Rainbow Classroom by Alcatel-Lucent Enterprise

Bringing real-time collaboration to your Learning Management System

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Enterprise

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Overview

As the world adapts to the new normal of remote learning and virtual classrooms, educational institutions are being tasked with continuing to deliver reliable, high-quality education. Today's Learning Management Systems (LMS) provide instructors with the tools to create and deliver educational courses and training programs, monitor student participation, and assess performance. However, they come up short in terms of managing the remote classroom and enabling effective interactive collaboration.

Rainbow™ Classroom by Alcatel-Lucent Enterprise, based on ALE's industry-proven Rainbow, provides a fully secured solution, with encrypted end-to-end communications and compliancy with the Learning Tools Interoperability (LTI) standard. LTI defines the standard for learning systems to communicate with external systems to connect and work with LMS. With Rainbow Classroom educational institutions can:

• Enrich existing LMS platforms with real-time collaboration capabilities

• Seamlessly create and manage virtual classrooms using a web browser and internet connection

• Customize features based on learning platform requirements

• Benefit from administration, analytics, documentation, tracking, and reporting

Rainbow Classroom brings communications and collaboration to your LMS – delivering a comprehensive virtual classroom experience.

The new normal challenge

This unique point in our history has unleashed disruption that no one could have foretold. It has challenged us in all aspects of our lives and has forced us to reconsider what we do and how we do it. In particular, our educational institutions have been challenged to re-think what classrooms looks like, how they are managed, and how to effectively deliver content in a meaningful and engaging way.

While the LMS provides a foundation for traditional learning environments, instructors need to find new ways to interact with students in this new virtual environment. They need the tools to collaborate and keep students engaged while they sit at home either alone and isolated in their bedrooms, or worse, working at a kitchen table surrounded by the distractions that brings.

Unfortunately, many of the communications systems available today have been designed for corporate environments and do not address the unique demands of the classroom such as easy collaboration, and attendance taking. In fact, some platforms consider each class as a unique meeting rather than a continuation of a previous session, making chat discussions and file shares from previous sessions unavailable.

Additionally, many school districts do not have a district-wide plan for 100% remote teaching, which can lead to a variety of platforms being deployed. With no standardized platform they do not have the tools to engage in district-wide virtual professional development. So, in addition to the challenge of teaching 100% remotely, instructors also miss out on the opportunity to engage with their peers or learn from industry experts. Professional engagement provides the opportunity to share their ideas and experiences, and lower their collective stress level.

Rainbow Classroom comes to you

With challenges come opportunities. The current LMS market, estimated at 13.4 Billion USD, is expected to grow 90% over the next five years to approximately 25.7 Billion USD[1]. Solutions designed with education in mind can bring the collaboration and control to the classroom that educational institutions require.

How it works

Rainbow Classroom takes your LMS to the next level by integrating communication and collaboration tools, allowing the instructor to recreate the classroom atmosphere, remotely.

It provides communication and collaboration capabilities in an environment that is familiar to you, with your learning management system – ramp-up time is reduced, and single-sign-on gets you up and running quickly. Seamless integration enables both instructors and students to access data from the existing LMS and start virtual classrooms from a familiar interface.

Based on Rainbow cloud-based services, Rainbow Classroom provides collaboration with instant audio, video, and IM sharing from within a Rainbow group chat known as a "Bubble". Participants, either Rainbow users (students and teachers) or external guests (lecturers) connect to the collaboration space using the Rainbow client application available from a desktop, mobile, or from a compatible web browser that supports WebRTC standard for audio and video.

In addition, Rainbow Classroom can be adapted for rooms equipped with a large screen. This solution allows room-to-room instant video conferences for hybrid learning as well as enabling external guests using a compatible web browser.

For school district administrators, Rainbow Classroom offers phone conferencing for up to 100 participants available from any phone over PSTN worldwide (check the country list availability). Each user has a personal conference bridge and can also easily schedule a meeting including phone conference details using the Microsoft Outlook Calendar add-in. All participants benefit from collaboration features such as IM, screen and file sharing among others.

