

Comparison of Learning Management & Web-Conferencing Platforms

Prepared by: Julian Gaspini

May 28th 2020

Summary

Criteria	Zoom	BB Collaborate	Google Meet	Cisco Spark/WebEx	Microsoft Teams
Deployment & Usability	<p>Download and Install application</p> <p>Connects with desktops, mobile devices, and room systems</p> <p>Compact with features capable to support webinars, online training, video conferences, and virtual meetings</p> <p>Consistent experience for all users</p> <p>Calendar Syncing</p> <p>Simple user interface</p>	<p>No download required, web based</p> <p>Connects with desktops</p> <p>Must be invited/have access to course content on Blackboard</p> <p>Integrated with Quercus</p> <p>Online teaching, share content, virtual office hours, record a lecture</p> <p>Simple user interface</p>	<p>No download required, web based</p> <p>Connects with desktops, mobile devices</p> <p>Must have google account (G Suite)</p> <p>Calendar Syncing</p> <p>Simple user interface</p>	<p>Download and Install application</p> <p>Virtual meetings and conferences</p> <p>1 on 1 meetings</p> <p>Cisco One Service Ecosystem of (HD Video and Audio, Conferencing, File Sharing, Team Messaging, white-boarding and spark-boarding, mobile app)</p> <p>Calendar Syncing</p> <p>Complex user interface</p>	<p>Download and Install application</p> <p>Chat and work collaboration platform</p> <p>Access to shared files, calendars, collaborative editing, and easy transitions from voice, video, and text chat</p> <p>Integrated with Word, Excel, SharePoint, and PowerPoint, Power BI and One Drive</p>
Video Conferencing Capability	<p>Stable and reliable</p> <p>Supports long calls</p> <p>300 max participants</p>	<p>Stable and reliable</p> <p>250 max participants</p>	<p>100 max participants</p> <p>Stable and reliable</p> <p>Ability to call in via cellphone</p>	<p>100-200 participants</p> <p>Unlimited meeting duration</p> <p>Up to 10GB of cloud storage</p>	<p>250 max participants</p> <p>Live Streams up to 10,000</p>

Video & Audio Quality	HD Video and Audio Limited latency issues	HD Video and Audio Limited latency issues	HD Video and Audio	HD Video and Audio Latency issues with VPN connection	VGA and HQ video Quality
Simple Online Meetings	Email invitation Link share invitation Cloud support of meeting recordings	Sessions created through BB Collaborate in Quercus Link share invitation (can be invited as Guest through link)	Link share invitation Email invitation Recordings saved locally	Cloud support of meeting recordings Have an administrator schedule a meeting on your behalf	Cloud support of meeting recordings Microsoft Teams Rooms for small group meetings
Versatility	Robust features (annotation tools, whiteboard, share screen, waiting room, breakout rooms, virtual background) Many host controls: customize sessions and enable or limit access of participants	Robust features (annotation tools, whiteboard, share screen, breakout rooms) Cannot pre-assign breakout rooms Many host controls: customize sessions and enable or limit access of participants	Limited features Fewer host controls (inability to control certain functions of participants) No waiting room No breakout rooms No white board	Personal Room Meetings Share applications/screen Polling Many host controls: customize sessions and enable or limit access of participants	Tabs: placeholders for favourite applications and files Immersive Reader: speaks the text on a channel out loud Search, filter, @ mentions and bookmark options for chat call history, hold/resume, speed dial, transfer, forwarding, caller ID masking, extension dialing, multi-call handling, simultaneous ringing, and voicemail
Security	Ability to secure access to a meeting with passwords,	Restrict participant permissions	No password required	Must have WebEx Account	Restrict guest access

	authorization, and waiting room functions	Have only students enrolled in the course join the session Restrict guest access		Restrict access via password	
--	---	---	--	------------------------------	--

Zoom

Join a Meeting

- Easy to join a meeting via an email Invitation or directly through the zoom application
 - o Click link to zoom meeting
 - o Copy and paste meeting ID

