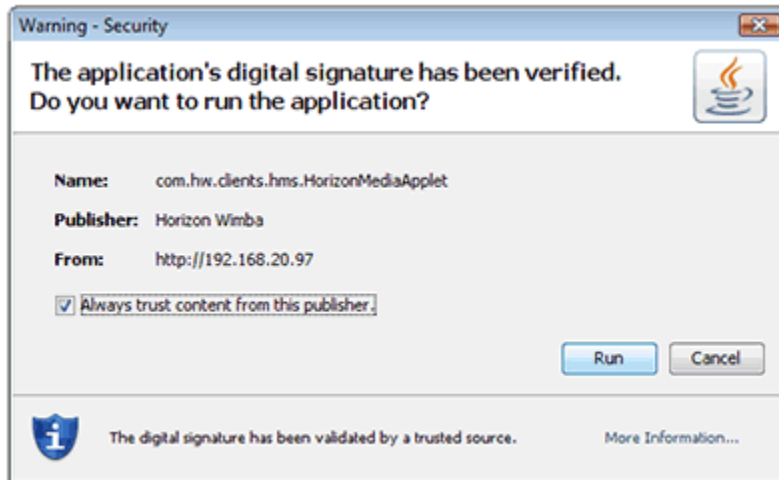


Audio and Video in Wimba Classroom

Authorizing WimbaMedia



The **WimbaMedia System** uses a signed Java applet to play audio and video on your computer. If you have not fully authorized the applet previously, you will receive a popup window similar to the one pictured above.

When asked if you wish to trust the signed applet provided by Wimba, click 'Always' or 'Grant Always.'

NOTICE FOR MAC USERS: *Certain Safari users will receive a different popup window. If so, under "When using this certificate" select 'Always Trust' and click 'OK.'*

Once you have successfully authorized WimbaMedia, you should see the **Media Bar** appear.

Media Bar



The **Media Bar** appears above the **Text Chat Area**. It is home to the **WimbaMedia System**, a multi-way audio and video means of communication during a live presentation.

The Media Bar contains the following items:

- **NetStats:** network statistics about your Internet connection
- **Talk button:** initiates your microphone and video broadcast (if the **Video Window** is raised and you have opted to transmit video)
- **Volume meters:** colored bars indicating you are sending/receiving audio
- **Camera button:** raises/lowers the **Video Window**
- **Telephone Simulcast:** backup option if you do not have a headset or microphone
- **Options Menu:** advanced audio/video settings

For more information on speaking and/or sharing video, please refer to: [Broadcasting Audio](#) and [Broadcasting Video](#).

Note: If the room is configured for Phone Simulcast Only, the **Media Bar** will only display the Telephone Simulcast icon.

NetStats

It is possible to monitor network status, both for yourself and your users.

NetStats Indicator



Connected



Disconnected

The **NetStats** Indicator displays the overall quality and strength of your connection to the **WimbaMedia System**. This is depicted graphically in the **Media Bar**, and updated at regular intervals, so that you can monitor your connection.

Monitoring Media Quality

First, ensure that WimbaMedia has connected by viewing the triangular 'hat' on top of the NetStats Indicator. If you do not see the hat, then you were unable to connect, and you will not have the ability to send or receive audio/video.

A hat on top of the Third Bar (green) indicates a clear connection (Great Quality).

A hat on top of the Second Bar (orange) indicates an adequate connection (Good Quality).

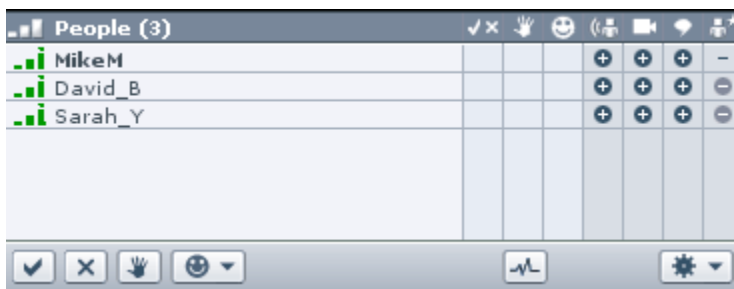
A hat on top of the First Bar (red) indicates network congestion (Poor Quality).

