83.04%	/100	0	10	5	20	5	79	5
Brock Henry	95.56%	/100	/5	10	5	16	0	95	5
Dev Jenkins	88.57%		Excused	7	5	Not assigned	10	95	0
Erin Lee	70.00%		5	6 Done late	5	14 Done late	Missing	68 Done late	5
Lois Martine	z 89.33%			10	5	20	9	88	0

The main funtionalities of the tool supporting the teachign and learnign process include:

• Managing courses and sharing resources. When a teacher logs into the platform, he can see a section for each of their classes, with courses differentiated by colours and banners. Name the class, enter a description, pick the banner image, and it is good to go. Resources can be shared to students all at the same time and theyare notified by email. So, a teacher can share and annotate a Google Doc, Sheet, or Slide, and keep track of when students had that distributed. The teacher can also drag and drop material from Google Drive, making integration even easier.





• Assignments: It allows to create, manage, and grade assignments. Teachers can create learning activities (assignments) using learning content like Youtube videos, Google Form surveys, or PDFs from Google Drive. They can assign learning activities (assignments) to all learners or individual learners. Educators can either immediately give out the learning activity (assignment) or schedule the learning activity (assignment) for a specific day. These functions also allow to schedule assignments across multiple classes. When making assignments, it is easy to select a title, add instructions, add files, pick a grading category (more on that below), or assign a point value and due date.







When it comes to doing the assigned work, the teachers will decide what they want the student to do. In many cases student will be able to create that work in Google Docs that the teacher provides via Google Classroom.

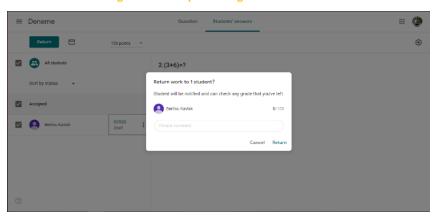
Teachers will also decide what student have to submit or hand in and this can be done via Google Classroom too. That might be filling i the Doc provided, or submitting external work, by sharing a file or taking a photo of artwork or something written. This is one area where using the smartphone app will make things really easy, because students can take a photo with their phone and then upload that to Google Classroom without worrying about how to transfer that to the computer first.

🗐 google da	as: 🗴   🛅 Google Form X 🖪 Classwork fo: X 📄 Internet Safi X   🖏 Photo Edito: X   🜀 Google Farm X   1	Settings x Google Acc: x G Google Acc: x + -	×
$\ \ \leftarrow \ \ \rightarrow \ \ G$	elassroom.google.com/u/2/w/MTISNzQ0OTMzNzMw/t/all	् 🕁 🔮	11
×	Assignment	Assign	
Ē	Title	For Reading 101   All students	ĺ
=	Instructions (optional)	Points	
	Google Drive     Link	Due	ł
	0 File	No due date 👻	
0	YouTube	Торіс	Ţ
Screensho	ot (68).jpg	Show all	×
6	🗧 🧑 🚱 🖂	- 11 🔹 🛋 📚 950	PM 2020

Figure 9: Example of Assignment creation

Teachers can write private messages about their notes (see figure below) and students can reply to these messages. Also, teachers can upload materials via Google Drive, uploading files, attaching link, or sharing YouTube videos (see figure below).

 Virtual Discussions: Teachers can invite learners to answer question-driven discussions. Comments on Google Docs allow a two-way discussion, as educators can give learners feedback. It is a good way to keep learners engaged, especially when you cannot see them. Educators can manage discussions by choosing to mute many individual learners from posting or commenting.



#### Figure 10: Example of assignment feed-back







•	Tite	For	
		Deneme 👻	All students 👻
=	Description (optional)	Торіс	
		No topic	-
	B I ∐ ≔ X		
	الله الله الله الله الله الله الله الل		
2			

• Announcements: Teachers can give updates to learners through announcements. Announcements are posts with no learning activities (assignments); they are just notices for learners about deadlines, tests, or any classwork. Educators can schedule announcements and can control replies and comments made on each announcement post.

#### Figure 12: Announcement

Upcoming	For
Due Friday 5 paragraph Essay: What d	Reading 101 💌 All students 💌
Create a Google Slides on	
View all	Share with your class Important Announcement: Tomorrow's test is being rescheduled for Monday! Use this extra time to continue studying! Comment below if you have any questions.
	Add     Cancel     Post

• **Questions** is another feature that provides an opportunity to increase engagement. For example, to assign a question to the class or individual students, with short answer or multiple- choice answer options. While this pales in comparison to the likes of Blackboard, you can use Google Forms to create self-grading, multiple choice assessments.

