

Delivering Effective Hybrid Classes

Steven Muegge
Fred Dixon

Who we are

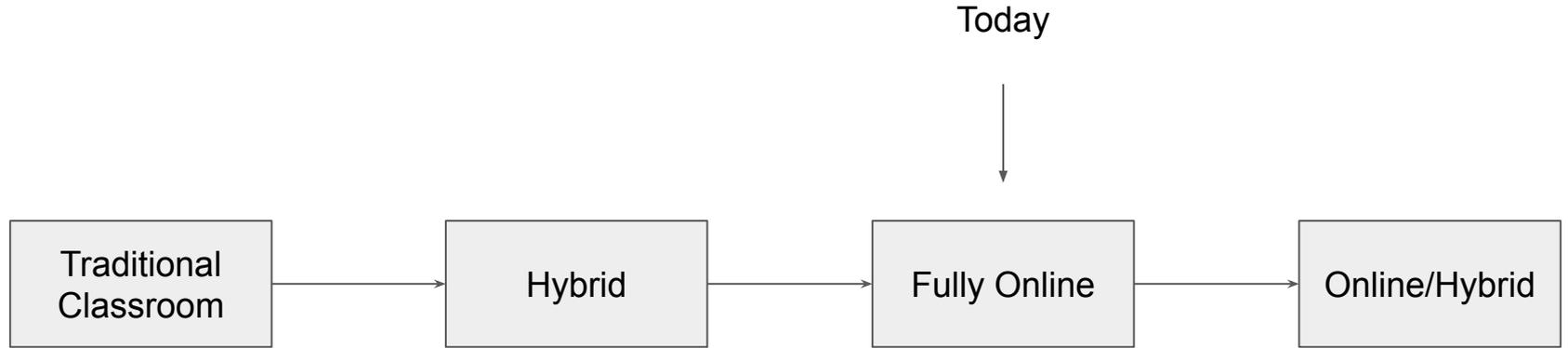
Steven Muegge

- Director, Technology Innovation Management (TIM) program
- Carleton University, Ottawa, Canada

Fred Dixon

- Project Manager, BigBlueButton
- CEO, Blindside Networks

Where we are today



Advantages

Reduce classroom density

Students to join with no travel time (class and office hours)

Introduces more of the social aspect of learning (as opposed to fully online and only watching a lecture)

Easier for students to build a relationship with each other

Challenges

Remote students feel disconnected

Cognitively more challenging for the instructor to bridge both teaching mediums (as opposed to everyone online, or everyone physically in the classroom).

What are the challenges you experiences with Hybrid Classes?

Type them into the chat

Room Setup

Microphone

- Yeti microphone (omnidirectional to pick up the class)

Camera placement

- Provide online students with a camera to view the audience

Speaker

- Use an external speaker to enable students in the class to hear remote students

Viewing remote students

- Have them visible to you (back wall or on a monitor)

Best practices

Breakout rooms

- Get students to introduce themselves to each other at the start of the course
- Encourage students to collaborate with each other in group projects

Flip the classroom

- Get remote students engaged in the class

Have a helper monitor the online class

- Nominate someone in the class to monitor online students

Use a phone and webcam to time student's speech

The screenshot displays a BigBlueButton web conferencing interface. At the top, it shows a navigation bar with a back arrow, a user icon, the text "Home Room", and a "Start recording" button. Below this, there are two participant names: "Steve" and "Frederick Dixon". The main area is a video grid with three panels: a video of Frederick Dixon on the left, a central panel showing a smartphone screen with a circular timer set to 05:35 and a 4:23 PM alarm, and a video of Steve on the right. Below the video grid is a presentation slide titled "Welcome To BigBlueButton" with a list of features: CHAT, WEBCAMS, AUDIO, EMOJI, BREAKOUT ROOMS, POLLING, SCREEN SHARING, and MULTI-USER WHITEBOARD. At the bottom, there is a control bar with navigation arrows, "Slide 1", a dropdown arrow, a minus sign, "100%", a plus sign, a double arrow, and a refresh icon. A vertical toolbar on the right side contains icons for hand, undo, trash, and a document icon. At the very bottom, there are five circular icons: a plus sign, a microphone, a telephone handset, a video camera, and a screen sharing icon.