If you click the **NetStats** Indicator, you can view diagnostic information that may be requested when speaking with Technical Support.

If the hat does not appear (and the bars are gray), then you have no connection. If you should ever lose your connection, you may re-launch WimbaMedia by clicking the Options Menu and selecting Reconnect Media. This should restore your connection to presentation media.

Monitoring Other Users

When your room is set up for WimbaMedia, you have the ability to monitor your participants' network status at anytime during a presentation by viewing the **NetStats** Indicator to the left of each user's name in the **Participant Area**.



The same rules apply for monitoring the network status of your users as described in the Monitoring Media Quality section above.

Using WimbaMedia Audio

Using WimbaMedia, participants are able to speak when authorized by the presenter.

- If you'd like to speak, you will need a microphone.
- If you are using an unsupported browser or OS, then you may be able to participate using the telephone simulcast.
- Preparing Your Microphone and Computer:
 - o We recommend using a headset (with integrated headphones and microphone). Headphones will generally produce better audio quality than speakers, and they will also prevent the audio you receive from being picked up by the microphone when you speak.
 - o Before you attend a presentation, make sure that your audio devices are properly connected to your computer. Speaker/headphone plugs are usually color-coded to match the output port of most PCs. Typically, speakers/headphones will be plugged into the green port to your sound card. If your computer does not come with color-coded ports, search for the icon that resembles either sound waves with an arrow pointing outward or headphones.
 - o Microphone plugs are also usually color-coded to match the microphone port of most PCs. Typically, microphones will be plugged into the red or pink port to your sound card. If your computer does not come with color-coded ports, search for the icon that resembles a microphone.

Broadcasting Audio

Talk Button



To Broadcast Audio:

1. Speak into your microphone and select one of the following options:
 - Press and hold the **Ctrl** key on your keyboard as you speak.
 - Click and hold the **Talk** button as you speak.
2. While speaking, the **Talk** button will change color from dark gray to orange. In addition, an orange box will light up within the **Speaking Privilege** indicator to the right of your name in the participant list.
3. When you have finished speaking, release the **Ctrl** key or **Talk** button.

Note: If you wish to use the **F8** key (instead of **Ctrl**), or disable the **Talk Hot Key**, refer to [Options Menu](#).

Lock Talk



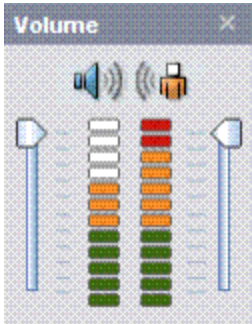
You may keep your hands free and your microphone locked on by raising the **Options Menu** and selecting **Lock Talk**. A check mark will appear next to this option, indicating its Locked status. At this point you can speak freely into your microphone.

To mute yourself while your microphone is locked on, either hold down the **Ctrl** key (or **F8** key, if selected as the **Talk Hot Key** option within the **Options Menu**) or click and hold the **Talk** button (the reverse of normally enabling your microphone).

When you have finished speaking, return to the **Options Menu** and re-select **Lock Talk**.

Volume Controls

Overview



The meters to the right of the **Talk** button register the levels of incoming and outgoing audio. Anytime someone else speaks, you should see the colorful bars of the **Incoming Audio** meter (left) fluctuate with the volume level you receive.

You can adjust the Incoming Volume by clicking on the volume meters and moving the slider to the left of the incoming level meter.

The **Outgoing Audio** meter (right) registers the audio that you send. Anytime you speak, you should see the colorful bars of this meter fluctuate with the volume level you send. For optimal audio quality, click on the volume meters, and watch your Outgoing Audio level when speaking. The bars should reach the top of the orange range (third indicator from the top) consistently, and occasionally reach the top two (red) levels. If the volume is too high, your voice may be distorted and others will be able to hear you breathing. If the volume is too low and does not go above the green levels, the system will try to amplify the sound and possibly create distortion.

You can adjust the Outgoing Volume by clicking on the volume meters, and adjusting the slider to the right of the outgoing level meter. You may also adjust it using your computer's recording settings.

To be able to receive and send audio/video, you need to ensure that WimbaMedia is connected during the presentation. When connected, the **NetStats** Indicator to the left of the **Talk** button should appear in color. If it appears gray, then WimbaMedia is not connected to presentation media.