When it comes to Announcements, Assignments, and Questions, the really useful feature is an ability to save to draft, set to publish at a certain time, or publish out immediately. This flexibility gives teachers the ability to plan and prepare well ahead.

• Live Classes: One of the latest features allows educators to take a real-time class virtually through Google Meet. While a presentation can be carried out using Google Slides, the teacher is also able to create a real-world view by using Google Meet to see and hear the students for video interactions.

Educators can add up to 250 people to a Hangout call, and 1,00,000 viewers can live-stream. Meetings or lectures can be recorded so that learners who missed the live session can watch them later. Live classes are a great way for educators and learners to interact. They also allow







the educator to do a quick check-in and review directions. Learners can ask questions or get some help with an assignment as well.

- **Control students' interaction**. Student interactions can be controlled on three levels: students can post and comment, only comment, or only teachers can post and comment. This allows teachers to make announcements clearly, but it also makes it obvious if educators want students to interact with a post. This applies to multiple teachers as more than one can be added to a classroom, making it great for assistance.
- **Student Activity:** Teachers will be able to see when a student was last active online, commented in a class, or submitted work.
- Invite students. Teachers have the ability to invite students to classes. This will send out an email to the correct Gmail account, providing a link so students can join the classes. Google Classroom also provides the ability to create unique ID codes for individual classes, so teachers can supply a code to give you access. The teacher can also invite a co- teacher to a class.
- **Emailing.** The teachar can also e-mail students, co-teachers, or guardians andsSet up guardian email summaries
- **Create classwork or post materials.** Teachers can use the tool to elaborate and create an assignment, create a quiz assignment, create a question directly in the tool without the need to use external resources. He could also add materials to the Classwork page. He also could turn on originality reports
- **Chats**: There are two types of chats in Google Classroom. Private chats between student and teacher, and public chats with fellow students. There are two places to post public chats: on the stream and on individual classwork.

During the assessment several drawbacks for teachers were made evident. The biggest problem is that the teacher cannot choose students while planning lessons, you need to write their emails every time (see figure below). This makes planning lessons tiring for teachers. The other problem is taking notes from Google Forms. When teachers make exams from Google Forms, the questions are uploaded to Drive. Teachers can see how many students gave the correct answer but cannot see which students gave the correct answer. For students we did not face with any difficulties. They can easily create posts or comment on something.







#### Figure 13: Addressing meetings in Google Calendar

= 🔢 Calendar	Today				Q (?) 🔅	Week 👻	٢
	-	X	THU	FRI	SAT	SUN	
+ Create		Add title	19	20	21	22	
August 2021 < >		Event Task Reminder	-				0
M T W T F S S 26 27 28 29 30 31 1							0
2 3 4 5 6 7 8	C	Thursday, 19 August 11:00 – 12:00 Time zone - Doesn't repeat	Lesson 6				
9 10 11 12 13 14 15 16 17 18 19 20 21 22		Find a time	09:00 - 10:00			,	
23 24 25 26 27 28 29	8	Add guests					+
30 31 1 2 3 4 5 용 Search for people	•	Add Google Meet video conferencing	(No title) 11:00 - 12:00	Lesson 8 11:30 - 12:30			
	0	Add location					
My calendars	=	Add description or attachments	Question: 2.(3+6)=?, 13				
Umut Erdemir		Umut Erdemir 🔵					
Birthdays		Busy · Default visibility · Notify 30 minutes before					
Deneme			Lesson 7 15:30 - 16:30				'
Reminders		More options Save					
🗸 Tasks	-						
Other calendars + ^	18:00 -						>

#### 3.4 Supporting Assessment

Google Classroom include several functionalities to support the assessment of the students. In particular, the more remarkables are:

- Specific area for grades management. Three tabs sectionalize the layout with Classwork, People, and Grades. Grades is a chart that shows assignments and students and is where the teachers enter grades which is shared with each student privately. Google Classroom uses grading charts to store an at-a-glance marking sheet for teachers. This is also used to share grades with students directly while maintaining privacy so grades from other students are not visible.
- **Customizable Grading System:** Educators can select a grading system and create grade categories. If educators want the overall grades to be accessible to learners, they can select from any of the following systems:
  - $\circ~$  Total Points Grading: Divide total points learners earn from the maximum points available.
  - Weighted by Category Grading: For the grading itself, teachers are able to create a weighted grading system. Grade categories are assigned a weight. Each grade category's average scores are calculated and multiplied with the grade weight to give you the overall grade out of 100%. Homework could be set to account for 25 percent while exams are another 25 percent, and class participation makes up the other 50 percent, for example. Google does the heavy lifting here, keeping track of the category as the teacher grades individual assignments. Control options here allow how much a student can see of their grades.
  - No Overall Grade: If the educators do not select grade the learners.
- **Manual grading**. Grading is entered into the chart manually. Automation here, where grades from the assignment doc populate this chart, would be a nice option.
- Simultanous view of assignement and grade. Teachers can work with the chart and the assignment opened at the same time more like the real-world with a logbook open as marking happens.







- **Export of grades** into a student information system (SIS), increasing the ease of use and compatibility.
- **Rubrics.** Teachers can create a rubric, with up to 50 criteria per rubric and 10 performance levels per criterion.

The teachers can set up grading, give feed-back on assignments, grade and return an assignment and grade and return question answers, grade with a rubric, view an originality report and grade quizzes with Google Forms

## 3.5 Supporting the Empowerment of Learners

- **Diferrenciation**: Classroom offers numerous ways to make learning interactive and collaborative. It offers teachers **the ability to differentiate assignments**, include videos and web pages into lessons, and create collaborative group assignments. Through Classroom, teachers are easily able to differentiate instruction for learners.
- **Student Activity Dashboard:** Schedule assignments across several classes at once, and access Meet and Classroom more easily for better student engagement.
- **Offline Work:** Students will be able to start work , review, and write assignments, and add attachments, all offline.
- For students the interface focuses on the information they need access to.
- It facilitates access and equity
- It provides choice and flexibility in online assignments

## 3.6 Facilitating Learners' Digital Competence

Since many people have already used a lot of Google's tools and are familiar with how to use Googlebased systems, it is an appealing way to transition to online learning quickly, easily and for free. It is also simple enough to use without worrying about needing IT resources to keep it running. It only takes about half an hour to get the hang of if the user is accustomed to using the web and Google tools. Yet it still gives educators the freedom to post materials, set assignments, and carry out quizzes quickly and easily.

Google Slides could be better integrated as it can sometimes be difficult for a student to navigate between that and a document they are working on. This is a small multi-tasking gripe but is worth giving attention to. When the teacher shows the class how this is done, it can avoid leaving the less technically minded students struggling more than those who can work out multitasking more easily.

Making announcements is a simple and minimal feature akin to social media with no rich-text formatting. However, you can attach links, YouTube clips, and documents though, so it is very useful yet succinct. These announcements can be tagged with topics for even more clarity and organisation.





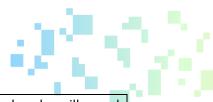


All the functionality of Google Classroom are summarised in the table below

Summa	ary of functionalitie	25
1.	-	A a ready-made learning platform that is extremely simple to navigate,
	use	works across numerous devices, and integrates with other tools. I is one of the easiest ways to transition online, since many teachers and students will own the hardware to get up and running and the school will not have to worry about IT support
2.	Security and data protection	Google ensures safety and security for students by only allowing to create a class when the school or university has first signed up for a free Google Workspace for Education account. This is when the institution can decide which services students can use. It also offers a chance to look at and personalise the privacy and security settings to best suit the groups being taught.
3.	Accessibility	Google Classroom is easy to access and works across – deep breath – iOS, Android, Windows, Mac, Chrome, and pretty much any other device that can get a browser window running within it. Alternatively, gaming consoles which also have a browser. This means you can access Google Classroom on the Xbox or PlayStation.
4.	Roster Import	This feature is made for admins who need to setup classes in large numbers as it automates this, syncing with an SIS, and works using Clever.
5.	Classroom Add- ons	These have been added as a way to integrate useful content easily within Classroom. Admins can pre-install for teacher ease.
6.	Others administration functions	Protect data and set permissions for your users. Set up classes and rosters. Add or remove students and teachers from classes. Get 24/7 support
7.	Supporting Digital Resources	Google Classroom allows and easy and direct interaction with all Google Suite of applications. It uses the Google ecosystem of tools like Docs and Slides for easy materials sharing, what it is and advantage as simplifies student evaluation: Google Workspace for Education (formerly G Suite for Education), Google Meet, Chromebooks, Gmail, Google Calendar, Google Forms, Google Drive, Whiteboard etc.
8.	Stream	Is the social part of the class all about communication. For small classes that are entirely virtual, this might be widely-used for discussion, but for larger classes replacing physical lessons, it might be that commenting by students in the Stream is just too much to manage.
9.	Classwork	It allows teachers to upload materials, create assignments and quizzes using Google Forms, and ask questions. This is where the student