Scheduling a new meeting

- Edit Meeting Creation Settings
 - o Create a title/topic for the meeting
 - o Set a date, time and duration for the meeting
 - o Enable recurring meetings, and indicate how often and when the meeting will reoccur
 - o Options to generate a unique, one-time, 9 digit ID for a meeting or use the same personal ID for each meeting
 - o Can set passwords for meeting
- Set default video setting
 - o Enable or disable video function for host and participants
- Edit Meeting Options (prior to meeting start)
 - o Enable/disable join before host
 - o Mute participants upon entry
 - o Enable waiting room
 - o Pre-assign breakout rooms
 - o Automatically record the meeting in the cloud
- Invite others to the meeting

- Via outlook, google calendar
- Copy invitation and send it via email

In Meeting Controls

- Basic Controls
 - Muting and unmuting functions
 - Ability to chose audio output/input devices
 - Video on/off functions
 - Ability to chose internal/external video equipment
 - Invite participants in real time
 - Select 1 or multiple individuals from list and add simultaneously
 - Copy URL into group chat
 - Email invitation
 - Manage Participants
 - Host at the top
 - Participants in ALPHA order
 - Promote to host or co-host
 - Remove from meeting
 - "Mute All" button
 - Lock meeting
 - Entry and exit notifications
 - Share Content
 - Everyone has capability to share content, host can restrict share content
 - Desktop, Web Page, Application, white board
 - Annotation Tool
 - Tool kit (spotlight, text, shapes, free form)
 - Host can disable attendee annotations
 - Host can clear annotations
 - Video

- Gallery view; see everyone at the meeting at once
 - Speaker view; video focuses on the current or most recent speaker
 - Ability to self hide video
 - Ability to hide non-video participants
- Chat
 - Private Message
 - All participants
- Record a Session (only host has access)
 - Initiate, Pause, and Stop recording
 - Free User – recording saved locally (to personal laptop)
 - Licensed User – recording saved to cloud (link, shareable)
 - End meeting for all

Break Out Rooms

- Ability to take a large meeting or virtual class room and split it up into multiple groups or breakout rooms
- Open and close breakout rooms as often as you like
- Breakout rooms can be recorded and saved locally only
- Host and Co Host Functions
 - have the “breakout rooms” button
 - can hop between all the rooms
 - Automatically or manually edit breakout rooms
 - Swap/exchange participants in and out of rooms
 - Assign specified number of breakout rooms
 - Assign number of participants per room
 - “Open all Rooms” to create the rooms
 - Broadcast Message to all Rooms
 - Close Rooms
 - Starts 1 minute timer to rejoin original session (can change counter)
 - Option to auto close rooms after a specified amount of time
- Pre-Assign Breakout Rooms

- In zoom app, when creating a meeting or if meeting has already been created you must edit the meeting and select “Breakout Rooms Pre Assign”
 - Create a rooms
 - Upload a CSV with all participants in advance

Webinar

- Basic Info
 - Zoom Video Webinars allow you to easily conduct large online events with video, audio and screen sharing for up to 100 video participants and 10,000 attendees
 - The features in Webinar are tailored for managing large audiences with branding, registration, host controls, polls, question & answer, raise hand, chat, recording and reporting
 - Create a title/topic for the meeting
 - Set a date, time and duration for the meeting
 - See more students simultaneously
 - Privacy issues
- Invitations
 - Invite panelists
 - Authorize and Register Attendees
 - Automatically or manually approve attendees
 - Notify host when someone registers
 - Add questions and create custom questions to accompany registration
 - Name, location, company
 - Registration to link
 - Send to attendees where they can register for the webinar

BB Collaborate (Ultra)

Basic Information

- Max of 250 participants, made up of moderators, presenters, and participants
- No download or installs required, completely web-based
- Used directly from within Quercus and therefore integrated with Quercus
- Online teaching, share content, virtual office hours, record a lecture
- The screen sharing features allows presenters to demonstrate procedures exactly as instructed on the screen. This also allows the presenter to permit others to share their screens if they need clarification of something or to share further ideas.
- The software gives you the freedom to use a whiteboard to draw/demonstrate concepts to students and other employees

Features:

Record Sessions

- Compressed and saved as MP4s, they include
 - o Audio
 - o Any content shared or active speaker video
 - o Chat messages in the everyone channel
- Moderators control recording
 - o Enable all enrolled students have access to recordings
 - o Edit recording name
 - o Delete recordings
 - o Share via URL
- Multiple recordings during one session
 - o If you continue recording after you have stopped, a new recording is saved and added to the list of recordings for that session
- Ability to download recordings and transcripts of chat or captions