Volume Controls (and more advanced settings) can also be adjusted using the [Options Menu](#).


Speaking Privileges

Media Settings within the Administration Tools (or room settings, within a Course/Section, if using a Course Management System integration) determine whether or not participants have speaking privileges at the start of the presentation. However, you can change speaking privileges for any or all participants during the live presentation.

To Enable or Disable Speaking Privileges for All Participants

1. Click the **Actions Menu** below the participant list.
2. Select **Enable/Disable Audio**

If the option reads **Enable Audio**, clicking it will enable all participants' audio privileges. The **Speaking Privilege** icon next to all participants' names will be positive. 

If the option reads **Disable Audio**, clicking it will disable all participants' audio privileges. The **Speaking Privilege** icon next to all participants' names will be negative. 

To Enable or Disable Speaking Privileges for an Individual Participant

In the Participant Area, click the **Speaking Privilege** icon next to the participant you wish to enable or disable.

- If the icon is positive, the participant is enabled. Clicking the icon will disable his/her speaking privileges.
- If the icon is negative, the participant is disabled. Clicking the icon will enable his/her speaking privileges.

Solving Technical Issues

To Resolve Microphone Problems

If you have correctly connected your microphone, but others still cannot hear you, you should ensure that a) your computer's recording controls have the proper settings, and b) your microphone is functioning.

To Check Recording Control Settings (PC)

1. Open your *Volume Controls* by selecting: Start -> Programs -> Accessories -> Entertainment -> Volume Control.
2. Click the *Options* menu and select *Properties*.
3. Select the *Recording* button.
4. From the list, make sure *Microphone* has a check mark next to it.
5. Click *OK*.

6. Lastly, go to the *Microphone* section and make sure the select box is set to a non-muted option. You may also want to adjust the slider, if volume level is an issue.

To Check Volume Control Settings (Mac OS X)

1. Open your *Sound Preferences* by selecting: Apple Menu -> System Preferences -> Sound -> Input.
2. Make sure that the *Input Volume* slider is sufficiently to the right and the correct device is selected for sound input.

Check Microphone Function (PC)

If your volume controls have the proper settings, you should ensure that your microphone is functioning. First ensure that your microphone is turned on (if there is an on/off switch) and properly plugged in. You can then record an audio clip and listen to that clip to ensure that your computer can properly capture your audio:

1. Open your *Sound Recorder* by selecting: Start -> Programs -> Accessories -> Entertainment -> Sound Recorder.
2. Click the circular *Record* button to start your recording.
3. Speak into your microphone for several seconds. As you speak, you should see the audio meter register your voice.
4. Click the square *Stop* button to stop your recording.
5. To play back your recording, click the triangular *Play* button. You should hear the audio clip you have recorded. If you can't hear the clip (or did not see the audio meter register your voice), the issue is most likely related to your microphone.

Check Microphone Function (MAC)

If your volume controls have the proper settings, you should ensure that your microphone is functioning. First ensure that your microphone is turned on (if there is an on/off switch) and properly plugged in. You can then use your Sound preferences dialog to determine whether your computer can properly capture audio:

Open your *Sound Preferences* by selecting: Apple Menu -> System Preferences -> Sound -> Input.


When you speak into the microphone, the Input level volume meter should register your audio. If it does not, the issue is most likely related to your microphone.

Telephone Simulcast

The Telephone Simulcast provides a backup option if your microphone is not working. For complete details, refer to: [Telephone Simulcast](#).

Telephone Simulcast

The **Telephone Simulcast** provides a backup option for users who do not have a microphone or are experiencing technical difficulties.

1. To access the Simulcast, click the **Phone** icon . A telephone number and PIN will appear. (If the **Media Bar** does not appear, type **/phone** in the **Text Chat Area** and press **Enter** on your keyboard. Dial-in information will then be displayed textually).
2. Dial the telephone number provided and enter the PIN when verbally prompted. You will hear three tones, indicating that you have successfully connected. You can now listen to session audio via telephone. If participants are enabled to speak, they can do so using the telephone.

***Note:** Use of this option requires simultaneous access to the telephone and Internet for full participation in the presentation.*

Using WimbaMedia Video

Using WimbaMedia, participants are able to speak and share video when authorized by the presenter.