What have you found that works well for teaching online?

Type them into the chat

BigBlueButton

Open Source Virtual Classroom

Why BigBlueButton exists?

**Better online learning leads to a better
world**

Where we have come from?

Born in the classroom

- Carleton University created BigBlueButton in 2007 as web conferencing systems were not designed for virtual classrooms

Open Source

- Developers and teachers from around the world can collaborate together to improve it

Global adoption skyrocketed during pandemic

- Millions of teachers and students are using BigBlueButton during the Pandemic.

Why BigBlueButton?

Integration

- The top learning management systems - Moodle, Canvas, Schoology, D2L, and Sakai - have all embedded BigBlueButton as their default classroom

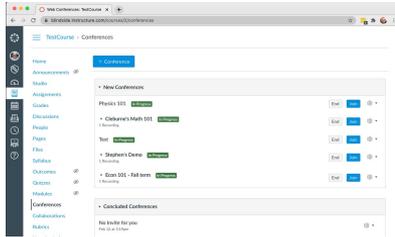
Focus

- BigBlueButton is designed for one user in mind: the teacher

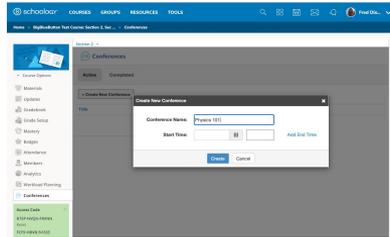
Engagement

- The project is constantly evolving with more pedagogical features to increase engagement with students

