

INSTRUCTOR KIT:

Pedagogical Use of G-Suite Applications for Online Synchronous Lessons



Compiled by: Fathimath Nasiha Abdul Muhaimin

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Moving from the familiar physical classroom environment to a mostly unfamiliar online virtual classroom setting can be a rather strange and at times a daunting experience. Having to sit in front of a computer typing and clicking at your keyboard and going “hello, can you hear me, did you understand”, repeatedly to a group of faces on boxes on a screen does sound a bit tiresome. However, instructors who have gone “online” and experienced the online synchronous classes assure that once we figure out the pedagogical uses of the technologies on hand, the online class is not all that different from an in-person, physical classroom. They assure that with the right pedagogical use of the tools available allows for effective teaching and learning in online spaces too.

For successful online synchronous sessions, just like for F2F sessions, instructors must apply effective lesson planning strategies, appropriate instructional design, pedagogical models, feedback strategies, community building opportunities, synchronous course management skills and exploratory discussions to enhance student engagement in learning. **Our aim is to bring structure, cohesion and active engagement to the learning environment, keeping in mind that both Synchronous (online, Google Meet) and Asynchronous (online via Moodle) lessons work together for the whole subject.**

Lessons designed upon active learning strategies make online synchronous sessions successful and in this guide we will look at how this can be achieved using the G-Suite applications as we take our online live classes using Google Meet.

KNOWING YOUR TOOLS AT HAND

THE G-SUITE APPLICATIONS

There are several web-based applications that help instructors create interactive and engaging classroom atmosphere during synchronous, live, real-time, online sessions. Google provides us with some of the most easy to grasp and convenient applications for education.

Google Meet is a video conferencing application that is part of the Google Suite. The Google Meet is as the name suggests a platform to conduct online meetings. You are connected in real-time to a group of other people via audio and video, you can share your screen, and also chat. To learn more about the use of Google Meet refer [“Instructor’s Guide to Google Meet”](#).

Other G-Suite applications such as Google docs, Google slides, Google sheets and the Google Jamboard can be easily integrated into your Google Meet session. We will look at a sample online synchronous session with some of these tools in the next section of this guide. You can explore how to create and use the G-suite applications by referring to G-Suite Basics and G-Suite advance guides.

Taking a closer look at the G-suite applications and their pedagogic uses:

Google application/tool	Features	Pedagogical / classroom use
Google doc	<p>Can be created, edited and stored online.</p> <p>Files can be accessed from any computer / device with an internet connection and a full-featured Web browser.</p> <p>Multiple authors can work together in real-time from geographically diverse locations. All participants can see who made specific document changes and when those alterations were made.</p> <p>Can import, create, edit and update documents and spreadsheets in various fonts and file formats,</p>	<p>In our usual F2F classes, we normally pose questions to the whole class and move on when one or two students answer, however, using the Google doc, we can get all the students in the class to answer our questions!</p> <p>We can have a single Google doc for each lesson, with STRUCTURED sections for pre-lecture questions, during lecture questions and post lecture questions.</p> <p>We can create collaborative group work docs, where students work together on a case-study or solving a problem.</p> <p>We can also guide individual</p>

	<p>combining texts with formulas, lists, tables and images.</p> <p>Compatible with most presentation software and word processor applications.</p>	<p>students to create Google docs and share with instructor</p>
Google slides	<p>Allows users to create and format presentations and work with other people.</p> <p>Works similar to Google docs</p>	<p>Can get students to work together in groups on solving a problem, presenting a particular topic.</p> <p>Can be used during the session or at the end of the session.</p>
Google sheets	<p>Looks and functions much like any other spreadsheet tool, works like Google docs</p>	<p>For teaching ideas with Google sheets look here.</p>

<p>Google Forms</p>	<p>Forms are among the internet's most versatile tools. Whether you need a contact form or a checkout page, a survey or a student directory, a form is all you need to easily gather that information. With Google Forms, it only takes a few minutes to make one for free.</p>	<p>We can use Google forms to create quizzes, from MCQs, short answers, ratings. We can use the quizzes at the beginning or at the end of the session.</p> <p>For teaching ideas with Google sheets look here.</p>
<p>Google Jamboard (white board)</p>	<p>Jamboard is one smart display, and works like a Whiteboard.</p> <p>Quickly pull in images from a Google search, save work to the cloud automatically, use the easy-to-read handwriting and shape recognition tool, and draw with a stylus but erase with your finger – just like a whiteboard.</p>	<p>You can create and share the Jamboard as the main teaching activity if you want to go for the 'chalk/marker and board' option of teaching.</p> <p>To explore and learn more about Jamboard look here.</p>

SAMPLE ONLINE SYNCHRONOUS LESSON PLAN

Topic: "Legislatures: Representing the People?"