- If you'd like to speak, you will need a microphone. For more information on setting up your microphone, refer to: [Using WimbaMedia Audio](#)
- If you'd like to broadcast video, you will need a supported video device (such as a webcam)
- We recommend using a webcam that either plugs in to a USB port or comes integrated in your computer
- Before you attend a presentation, make sure that your video device is properly connected to your computer

Video Window

Overview



The **Video Window** displays a streaming broadcast of any user sharing video. This window will automatically appear upon entry to Wimba Classroom only if someone is sharing video. It can be opened or closed manually by clicking the **Camera** button on the **Media Bar**.

The window contains three buttons:

- **Start/Stop transmitting video:** enables/disables your video device
- **Show/Hide preview video:** provides a live, mirror-image representation of your video image. For more information, refer to [Video Preview](#)
- **Display video full screen:** increases the size of the broadcast to take over your full screen. To restore the window size, either press the Esc key on your keyboard, or double click your screen.

Whenever a user broadcasts video, the name with which they are logged in to Wimba Classroom appears within the **Video Window** for identification purposes. To toggle a user's name on/off within this window, press Alt-A (Windows) or Command-A (Mac).

To increase the size of the **Video Window**, move your cursor to its edge. When the cursor changes shape, click and drag the cursor away from the center of the **Video Window**. Likewise, to decrease the size of the window, move your cursor to its edge. When the cursor changes shape, click and drag the cursor towards the center of the **Video Window**.

Video Preview

Overview



Video Preview provides a picture-in picture review of your image within the **Video Window**.

This preview automatically appears whenever you click the **Start transmitting video** button. It can also be enabled/disabled by clicking the **Show/Hide preview video** button.

By default, the preview image appears in the lower right-hand corner of the **Video Window**, however, it can be altered in several ways.

To Move the Preview Image:

1. Place your mouse cursor over the image
2. Hold down your mouse button and drag the image to any corner of the **Video Window**. Let go of your mouse button to drop the image at the desired location.

***Note:** If you drag the image outside of the **Video Window**, the preview will disappear (and the **Hide preview video** option will be engaged).*

To Resize the Preview Image:

1. Place your mouse cursor in the corner of the image opposite to its position in the **Video Window** (i.e., if the image is in the lower right-hand corner, place your cursor in the upper left)

2. Hold down your mouse button and drag the image (away from its corner to increase its size, or toward its corner to decrease)

Broadcasting Video

Camera Button



To Broadcast Video and Audio:

1. If the **Video Window** is not raised, click the **Camera** button on the **Media Bar**.
2. Click the **Start transmitting video** icon (depicted by a closed eye).
A preview of your video will appear in the lower right-hand corner of the window.
3. To share video and speak into your microphone:
 - Press and hold the **Ctrl** key on your keyboard as you speak.
 - Click and hold the **Talk** button as you speak.
4. While broadcasting and speaking, the **Talk** button will change color from dark gray to orange. In addition, an orange box will light up within the **Speaking** and **Video Privilege** indicators to the right of your name in the participant list.
5. When you have finished speaking, release the **Ctrl** key or **Talk** button. This will also stop your video broadcast (unless you are the Default Presenter).

Note: If you wish to use the **F8** key (instead of **Ctrl**), or disable the **Talk Hot Key**, refer to [Options Menu](#).

Lock Talk



You may keep your hands free, and both your microphone and video device locked on, by raising the **Options Menu** and selecting **Lock Talk**. A check mark will appear next to this option, indicating its locked status.

So long as you have followed steps 1-2 above, you can speak freely into your microphone, broadcasting both audio and video.

To mute yourself (and hide your image) while Lock Talk is engaged, either hold down the **Ctrl** key (or **F8** key, if selected as the **Talk Hot Key** within the **Options Menu**) or click and hold the **Talk** button (the reverse of normally enabling your microphone).

To hide just your image, click the **Stop transmitting video** icon (depicted by an open eye). Your microphone will remain locked on.

When you have finished broadcasting, return to the **Options Menu** and re-select **Lock Talk**.

Default Presenter

During a video presentation, Wimba Classroom designates the first presenter to transmit video as the **Default Presenter**.