Embedded into the world's top LMS systems



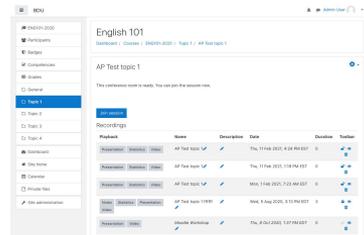
Canvas Conferences
Instructure



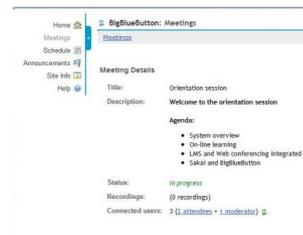
Schoology Conferences
Schoology



Virtual Classroom
D2L



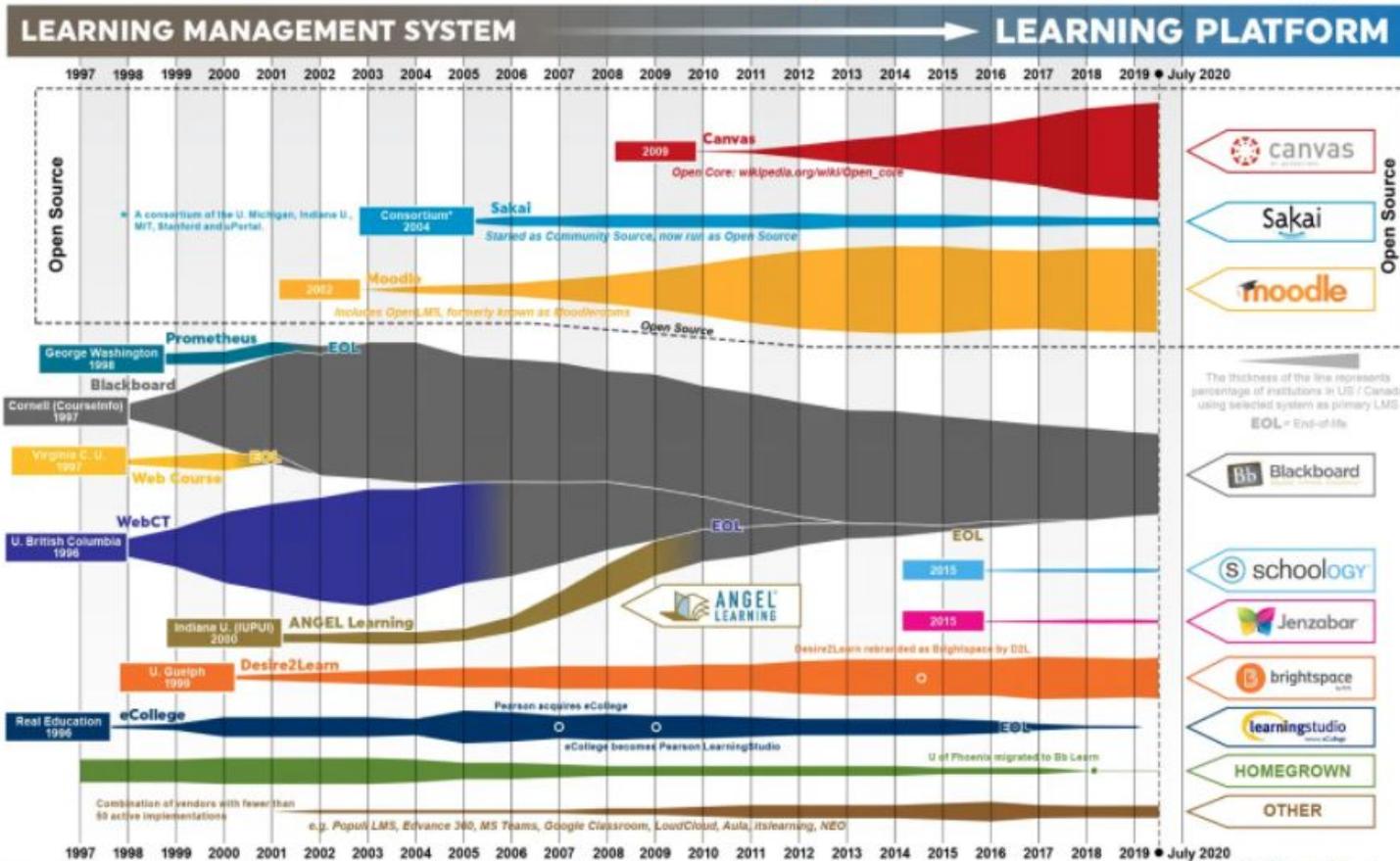
BigBlueButtonBN
Moodle



Meeting Tool
Sakai

LMS Market Share For US & Canadian Higher Ed Institutions

MID-YEAR 2020 EDITION



All data from LISTedTECH LMS database under agreement with MindWires, LLC

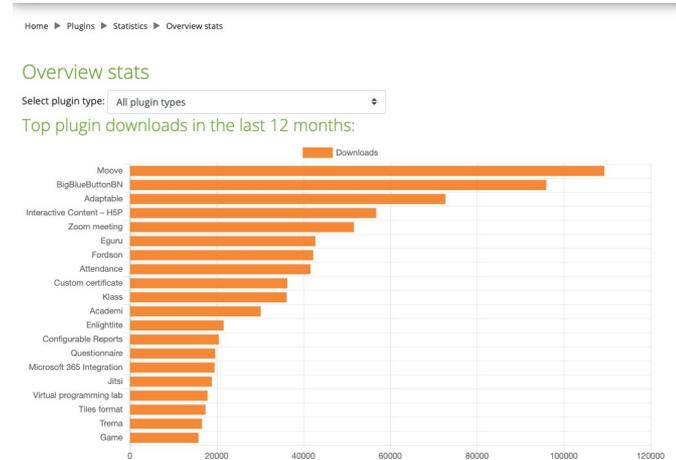
Phil on EdTech

Moodle

Used by 20,000 Moodle sites around the world
(according to moodle.org)

2nd most downloaded plugin overall (out of 1,400)

Work is underway to incorporate BigBlueButton into
the core of Moodle itself



Huge increase in hosting

Blindside Networks hosting increased 50x in the last 12 months

Thousands of schools are using Schoology Conferences and Canvas Conferences every day.

Some deployments, such as OCPS, run over 50k+ concurrent students each day.