Breakout Groups

- You can create breakout groups that are separate from the main room and assign attendees to them.
- Breakout groups have their own private audio, video, whiteboard, application sharing, and chat.
 - o Any collaboration that takes place in a group is independent of the Main room
- You can choose to have Collaborate create and randomly assign breakout groups for you. Or you can create the groups yourself
 - o Breakout groups are assigned during the session. **You can't create them ahead of time or save them.**
- Option to allow participants to switch breakout groups themselves
- **They are not recorded**
- All participants in a breakout group are presenters
- **Cannot be pre-assigned**
- Moderators can monitor groups and jump between groups
- **Cannot change name of group**

Course Room

- The course room is an open session dedicated to your course.
- Provides you and your students a convenient launch point for classes or impromptu meetings
- Students can use the room without an instructor or moderator present in the course room is open and on
- **Supervised sessions:** When the course room is unlocked anyone can join the session at any time. Instructors don't have to be present for students to join the session. If you don't want students to join a session unsupervised, lock the course room and create scheduled sessions.
- **Multiple sessions at once:** If you want to run multiple sessions at the same time for students to use as virtual study room, for example, you can create multiple sessions for the different groups to join

Application Sharing

- Moderators and presenters can share their desktop or a software application to teach attendees about a particular topic. Whenever they move through the application or desktop, their students automatically follow along

Session Settings

- As a moderator you can control attendee permissions by Allowing or revoking
 - o Sharing audio (mute one or all)
 - o Sharing video
 - o Posting chat messages
 - o Drawing on whiteboard
 - o Remove anyone from session
 - o Promote a participant to moderator
 - o Promote a participant to captioner
 - o Promote a participant to presenter
- **Share application or desktop**
 - o Share your desktop or a software application to teach students about a topic. Whenever you move through the application or desktop, your students automatically follow along.
 - o When you share your desktop or application it is seen by everybody in the live session and anybody viewing the recording later.
- **Share files**
 - o Upload GIF, JPEG and PNG images, PDF files, or PowerPoint presentations of 60MB or lower to your session. You can upload multiple presentations, however the total size allowed is 125 MB or lower for any particular session.
- Start a poll
 - o Moderators can poll attendees at any time using one of five different types of polls: Yes/No and multiple choice (1-2, 1-3, 1-4, 1-5).
- Create breakout groups

Attendance

- Let Collaborate take attendance for you. Collaborate tracks when attendees joined and left sessions. It also gives you an idea of how long attendees were present in the session on average.
- You can view the Session attendance report for each session.

Set a timer

- Count down to the start of the session, or time student presentation. Use the timer to communicate time sensitive information.
- Moderators can set a timer for everyone in the session or just make it visible to other moderators.

Annotation Tools

- Select arrow
- Pointer (use the pointer hand to point at different material on slide or presentation)
- Pencil (to draw free hand)
- Shapes (to draw rectangles, straight line, ellipse,)
- Text
- Clear all button

Chat

- 50 messages displayed (max) at any given time
- Moderators have their own private channel
 - o Choose to enable/disable chat for everyone
 - o Can supervise all chat conversations (including private chats)
 - o Can limit who participants chat with
- Private chat, for peer to peer messaging
- Group chat (Everyone), this chat is included in the recording

Accessibility

- full-screen reader support of all key workflows, whiteboard activities, and uploaded files

Session Inactivity

- session will end if inactive (when there is no attendee speaking, chat messages, users joining or exiting the session, hand raise, content activity (upload, convert, delete, and so on)

Google Meet

Basic Information

- Must have google account
- 100 participants
- 60 minutes per meeting (up to 24 hours per meeting through sept. 30th 2020)
- No download required (unless on mobile device)

Access Requirements

G Suite users (using Google Meet with a school or work account)	Non-G Suite users (using Google Meet with a personal account)
<p>A G Suite administrator needs to turn on Meet for your organization</p> <p>You need to be signed into a G Suite account to create a video meeting</p> <p>You need to be signed into a G Suite account to create a video meeting.</p>	<p>You will need a Google account to use Google Meet.</p>