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1   https://www.globenewswire.com/news-release/2020/07/24/2067246/0/en/25-7-Billion-Worldwide-LMS-Industry-to-2025-Featuring-Cornerstone-On-demand-Blackboard-D2L-Among-Others.html
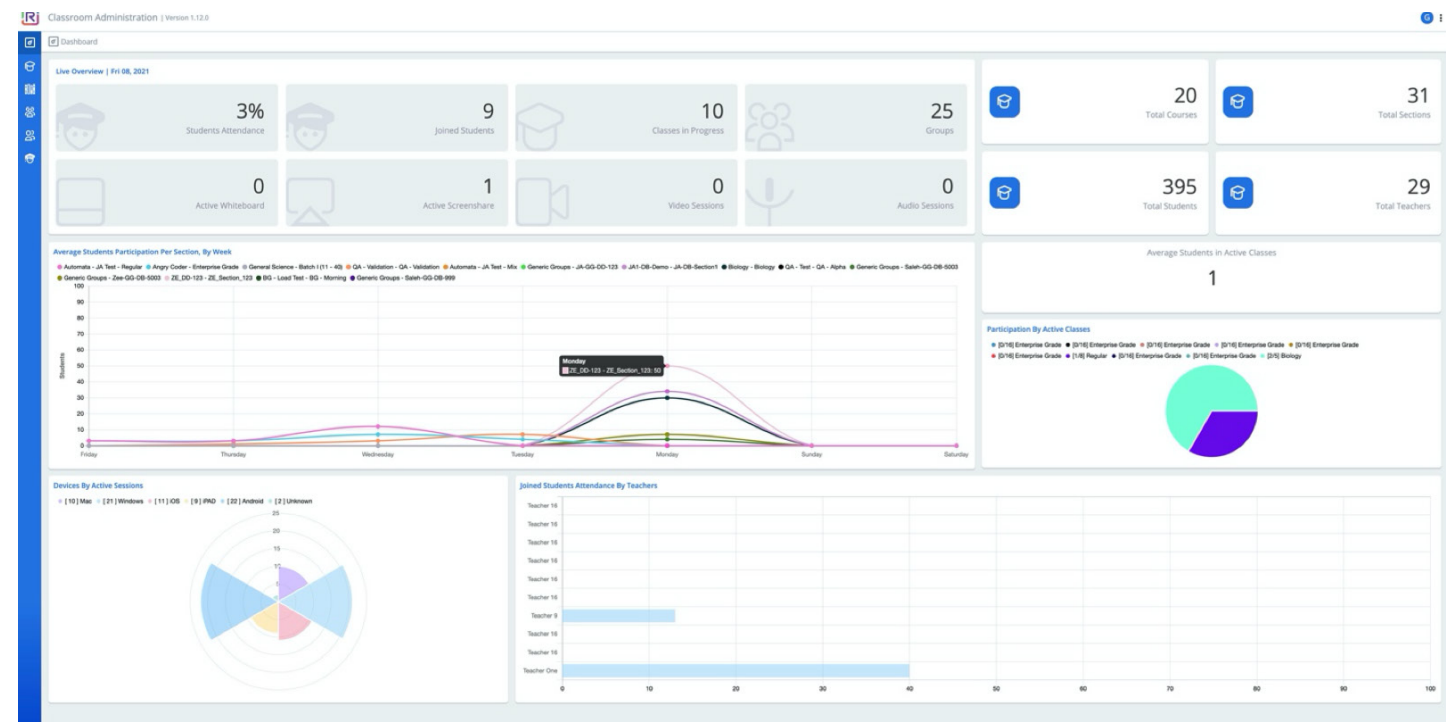
In a nutshell

Educational technology is only as good as it is easy to use and the ease it brings to teaching and learning. Rainbow Classroom:

- Provides communication and collaboration capabilities on your existing platform

- Reduces security risks and operating costs

- Increases flexibility, student services, and social awareness

- Lets students and teachers join classes from anywhere, anytime

With Rainbow Classroom instructors can:

- Track attendance and participation

- Engage the class with voice, video, sharing, IM

- Maintain control

- Present digital content

- Share interactive whiteboard

- Assign students to groups/projects

- Invite guest speakers or subject experts

- Record the class for review or absent students

- Grant access to, and remove student features

- Support individual help requests

Customers weigh-in on Rainbow Classroom . . .

"I found it really challenging to keep up with training after the lockdown started. It surprised us, and like many other organizations we didn't have a process in place for remote and digital learning. We used our coprorate learning management system as a repository for information, not as a tool for interactive learning. We tried improvising with many platforms but all of them only offered temporary solutions. With Rainbow Classroom we've managed to integrate into our corporate LMS, launching courses directly from there. Also we don't have to worry about forgetting credentials since it supports single-sign-on."

5 Tips for success

Research suggests that students, especially students with fewer resources at home, learn less when they are not in a school environment. Ensuring the fundamentals of engagement, uniformity, collaboration, parent communication and professional development can help provide the foundations for successful student learning.