Rob Bixler
@RobBixler_OCPS

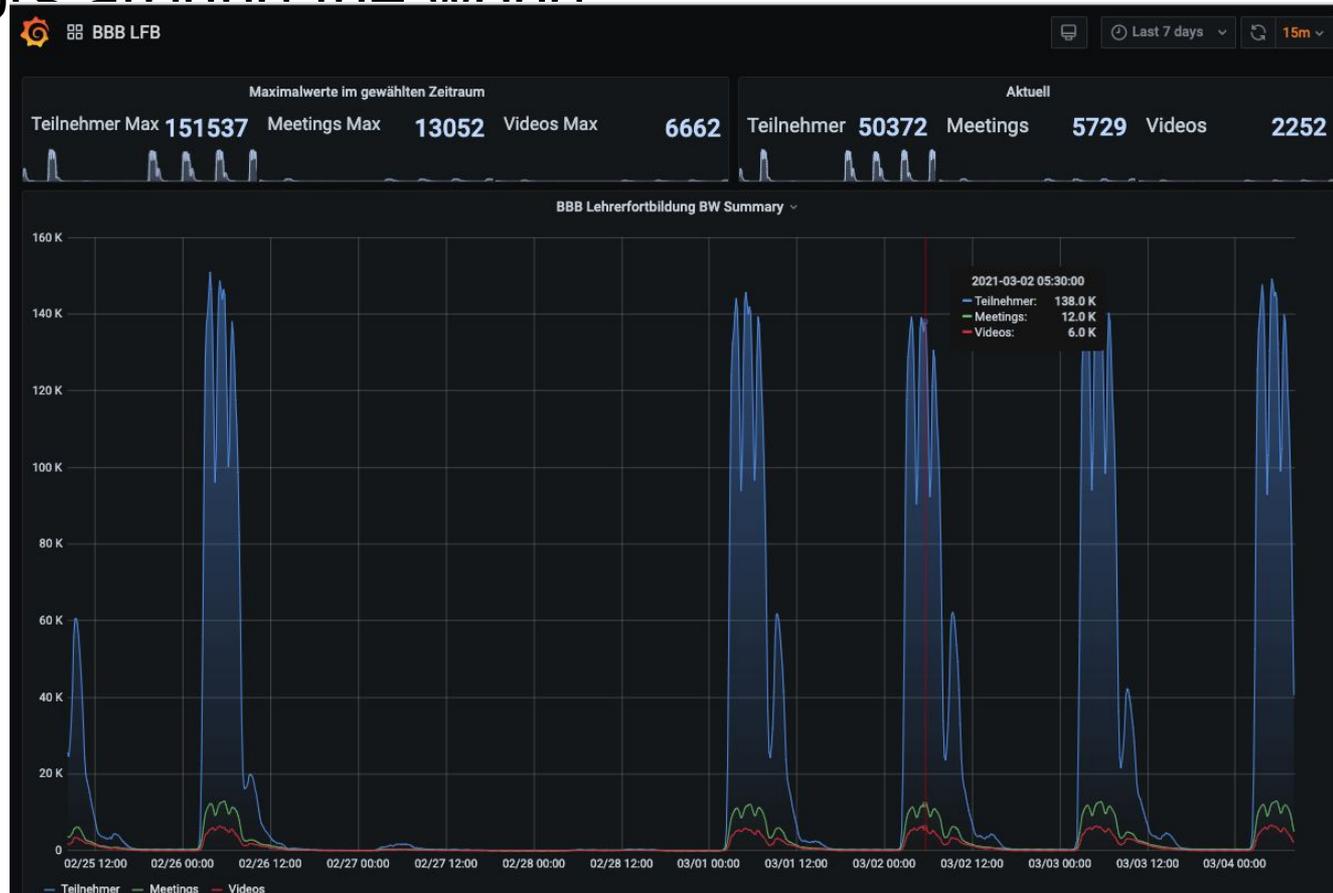
The numbers are mind-boggling. Our @OCPSnews teachers, students and parents are simply amazing. Thank you for everything over these last 9 weeks. Enjoy your summer. 🙌📱💻 @CanvasLMS @bigbluebutton @ClassLink



12:53 PM · May 29, 2020 · [Twitter Web App](#)

Helping educators around the world

Baden-Württemberg
, a state in
southwest
Germany, runs a
cluster of 4,000
BigBlueButton
servers that **hosts**
over 150,000
concurrent
students!



Classroom management

Lock settings enables teachers to control what features students can use during your lessons.

Lock viewers

These options enable you to restrict viewers from using specific features.