	actually finds the work that there is to do and the place he will spend most of his time on Classroom.
10. People	It shows all the learners and educators, including those who have not responded to the invitation to join. There is a People tab in Google Classroom. This will give access to all the people in a class and it should also give contact details for teachers and details of all the other members of the class.
11. Grades	It is a chart that shows assignments and students, and it is where the teachers enter grades – which is shared with each student privately. Depending on the settings, students are able to comment on one another's posts, which can support collaboration.
12. Managing courses and sharing resources	Resources can be shared to students all at the same time and theyare notified by email. So a teacher can share and annotate a Google Doc, Sheet, or Slide, and keep track of when students had that distributed. The teacher can also drag and drop material in from Google Drive, making integration even easier.
13. Create, manage, and grade assignments	Teachers can create learning activities (assignments) using learning content like Youtube videos, Google Form surveys, or PDFs from the Drive. They can assign learning activities (assignments) to all learners or individual learners. Educators can either immediately give out the learning activity (assignment) or schedule the learning activity (assignment) for a specific day. The functions also allow to schedule assignments across multiple classes. When making assignments, it is easy to select a title, add instructions, add files, pick a grading category (more on that below), or assign a point value and due date.
14. Virtual Discussions	Teachers can invite learners to answer question-driven discussions. Comments on Google Docs allow a two-way discussion, as educators can give learners feed-back.
15. Announcements	Teachers can give updates to learners through announcements. Announcements are posts with no learning activities (assignments); they are just notices for learners about deadlines, tests, or any classwork.
16. Questions	Teachers can assign a question to the class or individual students, with short answer or multiple-choice answer options.
17. Live Classes	Educators are able to take a real-time class virtually through Google Meet. While a presentation can be carried out using Google Slides, the teacher is also able to create a real-world view by using Google Meet to see and hear the students from video interactions. Educators can add up to 250 people to a Hangout call, and 1,00,000 viewers can live-stream.







18. Control students interaction	Student interactions can be controlled on three levels: students can post and comment, only comment, or only teachers can post and comment.
19. Student Activity	Teachers will be able to see when a student was last active online, commented in class, or submitted work.
20. Invite students	Teachers have the ability to invite students to classes.
21. Emailing	The teachar can also e-mail students, co-teachers, or guardians and set up guardian e-mail summaries.
22. Create classwork or post materials	Teachers can use the tool to elaborate and create an assignment, create a quiz assignment, create a question directly in the tool without the need to use external resources. They could also add materials to the Classwork page.
23. Chats	There are two types of chats in Google Classroom. Private chats between student and teacher, and public chats with fellow students. There are two places to post public chats: on the Stream and on individual classwork.
24. Specific area for grades management	Three tabs sectionalise the layout with Classwork, People, and Grades. Grades is a chart that shows assignments and students, and it is where the teachers enter grades — which are shared with each student privately. Google Classroom uses grading charts to store an at-a-glance marking sheet for teachers.
25. Customizable Grading System	Educators can select a grading system and create grade categories. If educators want the overall grades to be accessible to learners, they can select from any of the following systems: Total Points Grading, Weighted by Category Grading, or No Overall Grade.
26. Manual grading	Grading is entered into the chart manually. Automation here, where grades from the assignment doc populate this chart, would be a nice option.
27. Simultanous view of assignement and grade	Teachers can work with the chart and the assignment open at the same time more like the real-world with a logbook open as marking happens
28. Export of grades	Grades can be exported into a student information system (SIS), increasing the ease of use and compatibility.
29. Rubrics	Teachers can create a rubric, with up to 50 criteria per rubric and 10 performance levels per criterion.







30. Diferrenciation	It offers teachers the ability to differentiate assignments, include videos and web pages into lessons, and create collaborative group assignments.					
31. Student Activity Dashboard	Schedule assignments across several classes at once, and access Meet and Classroom more easily for better student engagement.					
32. Offline Work	Students will be able to start work, review, and write assignments, and add attachments, all offline.					

# 4. Tutorial Video and PowerPoint slides

The ACADIGIA resources for Google Classroom are available on the website <u>here</u>.