Learning Outcome:

- Students will be able to identify the differences and similarities between the two main types of legislatures and describe how these impact the representation of voters.

Pre-session Set up:

Create Moodle Announcement explaining what will be the focus of the session, links to readings students need to have completed, relevant media articles.

Set up a Google Meet schedule in advance. Make sure any relevant Google docs or resources are shared with students prior to the start of the session.

Important: set your Google sharing options to your desired permissions. Have relevant Google docs, images, and videos ready on computer for desktop share and discussion.

Online Synchronous Session: The LIVE class:

Time (Duration)	Activity	Resource
0-5 mins Introduction	Welcome students to class, ensure video and audio are working, and remind about netiquette. Share Google doc with pre-lecture questions, paste links in chat and tell students to open the doc, answer any immediate questions.	Google Meet Chat Google doc made for the session with pre-discussion questions.

	Let students know the session will be recorded and shared on Moodle.	
6 -15 mins Reinforcing concepts from readings	<p>Review objectives from Moodle announcement. Let students know they can ask questions via chat for now while you explain new concepts.</p> <p>Share your screen via 'Present' on Google Meet. Share the Google doc w/ pre-discussion questions; summarize student responses. (This is your feedback to student responses to the questions).</p> <p>Bring up Kreppel's 'Types of Legislatures' Chart on desktop, analyze in-depth with aid of sharing tools (highlighter, spotlight) or you can even open the chart on Google Jamboard and explain</p>	<p>Google Meet Screen sharing</p> <p>Google doc made for the session with pre-discussion questions.</p> <p>Google Jamboard: Kreppel's 'Types of Legislatures' chart on Google Jam board.</p>
16 – 26 mins Checking comprehension of new concepts	<p>Review student questions in chat and let students know they can now indicate on the chat and ask verbal questions, answer any questions.</p> <p>Use prepared Quiz questions (Can be made using Google forms) to confirm comprehension of key ideas, knowledge and concepts processed by students.</p> <p>Pose question in the chat ('What type of legislative</p>	Google form: Review Quiz

	system do you think best represents the populace?') and tell students to type their responses while you set up Google docs for collaborative group task	
27-47 mins Student Group Discussion: Active Learning Exercise	Share Group Work Google Doc in chat. Google doc will have clear instructions; each group represents one 'Type' of Legislature from Kreppel's Chart. They have to make case that their Type of Legislature truly represents the people and that each other type does not successfully represent the people. They should complete the Groupwork doc as they make their case. Give 10 mins to discuss. Go over the chat log from earlier, look over it and notice any trends, misconceptions, etc. By the 10-minute mark, if not earlier, check the work of each group by opening the respective Google doc see how it's going and decide whether they need extra time.	Google doc for group task
43-63 mins Student presentations	Each group has to present their key points from the worksheet via desktop share for 2 minutes. Each other group has to make 1 rebuttal point for 30 seconds.	Google doc for group task

<p>63-70 mins Lesson wrap up</p>	<p>Students complete google doc form responding to one key point they learned in the session, and one question they still have. Consider using a form to gauge comprehension so students can individually respond without being influenced by their classmates' insights</p>	<p>Google form for lesson evaluation / assessment</p>
<p>Post session reflection</p>	<p>Review Google Meet recording of session and real-time student response data to locate any misconceptions that should be addressed or particularly incisive points that should be highlighted. Add the most impactful moments of the session (e.g., edited elements from the video and responses to relevant questions from the questions to a Moodle forum discussion board post Provide guidance addressing residual questions and highlight important student contributions. Be sure to clearly contextualizing how students can draw from these elements for their final assignment</p>	

ADDITIONAL RESOURCES

Information and ideas for this compilation have been taken from the resources presented by the Centre for Teaching and Learning, Wiley Education Services and Google Education website and RRU Open Educational Resources.

1. To learn more about specific Google education tools please visit the Google Education site [here](#).
2. To read about collaboration-based pedagogy and G-suite applications click [here](#).
3. To learn more about how to teach online please take a look at 'Teaching from Home - Quick Start Guide' by Andrew Ng, Coursera, document in our resources section.
4. To explore more on how additional resources can be used in online classes please explore the resources from Centre for Teaching and Learning, Wiley Education Services [here](#).