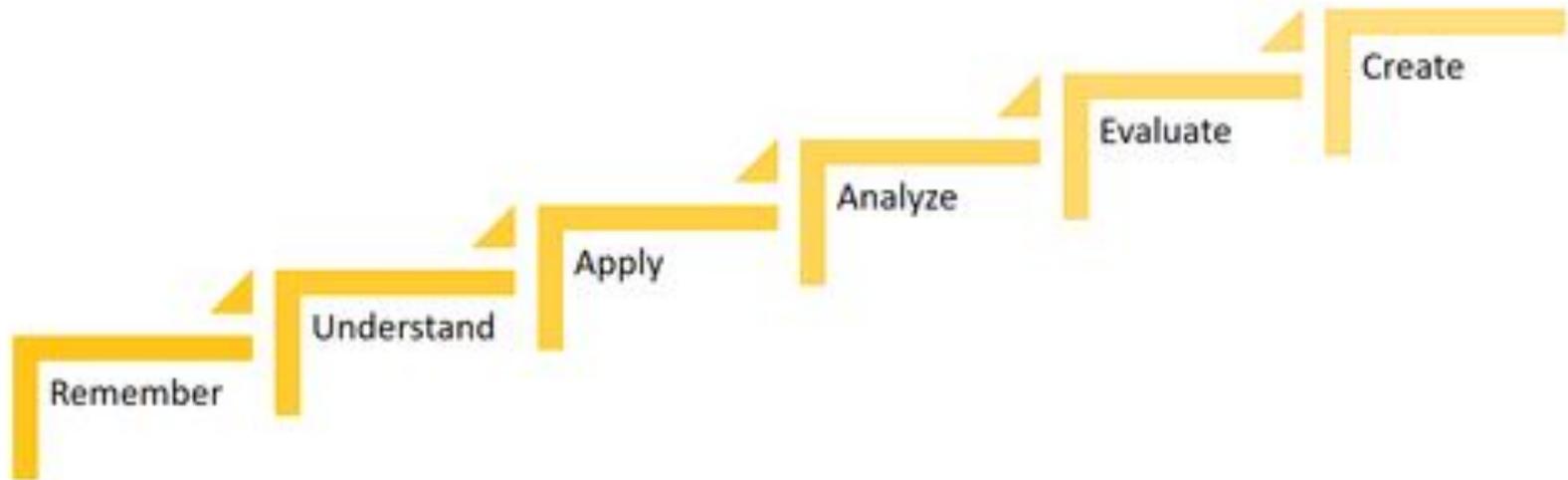
Feature	Status
Share webcam	Unlocked <input checked="" type="checkbox"/>
See other viewers webcams	Unlocked <input checked="" type="checkbox"/>
Share microphone	Unlocked <input checked="" type="checkbox"/>
Send Public chat messages	Unlocked <input checked="" type="checkbox"/>
Send Private chat messages	Unlocked <input checked="" type="checkbox"/>
Edit Shared Notes	Unlocked <input checked="" type="checkbox"/>
See other viewers in the Users list	Unlocked <input checked="" type="checkbox"/>

Cancel

How can BigBlueButton help with hybrid classes?

- Multi-user whiteboard
- Shared Notes
- Breakout rooms
- Polling
- Raise Hand
- Public/private chat

Bloom's Taxonomy



	Remember	Understand	Apply	Analyze	Evaluate	Create
Polling	✓	✓			✓	
Chat		✓	✓	✓	✓	
Emoji					✓	
Shared Notes						✓
Multi User Whiteboard		✓		✓		
Breakout Rooms			✓	✓	✓	✓

Usability

- **Usability**

- Raise Hand notifications
- Background uploading of slides
- Network quality indicator
- Audio alerts for users in waiting room