This provides a constant broadcast within the room whenever other users are not sharing video (either because no one is speaking, a user who is speaking has elected to not transmit video, or does not have a supported video device).

If you do not wish to broadcast video during the above scenarios, simply click the **Stop transmitting video** button. When ready to resume, click **Start transmitting video** to resume your broadcast.

If multiple presenters are logged in and you do not wish to be the **Default Presenter**, click the **Stop transmitting video** button. If another presenter has already clicked **Start transmitting video**, all they need to do is broadcast audio to become the **Default Presenter**.

If they have not yet started the transmission, they may then click **Start transmitting video** to automatically become the new default view.


You may also consider using the **Video Lock** feature to maintain the broadcast of a single user. When engaged, the **Default Presenter** broadcast will be disabled (unless the lock is enabled for this presenter). Once **Video Lock** is disabled, the **Default Presenter** broadcast will resume.


Video Broadcasting Privileges

The advanced media settings in the Wimba Classroom Administration Tools determine whether or not participants have video broadcasting privileges at the start of the presentation. However, you can change video sharing privileges for any or all participants during the live presentation.

To Enable or Disable Video Broadcasting Privileges for All Participants

1. Click the **Actions Menu** below the participant list.
2. Select **Enable/Disable Video**

If the option reads **Enable Video**, clicking it will enable all participants' video sharing privileges. The **Video Broadcasting Privilege** icon next to all participants' names will be positive. 

If the option reads **Disable Video**, clicking it will disable all participants' video sharing privileges. The **Video Broadcasting Privilege** icon next to all participants' names will be negative. 

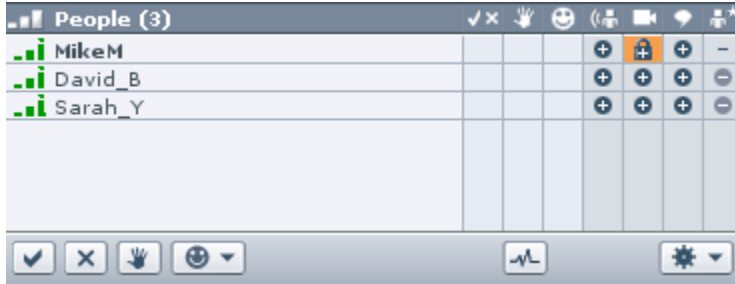
To Enable or Disable Video Broadcasting Privileges for an Individual Participant

In the Participant Area, click the **Video Broadcasting Privilege** icon next to the participant you wish to enable or disable.

- If the icon is positive, the participant is enabled. Clicking the icon will disable his/her video sharing privileges.
- If the icon is negative, the participant is disabled. Clicking the icon will enable his/her video sharing privileges.

Video Lock

Overview



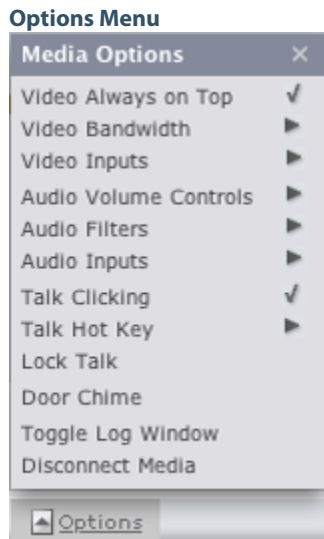
Video Lock allows a single user to broadcast video within Wimba Classroom, regardless of who is currently speaking. As with normal video broadcasting, your **Video Window** must be open and video transmission started.

To enable/disable **Video Lock**, double click the **Video Privilege** indicator to the right of the user of your choice (including any participant, yourself, or other presenters). Participants do not have the ability to engage this feature.

The **Video Privilege** indicator to the right of a user's name in the participant list will turn into a lock. Even when **Video Lock** is enabled, you still must either use the **Ctrl** key (or **F8** key, if selected as your **Talk Hot Key**) on your keyboard, hold down the **Talk** button, or use **Lock Talk** to speak.

Options Menu

The **Options Menu** provides a number of advanced media settings. These options only apply for as long as you are logged in to Wimba Classroom, and must be selected again upon re-entry (or if the room is reset).



Video Always on Top

By default, the **Video Window** is on top of all other application windows, unless it is minimized. You may disable this behavior by selecting this option.