1. **Engagement:** Knowing when students join and leave a class, their attendance duration, and participation stats are fundamental to understanding their engagement. This data can empower student success and help identify those who are in need of help or academic intervention. By embedding communication tools into the existing LMS, attendance can be recorded automatically. Students forgetting to join the class, or any confusion created by varied start times can be eliminated by having the embedded communications platform automatically 'call' the student when the teacher starts the class. Employing interactive tools can be valuable to keep students engaged on their virtual learning journey. For example:

   • Whiteboards

   • Polling

   • Gamefication

   • Inviting guest speakers

   • Grouping

   • Offering classes of interest

   As well, implementing strategies that limit learning disruptions can be helpful. These include:

   • Defining the classroom environment

   • Permitting exceptions for students with special needs or Individual Education Plans (IEPs)

   • Making changes as needed during instruction

2. **Equity:** Guaranteeing equity between in-person (synchronous) and on-line (asynchronous or synchronous) learners is an important consideration. Asynchronous remote learners are often at a disadvantage and miss much of the rich context that synchronous students get. To address this, it's important to:

   • Record class sessions, chats, and shared files, and make them available for the semester
   • Use whiteboards to engage students
   • Extend classroom learning strategies in group study
   • Invite subject matter experts to share knowledge
   • Utilize familiar tools

eBook
Rainbow Classroom brings real-time collaboration to LMS

"I've tried using different communication platforms in order to provide my students with ongoing education. Tracking attendance and participation has been difficult as I've had to do it manually for each session. Since we adopted Rainbow Classroom I've been able to automate these tasks, enabling me to focus on other things during and after class."

3. **Collaboration:** Build a classroom community. Be available, just like in the classroom. A successful virtual classroom will include collaboration that enables:

- Classroom control
- Voice, Video, Sharing, IM including preservation of communications
- Digital content
- Q & A sessions
- Facilitates group work and groups
- Interactive whiteboard
- Interaction with guest speakers or subject experts
- Supports individual help requests
- 1:1 consultation

4. **Parent communication:** Ensuring communication with parents is an important part of student success. Prior to shifting to 100% remote learning, parent communication was conducted in-person or using a school desk phone. With the move to remote learning, teachers have had to use their home phones or personal cell phones to ensure ongoing communications even though it may compromise their privacy. With an embedded communications platform the school district can extend the teacher's desk phone to their home to:

- Enable interaction for parents inside or outside of working hours
- Protect teachers privacy through integration with district PBX
- Utilize file and screen sharing to ensure efficient meetings

5. **Professional development:** Engage in team building through professional development. Remote learning has created a critical need for training to learn more about how to teach in our new normal. Working from home has eliminated the regular interactions teachers have to engage in with peers and it has magnified the isolation. It is important in this new normal that educational professionals have opportunities to continue to:

- Share winning techniques with grade-level peers
- Learn about techniques from outside experts
- Create opportunities to connect with colleagues
- Foster team building and collegiality

Beyond the classroom: Use cases

Intra-district collaboration: Instructors across the school district can exchange best practice teaching tips – promoting collaboration while advancing the district's mission for educational excellence.

Individual Education Plans (IEP): Promote improved engagement with parents and guardians in the IEP process by facilitating their 'virtual' attendance using Rainbow Classroom. Parents can attend the conference while at work or home and the conference can be recorded and placed in the student's electronic records.

Parent/Instructor conferences: Allow more frequent Parent/Instructor conferences or coaching. If necessary, Rainbow Classroom allows Instructors to conduct conferences with Parents/Guardians who cannot attend scheduled meetings regularly.

Guest lectures: Facilitate guest lectures using a desktop video camera and the Internet. The guest lecturer does not need to travel to the district to deliver the content and can still receive visual feedback.

Virtual field trips: Students can benefit from zoo and museum content without having to travel to a location. Using a laptop and webcam, students can tour the exhibit while engaging in a lecture about the topic, direct to the classroom.

Professional development: Rainbow Classroom allows the school district to deliver professional development topics which can be recorded for review and reinforcement.

Summary

Remote learning and virtual classrooms are here to stay. As the new normal becomes less 'new', and the demand for remote learning becomes more 'normal', optimizing technology designed for educational environments will provide the tools instructors need to effectively engage students while teaching remotely.

Rainbow Classroom reinvents remote learning with embedded collaboration and communication tools to provide teachers with full control over the features (video, voice, chat, file, and screen sharing) they need to successfully conduct a remote classroom. It integrates telephony capabilities into the school district's PBX*, Microsoft Teams® or Google G-Suite to enable whiteboarding, grouping, automatic attendance, engagement scoring, chat, shared file history, selective feature enablement, and recording of shared content for each class.

Rainbow Classroom can evolve to meet your needs and adapt to future changes. It is secure, open, flexible, intuitive, and specifically designed with student success in mind.

Visit our website to learn more about Rainbow Classroom by Alcatel-Lucent Enterprise

"I work as an instructor in a corporate environment. Prior to using Rainbow Classroom I would exchange as many as 60 emails a day with employees to set up training. Now that we have real-time communication natively embedded into our existing learning management system I don't have to manually track sign-ups and I can host my trainings virtually, from anywhere, anytime."