Join a Meeting

- From Gmail
 - o In the sidebar, click Join a meeting and enter a meeting code.
- From Google Calendar, or Outlook Calendar (with plugin)
 - o Click the event, then click Join with Google Meet
- From Meet (<https://meet.google.com/>)
 - o Join a scheduled meeting or use a meeting code.
- From Mobile Devices

- Download the Google Meet app

Schedule a Meeting

- Sign into your G Suite Account
- In Google Calendar:
 - Create an event
 - Click Add guests and enter the names or email of the people you want to invite
 - Save
 - Click “Send” to notify Guests”
- In Gmail
 - In the sidebar, click Start a meeting.
 - In the Meet window, choose an option to join the meeting:
 - To join using your computer’s camera for video and your computer's microphone for audio, click join now.
 - (G Suite users) Using your phone for audio, click Join and use a phone for audio and then follow the on-screen prompts.
 - Once in the meeting, add other people:
 - Share a meeting code: click Copy joining info, then paste it into a messaging app.
 - Invite someone by email: click Add people ➤ enter a name or email address ➤ click Send invite.
 - Invite someone by phone: click Add people ➤ click Call ➤ enter a phone number. This feature is currently available for meetings created via a G Suite account.
- On the Google Meet webpage:
 - In a web browser, enter <https://meet.google.com>.
 - Click Join or Start a meeting.
 - (Optional for G Suite users) Create a nickname for your meeting and enter the nickname. Click Continue.
 - Click Join now.
 - To add someone to a meeting, choose an option:
 - Click “Copy joining info” and paste the meeting details into an email or another app.
 - Click “Add people” and choose an option:
 - Under the Invite section, select a name, or enter an email address and click Send invite.
 - Under the Call section, enter a phone number and press Call. This feature is currently available for meetings created via a G Suite account.

Features

- Customize Video Meetings
 - o Change Screen Layouts
 - Auto
 - Tiled (shows up to 16 people when there is no presentation)
 - Spotlight (presentation, or active speaker fills the window)
 - Sidebar (you see the active speaker, with participants in a sidebar)
 - o Pin, mute, or remove participants
 - Only moderator or creator event has these controls
 - Unable to unmute another participant, participant must unmute themselves
 - o Captions
 - You can make it easier to follow what's being said in meetings by turning on captions, which show text of the conversation.
- Presentation Tool
 - o Simultaneously present while being seen
 - If your camera is turned on, your video is active while you're presenting.
 - o Select Your entire screen, a window, or Chrome tab
 - Select content/application you would like to share
- Fewer Features and host controls
 - o If you are in a G Suite for Education domain and you have created a meeting, you can not mute participants or remove participants that are not members of your domain.
 - o If you have a public meeting and participants have not verified with their email, you as the meeting creator must "allow" each one of them to join the meeting individually.
 - o No virtual background
 - o No waiting room; Meets does not have a waiting room feature to control who enters and exits a session and when they may do so
 - o No password entry
 - o Meet only records in 720p and the recordings take time to load on to your google drive. This time is increased if not all members leave your meet session

- Participants can take over the present featured screen. This pulls the focus off of your screen share as the spotlighted video. In zoom only the host can override a screen share
- Meet does not allow you to disable participants web cameras (preventing them from re-enabling them without host permission)
- Fewer host controls
 - Audio
 - Share screen
 - meet doesn't allow the host to lock the meeting from new participants joining nor to end the meeting when instruction is finished
 - Entry/exit in a meeting

Recording

- Recordings include the active speaker and anything that is presented.
- Recordings are saved to the organizer's *Meet Recordings* folder in My Drive.
- An email with the recording link is automatically sent to the meeting organizer and the person who started the recording.
- The recorded link is automatically added to the Calendar event.
- If a participant turns on live captions during recording, the captions won't be recorded and don't appear when you play the recording. *For more about live captions, see below.*

Breakout Rooms / Waiting Rooms

- Google Meet does not have breakout rooms or waiting rooms as an inbuilt feature. However, there is a work around for this which can be achieved by creating parallel hangouts.

Prepared By: Julian Gaspini

Program Coordinator – MFAcc