

RED RIVER VIEWPOINT

THE CONNECTED CLASSROOM: CISCO COLLABORATION IN EDUCATION

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TECHNOLOGY DECISIONS AREN'T BLACK AND WHITE. **THINK RED.**



Table of Contents

Introduction.....	1
Problem.....	1
Background.....	1
Solution.....	1
Conclusion.....	4
References.....	4

About Red River

Red River brings together the ideal combination of talent, partners and products to disrupt the status quo in technology and drive success for business and government in ways previously unattainable. Red River serves organizations well beyond traditional technology integration, bringing 25 years of experience and mission-critical expertise in security, networking, analytics, collaboration, mobility and cloud solutions.

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INTRODUCTION

What are we doing to educate today's 22nd Century students? Today more than ever, Higher Ed, K-12, and other educational institutions are having to rapidly innovate and adapt their teaching in order to be flexible, engaging and relevant while helping prepare their technology savvy students for a new technological future in the workforce. How can you drive learning while keeping these technology savvy students engaged in relevant, engaging, collaborative, and real-world lessons?

PROBLEM

For all too long, students have been captivated and distracted by technology use in the classroom. Over the last few decades, we replaced slate chalkboards with shiny whiteboards and projectors. Simply substituting old materials for new ways to display old content proved ineffective, and showed that student engagement did not increase. More recently, students have had full access to Internet services with one-to-many, one-to-one, and personal Bring Your Own Devices (BYOD programs). In many cases, this provided even more distractions for our students and greater levels of frustration with our teachers and classroom management.

BACKGROUND

Students and teachers today need a better way to help foster the 5 C's of learning (Communication, Collaboration, Creativity, Critical Thinking, and Citizenship) while providing strategic guidance and direction in the classroom. Keeping students on task without distraction is a key goal in helping guide the connected classroom through meaningful and strategic learning distractions.

SOLUTION

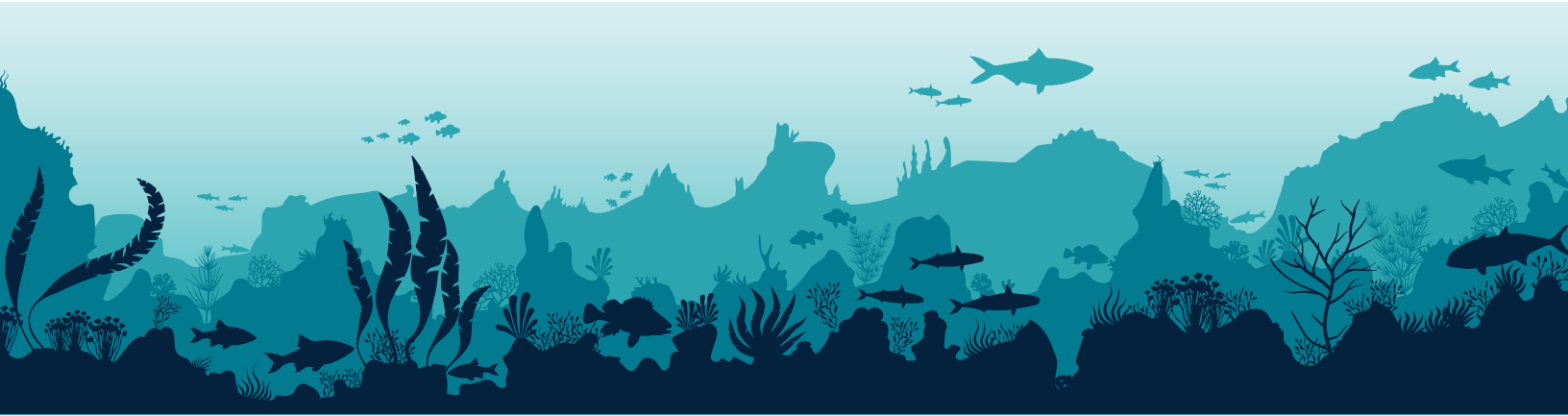
Cisco Webex Meetings

With Webex Meetings, teachers are able to provide their students access to learning anywhere, any time. Students, teachers and industry experts can connect using Cisco Webex Room devices, Desktop Video Endpoints, Mobile Devices, or even from their web browser using WebRTC. With WebRTC for Webex, meeting participants are able to connect to a meeting without the use of the Webex thick client and they are still able to utilize features like Audio and Video, Content Sharing and Host and Participant controls.⁽¹⁾

Learning is no longer only tied to the class that students are sitting in on a daily basis. With the benefit of Webex Meetings, classrooms are able to connect with experts from around the world. Schools are able to recruit adjunct professors from outside of their geographical region who can teach the class from their local office. This not only provides the education institution more resources, but it also gives adjunct educators the ability to increase hours that they are teaching when extra hours may not be available to them from their local school.

Just as teachers are able to provide instruction remotely, institutions are able to connect their students to programs around the world with virtual field trips. Often times, field trips are cost prohibitive and students spend more time en route to the destination than they are able to spend on-site. With programs

like Discovery Education's "Virtual Field Trips," teachers are able to take their students on field trips to learn about new topics in a new format without every needing to leave the classroom.⁽²⁾ Watching movies doesn't hold the attention of students the way that it used to. Students thrive when they are able to be curious, ask questions and observe someone new. By watching others do their jobs, students are exposed to new fields and could develop new interests. And, by allowing students to interact with these professionals and ask questions, they are able to feel like a needed member of the group, while getting answers to their inquiries.