Video Bandwidth

Video within Wimba Classroom is broadcast to other users at a default rate set prior to your presentation. This option allows you to alter the broadcast you send to other users from a number of different quality levels (ranging from Low to Highest Quality). Levels higher than the default rate will be unavailable.

Video Inputs

Allows you to manually select a supported video device other than the one automatically detected upon entry to Wimba Classroom.

Audio Volume Controls

- **Speaker Volume Up/Down:** raises/lowers incoming (speaker) audio volume
- **Microphone Volume Up/Down:** raises/lowers outgoing (microphone) audio volume

Audio Filters

Filters allow you to customize the quality of your audio, should you wish to make adjustments:

- **Auto Gain Control** can be used to help normalize the volume of incoming or outgoing audio, thus keeping the volume levels relatively steady. Low-level audio will be boosted and high-level audio will be reduced.
- **Noise Reduction** can be used to help reduce the level of background noise picked up by the microphone in use.
- **Silence Detection** can be used to ensure that you transmit audio only when you are speaking, preventing static or background noises. This feature should normally be kept on. However, if you find that your speech is not being properly detected, you can disable this filter, which will cause your audio to be transmitted at all times.
- **Echo Cancellation** detects outbound audio sent by a user, which is then repeated back through another user's inbound audio, and attempts to remove its echo effect. The most common scenario where this may occur is if a user's microphone picks up sound being transmitted from standalone speakers. This feature is only available on supported Macintosh systems.
- **Microphone Boost** is a system setting that will enhance your audio input if your microphone level is too weak. This is not selected by default, should only be used in rare circumstances, and is only available for certain sound cards on supported Windows machines.

Audio Input

Allows you to manually select an audio device other than the one automatically detected upon entry to Wimba Classroom.

Talk Clicking

Enables/disables an audio cue (click) heard whenever pressing the **Ctrl** key (or **F8** key, if selected as your **Talk Hot Key**) on your keyboard or clicking/releasing the **Talk** button. This is enabled by default as an accessibility feature for visually impaired users.

Talk Hot Key

By default, the **Ctrl** key on your keyboard is the designated **Talk Hot Key** to broadcast audio (and initiate a simultaneous video and audio broadcast). You may instead select the **F8** key, or disable this feature entirely. If disabled, you must click and hold the **Talk** button (or use the **Lock Talk** feature).

***Note:** If you are using Mac OS X 10.5 (Leopard) and running the Spaces feature, reconfigure the **F8** key so it is available, if you plan to designate it as your **Talk Hot Key**.*

Lock Talk

Hands-free presentation mode. For more information, refer to: [Broadcasting Audio](#)

Door Chime

Enables/disables audio notification whenever an individual enters/exits Wimba Classroom. This feature may be useful for Presenters holding office hours, or have the Wimba Classroom interface minimized. This option is disabled by default, unless it was modified within the room's settings.

Enabling/disabling this feature only affects the individual who modifies this setting.

Toggle Log Window

Displays WimbaMedia log information that may be requested when speaking with Technical Support.

Disconnect/Reconnect Media

This option should only be utilized if you are unable to connect to WimbaMedia, or need to re-establish your connection to presentation media.

Remote Access by Phone

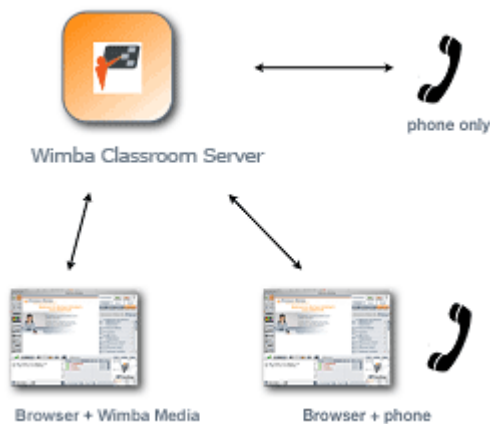
Introduction

The phone conference component of Wimba Classroom provides additional flexibility to a presentation by allowing presenters and participants to listen and talk via a standard phone line.

