

Rethinking Virtual Classrooms

Why Leading Institutions choose Blindside Networks



Blindside
networks

The Creators of BigBlueButton



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Executive Summary

Today's educational institutions face mounting pressure to deliver engaging, secure, and cost-efficient virtual learning experiences. While mainstream video conferencing tools like Microsoft Teams and Zoom dominate headlines, their one-size-fits-all approach often fails to meet the pedagogical, privacy, and integration needs of modern classrooms.

This whitepaper explores the challenges educational institutions face when selecting or renewing a virtual classroom platform. It shares key compliance, instructional, and operational insights, and presents a strategic framework for why leading institutions choose—and continue to trust—Blindside Networks, the creators of BigBlueButton.

One-Page Summary for Decision Makers

Selecting and Sustaining Success: Why Institutions Partner with Blindside Networks for BigBlueButton

Purpose-Built for Education:

- Includes whiteboards, polling, breakout rooms, and engagement analytics
- The classroom is not a boardroom

Deep LMS Integration:

- Built into the core of Moodle and Canvas
- Seamless, standards-based LTI 1.3 integration with Blackboard, D2L, and Schoology.
- Launch sessions, track attendance, sync grades and manage recordings directly from the LMS

Data Ownership & Compliance:

- You control recording downloads, retention, and access
- GDPR, ISO 27001 alignment and FERPA-ready deployments
- External DPO available for data protection inquiries

Global Hosting Options:

- Hosted on AWS, Digital Ocean, and OVH in Canada, Europe, United States, or Asia/Pacific environments
- On premises deployment into your hosting environment for additional security and compliance needs

Cost-Effective and Scalable:

- One platform replaces multiple third-party tools, like Kahoot, Figma, Jamboard (e.g., polling, analytics)
- Lower IT overhead with native LMS integration
- On-premises implementation (60 days)
- Premium SaaS hosting setup (48 hours)

Actively Maintained and Open Source:

- Over 200 global contributors
- Transparent roadmap and publicly available GitHub development
- API, plugin, and branding flexibility

Trusted by Institutions:

“Blindside Networks provides premium hosting for us and they are an absolute dream to work with.”

— Thomas Edison State University ([Source](#))

1. Problem Definition: The Virtual Classroom Gap

General-purpose meeting platforms treat students like attendees, not learners. Educational institutions struggle with:

- Limited instructional features such as built-in whiteboards, polling, shared notes, and breakout room management for engagement
- Use of 3rd party tools to supplement limited engagement, leading to increased support and sharing of personal data with external tools
- Data control concerns around recording ownership, storage residency, and retention limits
- Limited engagement tracking and poor visibility into student participation, especially when webcams are not visible

These gaps undermine instructional quality and create unnecessary IT complexity.

2. Industry Analysis: What Educational Institutions Need Now

“BigBlueButton enables our teachers to deliver the best online lessons for our students, with seamless integration into Canvas that saves us countless hours each week.”

— *Jack Child, Assistant Vice Principal, Minerva's Virtual Academy*
([Source](#))

The global virtual education market has grown substantially since the COVID-19 pandemic. According to Research and Markets, the global e-learning market is projected to reach \$457.8 billion by 2026. Schools and universities have rapidly adopted online delivery models, and many have retained virtual components as a core part of their blended or remote instruction strategy.

- **Post-pandemic learning factors** emphasize instructor presence, real-time engagement tools, accessibility, and ease of use, and analytics to support personalized feedback
- **Student preferences** increasingly favor platforms that integrate directly with their LMS and support features like breakout rooms and polling without needing external plugins or separate logins (EDUCAUSE 2022 report)

Educational institutions now require virtual classroom platforms that:

- **Support instructional design** through tools like whiteboards, shared notes, live polling, and breakout rooms
- **Integrate directly with their LMS** to remove external logins and third-party downloads
- **Enable privacy compliant deployment** that aligns with GDPR, ISO 27001, and FERPA best practices
- **Ensure inclusivity and accessibility** with screen reader support, multilingual UI, left-to-right layout support, and real-time captioning and transcription
- **Offer cost-efficiency** by eliminating 3rd party tools and a pricing model based on actual usage, not size of educational institution

These attributes have become key differentiators as institutions reevaluate the long-term viability of their virtual learning platforms.