Webex Meetings not only provides great possibilities from around the nation and even globally, but also locally. Joining a Webex Meeting for each lecture session gives educators the ability to record their class and gives students that aren't able to be in the classroom a chance to be a part of the class from home, on the road, or even from a hospital bed. Students that have a difficult time keeping up with the rest of the class can go back through and watch segments of the recordings to gain a better understanding, or tutors can watch with their pupils to help explain a concept in different ways that may be more effective for their specific learning methods. Community college professors are able to connect from one campus to many others in order to teach in multiple lecture halls and classrooms across their network of campuses, offering students more options and schedules while increasing the productivity of each professor.

Cisco Webex Room Kits

Webex Room devices are essential to give a classroom an integrated experience with the distance learning participants. Through presenter tracking capabilities, instructors are able to move around a space and have a Webex Room Kit control a camera's focus point to ensure that the teacher is always in frame and seen by remote participants. Content can be seen on multiple displays in order to provide optimal viewing for all students in the classroom. For occasions while an instructor is at a remote location, a display at the front of the room can be used for the instructor's live video stream, while another display can be set to show any content that the instructor is presenting.



With all interactive classrooms, teachers require a whiteboard for a variety of tasks. Whiteboards increase student engagement, allow for visual demonstration, provide teachers the ability to have students demonstrate that they understand concepts, and can offer students a chance to collaborate with each other all at the same time. With Cisco Webex Board and Companion Mode for Webex Room systems, teachers are able to use the Webex Board as their whiteboard while students can see on multiple displays throughout the room, from remote classrooms, and from their own personal devices, what is being written. Through the use of Webex Teams, multiple participants can interact with the whiteboard without even leaving their seat or being in the same room.⁽³⁾ This can be advantageous not only for remote learners but also for students with disabilities that may have difficulty accessing the Webex Board in the classroom.

Cisco Webex Teams

Asynchronous communication has been a part of education for a long time, from parents writing notes to the teacher, homework assignments being sent home, newsletters, and even turning in assignments and getting them returned with grades and feedback. Webex Teams allows this type of communication to be expanded by providing a tool that gives students and teachers the ability to interact directly or in groups and maintain a history for their conversations, assignments, and resources that may have been shared. Teachers have a place to share content from the classroom and links to recorded lectures.



With Webex Teams, teachers can assist their students in synchronizing with other students around the world that have similar academic interests as them. Teachers who employ clear expectations, utilize small groups, provide instruction on how to collaborate efficiently and hold students accountable for participation help students achieve more. Studies show that high quality collaboration leads to improved classroom experiences, increased motivation, classroom engagement, self-efficiency, and positive changes in academic trajectory.⁽⁷⁾

Cisco Webex Education Connector

Many times, when new technology is introduced, it is difficult for non-technical users to integrate it into their daily workflow. Because of this, Cisco has been working to increase interoperability of the Cisco Webex suite with Learning Management Solutions for improved digital learning environments.

Cisco Webex Education Connector is a Learning Tools Interoperability integration that seamlessly integrates into Blackboard, Canvas, D2L Brightspace, Moodle, and Sakai.⁽⁴⁾ With LMS directly integrated into Webex Meetings and Teams, teachers are able to easily add students to classes and organize them into project groups. Students can work with each other using Webex Teams to chat, meet, whiteboard, and share files securely.⁽⁵⁾

Using Education Connector's analytics page, teachers can view statistics like how many Teams spaces have been created, meetings scheduled by students and the instructor and how many office hours have been booked, helping teachers to understand their engagement with their students. Through scheduled office hours, students are able to attend online meetings with instructors at a time that works best for both the student and the teacher and receive the counseling they need through a face-to-face video call where they can talk and present ideas over a Webex Meeting.⁽⁶⁾

CONCLUSION

Red River has worked with industry experts to design a Connected Classroom model that allows instructors to provide their students with a learning experience like they haven't experienced before. With Webex Meetings in the classroom, teachers are able to bring in resources that weren't as readily available before. Subject Experts and Remotely located adjunct instructors can address classrooms across the world and to more than one campus at a time. Students that aren't able to attend class while away for emergencies, home due to illness, or even hospitalized are able to be an active participant in class discussions instead of just receiving take home assignments. Additionally, through the Webex recordings, students have the ability to continuously learn by having prior lessons available for reference. By providing Webex teams, students and teachers can be more engaged in all areas of learning.

REFERENCES

1. **Cisco** – Cisco Webex Web App Updates Overview:
<https://help.webex.com/en-us/w1115i/Cisco-Webex-Web-App-Updates-Overview>
2. **Discovery Education** – Virtual Field Trips:
<https://www.discoveryeducation.com/community/virtual-field-trips/>
3. **Cisco** – Companion Mode for Room Series Devices and Webex Boards:
<https://help.webex.com/en-us/fd1jm/Companion-Mode-for-Room-Series-Devices-and-Webex-Boards>
4. **Lance Ford, PhD** – The More Intuitive Way to Learn:
<https://blogs.cisco.com/education/the-more-intuitive-way-to-learn>
5. **educonnector.io**:
<https://www.educonnector.io/>
6. **Cisco** – The Cisco Webex Education Connector for Teachers:
<https://help.webex.com/en-us/ngd7brv/The-Cisco-Webex-Education-Connector-for-Teachers>
7. **American Institute for Research** – Learning with Others: A Study Exploring the Relationship Between Collaboration, Personalization, and Equity – Final Report:
<https://www.air.org/resource/learning-others-study-exploring-relationship-between-collaboration-personalization-and>

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