Engagement

- **Engagement**

Per-user whiteboard

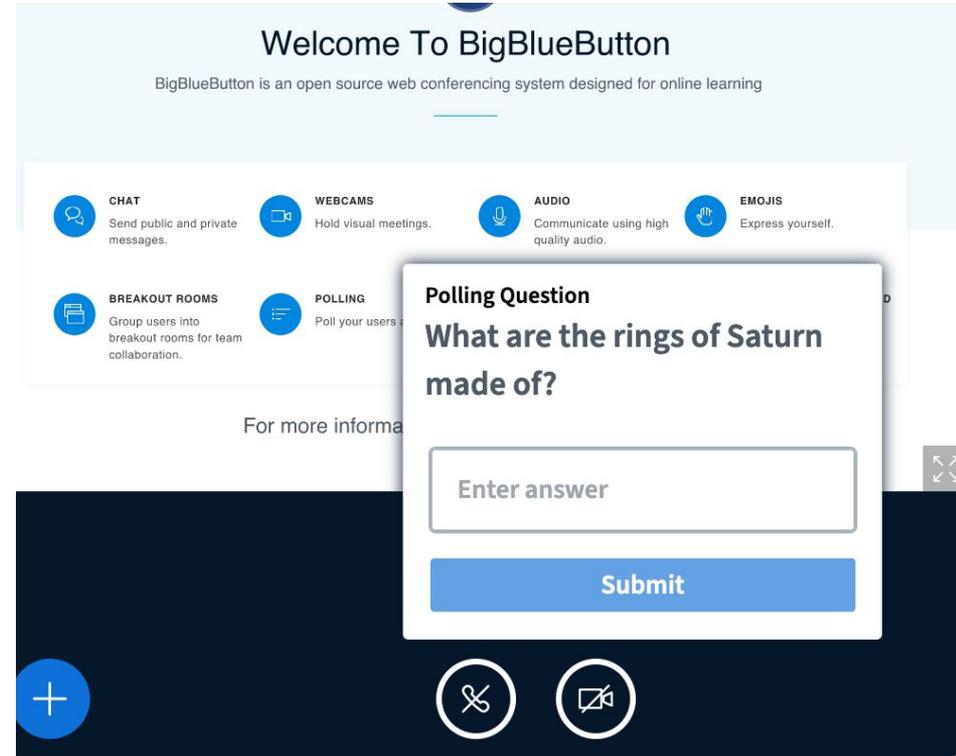
Typed responses to polling questions

Randomly choose a user

Typed Responses for polling

Students are prompted to enter their response to a poll

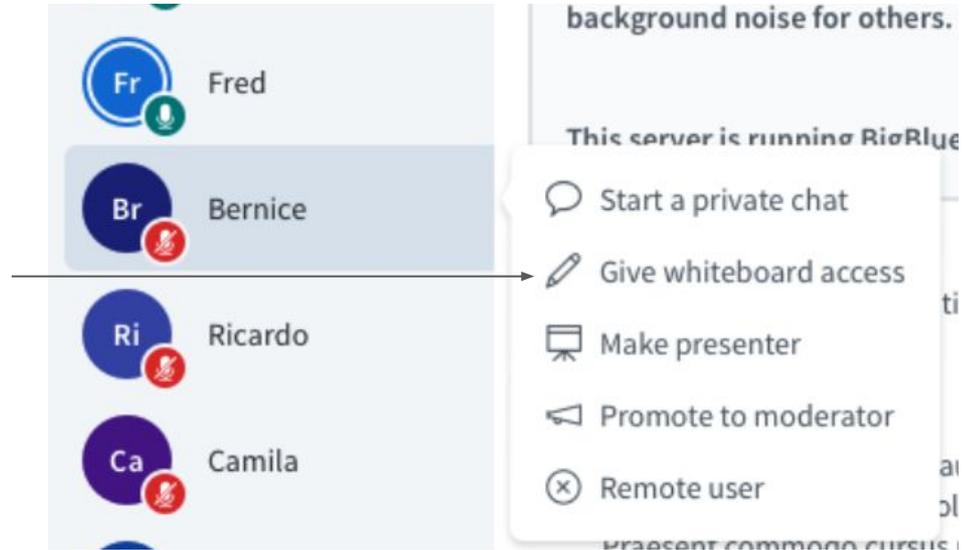
Instructor can see all the results



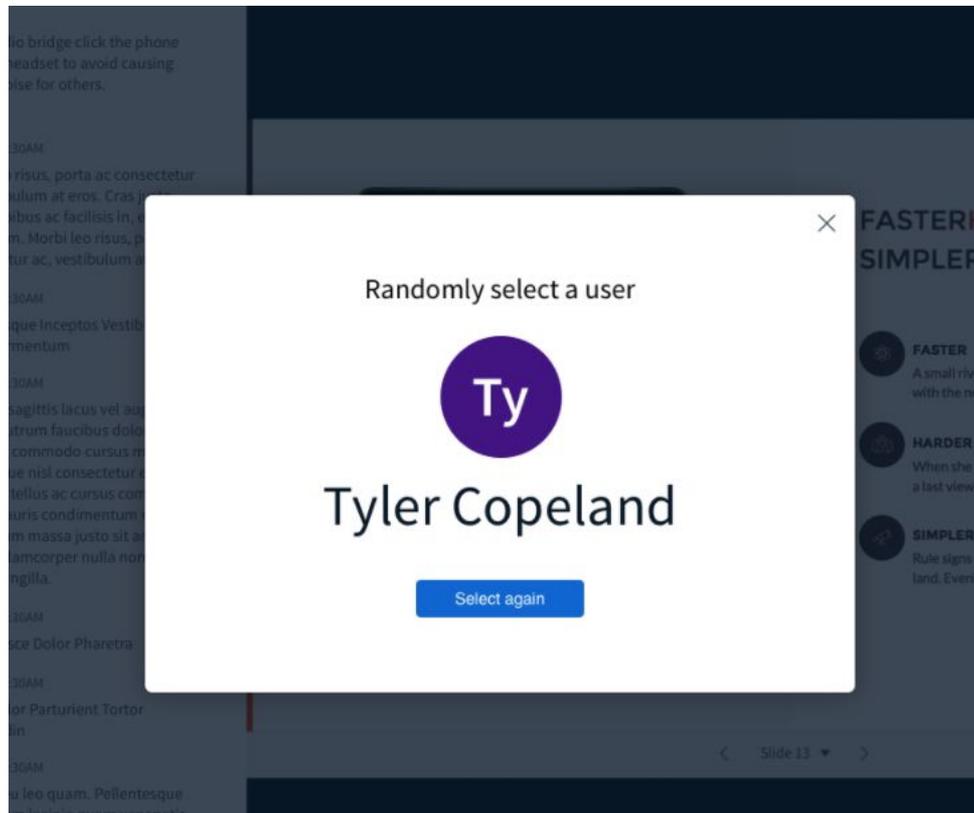
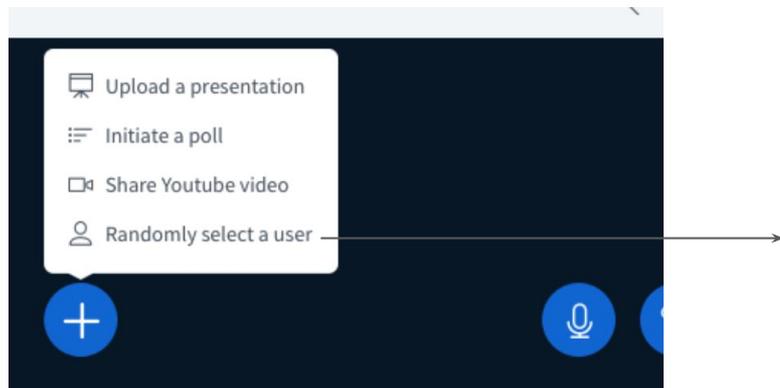
The screenshot displays the BigBlueButton interface. At the top, it says "Welcome To BigBlueButton" and "BigBlueButton is an open source web conferencing system designed for online learning". Below this, there are several feature icons: CHAT (Send public and private messages), WEBCAMS (Hold visual meetings), AUDIO (Communicate using high quality audio), EMOJIS (Express yourself), BREAKOUT ROOMS (Group users into breakout rooms for team collaboration), and POLLING (Poll your users). A "Polling Question" dialog box is overlaid on the screen, containing the question "What are the rings of Saturn made of?". Below the question is a text input field with the placeholder "Enter answer" and a blue "Submit" button. At the bottom of the screen, there is a dark blue navigation bar with a plus sign icon on the left and icons for mute, video, and chat on the right.

Per user whiteboard

Give specific students ability to write on the whiteboard



Randomly choose a user





Blindside networks

Commercial hosting for BigBlueButton

blindsidenetworks.com

Summary

At 8:30 AM the world starts teaching with BigBlueButton

- We are a global community
- The product is localized into over 65 languages

Blindside Networks provides commercial hosting and support

- Contact us if your using Canvas, Schoology, Moodle or other LMS and we'll show you how your teachers can deliver more effective online classes.