In the case of a Wimba Classroom session with mixed use of phone users and online users, online users will see the phone users represented in the Participant Area. In addition, presenters will be able to apply the same audio functions to a phone user as they can apply to a user logged in online. Audio feedback will be available for these functions so the phone user is aware of functions applied to them without visual feedback.

The different possibilities of conducting sessions with Wimba Classroom include:

1. Wimba Classroom only (Browser + WimbaMedia System)
2. Phone conferencing system only (Phone Only conference call)
3. Wimba Classroom and integrated phone simulcast system (Browser + Phone)



Phone and Online Feature Descriptions

Phone-only users will be displayed in the Wimba Classroom participant list, using their phone number or caller ID. Caller ID is preferred over phone number, if both exist. If there are duplicate phone numbers, or caller IDs, the string will have a space and number appended to them in login order – “callerid 1”, “callerid 2”, etc.

List of keypad functions available to Phone-only users

Phone-only Keypad Command	Function	Presenter-only function	Can also invoke from online interface	Reflected in the online interface
*2	Start/stop archive	y	y	y
*3	--			
*4	--			
*5	Talk-enable/disable all participants (listen-only mode)	y	y	y
*6	Mute/unmute self			
*7	Lock/unlock room	y	y	y
*8	Roll call	y		
*9	List of commands			
*10	Raise hand		y	y
*11	Indicate "yes" (poll)		y	y
*12	Indicate "no" (poll)		y	y
*13	Poll summary	y		y
*14	Clear Y/N Poll Responses	y	y	y
*15	Clear Hand Raise Responses	y	y	y

Note: Wimba Classroom users that are using the phone simulcast do not have access to the keypad functions that Phone-only users have. They will continue to access these functions through the Wimba Classroom interface.

Explanation of keypad-accessible Wimba Classroom functions

- **Start/stop archiving (*2):** A Phone-only presenter can start or stop an archive by pressing *2 on their phone.

If archiving is started or stopped via the Phone-only keys, an indication will be shown on the Wimba Classroom interface (specifically, in the text chat area and in the participant list).

If an archive is started or stopped from the Wimba Classroom interface, a message will be heard by presenters using the Phone-only option.

- **Talk enable/disable all participants (lecture mode) (*5):** A presenter can enable or disable audio capabilities for all the participants in the room (whether they are using the phone, or are logged in to Wimba Classroom) by pressing *5.
- **Mute/unmute self (*6):** Any user can mute their own audio by pressing *6. (This option is only accessible for Phone-only users.)
- **Room lock (*7):** Allows a presenter to lock a room and prevent new participants from joining
- **Roll Call (presenter-only function) (*8):** Allows presenters on the phone to hear a list of everyone who is on the conference call, by pressing *8. Audio clips recorded by each user when they dial in to the system will be played. The Roll Call feature will only recite the names of those logged in via the phone. As for those logged in online, the presenter can check the participant list
- **List of Commands (*9):** The system will read back a list of all keypad commands to which that user has access
- **Raise hand (*10):** Allows a Phone-only user to raise their hand. The Phone-only user can undo the raise hand command by pressing *10 again.
- **Yes (*11) /No (*12) Polling:** Phone-only users can respond yes or no to a polling question. If a Phone-only user activates the yes or no poll feature, it will be reflected on the Wimba Classroom interface. The Phone-only user can undo the yes or no poll commands by pressing the same key combination again.
- **Poll summary (presenter-only function) (*13):** Allows a Phone-only presenter to receive an audio summary of the current status of yes/no polls and hand raises.
- **Clear Y/N Poll Responses (*14):** A Phone-only presenter can clear all Yes/No poll responses for all users, whether they are logged in to Wimba Classroom or a Phone-only user.
- **Clear Hand Raise Responses (*15):** A Phone-only presenter can clear all Hand Raise responses for all users, whether they are logged in to Wimba Classroom or a Phone-only user.

Login Procedure

To Dial-in as a Phone-Only User:

1. The user dials the provided number.
2. The system prompts the user to enter a PIN: "Please enter your PIN."
3. The user enters the PIN via the phone keypad.
4. The system reads a custom branding message (if the audio file is in place for the server).
5. The system prompts the user to record their name.
6. After the user records their name, the system reads the "login acknowledgment" message.
7. The system adds the user to the room, and assigns the correct status (either presenter or participant).