





Comparison of free versions of online videoconferencing tools

These tools allow multiple people to meet, interact, and collaborate in real time. Live online club sessions are closer to an in-person club experience than other options. At least two adults are required to manage live online sessions, and they can take more time to organise than remote sessions.

	BigBlueButton	Cisco WebEx	Google Meet	Zoom	
Time limit (if any)	60 mins/none ¹	50 mins	60 mins/366 hours ²	40 mins	
Do participants/guardians need to install, to use it?	No*	Optional*	No*	Optional*	
Do participants/guardians need to set up an account?	No	No	No	No	
Can I turn off direct messaging between participants?	Yes	Yes	Only public chat	Yes	
Important security features	 New IDs can be generated for each session 'Waiting room' feature to control the admittance of guests The host is able to mute and remove individuals 				
Can I control screen sharing?	Yes	Yes ³	Dependent on version⁴	Yes ⁵	
Maximum number of users	150 ⁶	100 ⁷	100	100	
Number of simultaneous hosts/moderators possible	Multiple	One	One	One	
Other useful features	Breakout rooms Hand-raise signal Ready-to-use polls Open source Multi-user whiteboard	Hand-raise and other signals Polls Passwords for sessions	Integration with Gmail and Google Calendar Hand-raise signal, whiteboard and ability to turn off public chat with Education /coderdojo.com accounts.	Breakout rooms Simultaneous multi-screen share (not in breakout rooms/on mobile) Hand-raise and other signals Host-only screen sharing option	
Issues worth mentioning	Harder for you to set up than other tools if you plan to use your own server.		Fewer free features: Breakout rooms and Polls on paid accounts only. No passwords for sessions available.	You should use additional security features to prevent unapproved access: password, unique links, 'waiting room' feature, 'lock room' feature.	
Guides/tutorials	Video for hosts, and video for participants	Overview video and start/join a session video	Training videos and help articles, and user guide	Multiple introductory videos	

¹ 60 minutes if you use BigBlueButton with Greenlight in the browser. No time limit if you use your own server.

² The free version of Google Meet maximum is 60 mins (<u>more information</u>), while the <u>Google Workspace for Education</u> <u>Fundamentals</u> edition which is free with a coderdojo.com email address has a limit of 366 hours for group meetings.

³ Control can also be given to others and taken back.

⁴ Feature available in education editions, for users with coderdojo.com Gmail accounts and paid workspaces. Feature not available with free standard gmail accounts.

⁵ If you are sharing your screen, others can't share theirs.

⁶ Limited by the server resources you have. Minimum server requirements should support 150 users.

⁷ The free version has been upgraded during the pandemic (<u>more information</u>).







Comparison of free versions of classroom-management and homework tools

The following tools are often used by schools. They allow you to remotely assign tasks to a group for them to work on in their own time (some tools, e.g. Microsoft Teams, also allow videoconferencing). Assigning tasks remotely is not as interactive as running live sessions, but it may suit you if 1) your participants already use these tools in school; 2) you have a club with a fixed group of participants; 3) you don't have the volunteers or time to manage live sessions.

	Microsoft Teams	Google Classroom	Seesaw
Do participants/guardians need to install?	Optional ⁸	No ⁹	Optional ¹⁰
Do participants/guardians need to set up an account?	No*	No*	No*
Can I turn off direct messaging between participants?	Yes	Yes	Yes
Can I turn off public chat/comments?	Yes	Yes	Yes
Integrated with videoconferencing?	Yes	Yes	No
Time limit (if videoconferencing available)	60 minutes ¹¹	See Google Meet above	Not applicable
Maximum number of users	250	250	150
Other useful features	Conversation channels to discuss specific topics with groups Create multiple groups (useful if running multiple clubs) Set up group before young people have access Share videos/links Invite learners with a link Provide feedback on multiple learners' work at once	Create multiple groups (useful if running multiple clubs) Set up group before young people have access Share videos/links Invite learners with a link Provide feedback on multiple learners' work at once Integration with Google Meet, Gmail, and Google Calendar	Create up to ten groups or 'classes' Two club leaders/educators per group/class Create and share up to 100 'activities' Provide feedback on learners' work Family messaging possible (with translation)
Issues worth mentioning	Limited number of channels (30)	Some issues with domain access depending on an organisation's admin and account types	Free package has fewer features; schools are likely to use a paid package
Guides/tutorials	'How to' videos	Tutorial for beginners	'How to' article

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⁸ Microsoft Teams can be accessed in a web browser or installed on a computer. Some functionalities are only available in the installed version.

⁹ On computers, installation is not required, but on mobile devices, installation is necessary. Parents/guardians must be invited by the volunteer/educator via the young person's profile.

¹⁰ Parents/guardians can download an app to receive notifications about their child's work. In the free version, type in the 'Class Join' code from the educator/volunteer and tap 'Go'. Young people can then create an account with their email and password, or continue with their Google account.

^{*} Accounts are created by educators/volunteers, who need to know the young people in advance. Suited for closed groups with a fixed number of participants.

¹¹ The free version has a 60-minute time limit on videoconferencing meetings (more information).







Comparison of free versions of live-streaming tools

These tools suit people who like the interactivity of running live sessions but prefer not to use videoconferencing tools. Live-streaming suits code-along sessions. You can make a recording of your live stream available after you end the stream, and you can share it beyond your regular club attendees (may create additional comment-moderation work).

	YouTube (Live)	Facebook Live	Twitch
Stream time limit	12 hours	8 hours	48 hours
Do participants/guardians need to install?	No	No	No
Do participants/guardians need to set up an account to watch or comment? Note: To register for an account on these platforms, the person must be at least 13 years of age (in some jurisdictions, this age limit may be higher).	Not to watch Yes to comment	Not to watch, if your page is public Yes to comment	Not to watch Yes to comment
Can I turn off or moderate comments and direct messaging between participants and to hosts?	Comments disabled on content set as 'for kids' Direct messaging is not possible within the stream	Some controls to automatically moderate certain types of comments during the live stream Direct messaging is not possible within the stream Can turn off direct messaging to the page separately	Can't disable chat Can set chat to 'followers only' and require minimum follow time (up to three months) Can turn on chat filters
Can you stream to a private group?	Yes, if set to 'unlisted', only people with the link are able to access the stream	Yes, can go live in a private Facebook group, so only the current members can view	No
Link/URL settings	Each stream has its own address/URL with its own settings. You can schedule streams as distinct events that can all show on your page in advance.	Each stream has its own address/URL with its own settings. You can schedule streams as distinct events that can all show on your page in advance.	The stream is always hosted at the same URL (twitch.tv/[your username]). Your settings apply any time the channel is live.
Other useful feature options	Assign moderators Chat filters and blocked words list Slow mode: sets a time limit between a user's comments Turning off live chat	Slow mode: sets a time limit between a user's comments Only show comments with at least 100 characters Only your followers can comment Block commenting unless the user is following the stream for at least 15 minutes	Assign moderators Require users to agree to channel rules Chat filters, blocked words list, and disable links in chat Require chatters to be verified by email Ban a user
Issues worth mentioning (Related to latency, meaning the delay between your camera capturing an event and the event being displayed to live stream viewers)	The default latency on YouTube is 10 to 20 seconds. You can change this so that you can be more responsive to participants in your chat. Live streams set as 'for kids' do not allow commenting.	Facebook's latency is about 10 to 15 seconds, and this can't be changed.	The default latency for Twitch is very low so that the host can engage live with the chat. This can be changed in the channel settings.

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