Be Designed for Teaching

To support instructional design—and to reduce the cognitive load on educators—modern virtual classrooms should:

- Enable live annotation, shared note-taking, and multi-user whiteboarding for interactive and participatory learning
- Include real-time student analytics based on activity and assessment to help educators immediately gauge understanding and give timely and personalized feedback

- Automate common actions, such as breakout rooms with auto-return results to keep learners focused during structured group work

Integrate Seamlessly with the LMS

To reduce instructional friction, modern virtual classroom platforms should:

- Provide built-in integrations with Learning Management Systems (LMS) such as Canvas, Moodle, and Schoology
- Be compliant with LTI 1.1 to ensure secure, role-based access for instructors and students for LMS systems that lack built-in integrations
- Enable automatic synchronization of grades, attendance, and scheduling
- Eliminate redundant logins and streamline instructor workflows by launching sessions directly from the LMS dashboard

Protect Data and Ensure Compliance

To meet global data protection standards and institutional expectations, platforms must:

- Align with GDPR and ISO 27001 standards for data protection and system security
- Support FERPA-aligned deployment practices for U.S.-based institutions
- Offer a signed Data Processing Agreement (DPA) and access to an external Data Protection Officer (DPO)
- Provide fine-grained controls over inclusion and retention of student interaction in recordings
- Provide deployment flexibility through multi-region SaaS hosting or on-premises deployment for data privacy and digital sovereignty

Support Inclusive Learning

Effective digital learning requires platforms to:

- Comply with WCAG accessibility standards, including screen reader compatibility and keyboard navigation

- Offer real-time captioning integrations for hearing-impaired learners
- Provide multilingual interfaces to serve global student and educator populations
- Ensure equitable access regardless of user ability, device, or geographic location

3. Solution Framework: BigBlueButton

“We are all very happy using BigBlueButton... it is much more suitable for training and teaching than other platforms – and with the integration with Moodle, it makes a seamless course and experience for us.”

— Eileen Wallace, Moodle Trainer, NELC ([Source](#))

To meet the instructional and operational needs of modern educational institutions, Blindside Networks delivers a comprehensive solution (next section) that builds on the foundations of BigBlueButton, a purpose-built virtual classroom that provides

- **Educational Design Excellence:** Built-in instructional tools like collaborative whiteboards, polling, shared notes, emoji-based reactions, and real-time analytics via the built-in Learning Analytics Dashboard to enhance engagement and give instructors actionable insights.
- **Deep Moodle, Canvas, Sakai, and Schoology Integration:** BigBlueButton is built into the core of Moodle, Canvas, Sakai, and Schoology, enabling educators to launch sessions, track attendance, and manage recordings directly within the LMS.
- **Standards-Based LTI Support:** For platforms like D2L and Blackboard, BigBlueButton offers certified LTI 1.1 compliance, providing secure, role-based access and streamlined integration across learning environments.
- **Global Development:** Over 200 global contributors support BigBlueButton's transparent development and localization (over 65+ languages and growing) enabling institutions to host and customize using public APIs, plugins, and branding options—free from vendor lock-in.
- **Secure Code-base:** Like Canvas and Moodle, BigBlueButton's open source code base enables security professionals world-wide to find and report any vulnerabilities for quick resolution.

- **Accessibility:** Independent audits of accessibility with VPAT and WCAG 2.1 (with exceptions).
- **Plugin Architecture:** Enables a community of extensions without needing to modify the core.
- **Smart Slides:** One-button polling based on contents of slides

BigBlueButton Roadmap Highlights

To meet the instructional and operational needs of modern educational institutions, Blindside Networks delivers a

LTI Standards Support: Support LTI 1.3 for even deeper integration with D2L and Blackboard for even tighter role-based controls and assessment workflows.

Increased Visibility: Real-time visibility into individual whiteboards, breakout rooms, and screen share.

Direct Feedback: Ability to communicate directly with individual students during a live class.

Quizzing: Using slides as a source of data, give one button click to initiate a quiz for formative assessment.

"BigBlueButton strikes a great balance between secure and collaboration enabling smooth teamwork. Its minimalist interface makes it easy to adopt."

— *Verified User, G2 Review* ([Source](#))

4. Blindside Networks Advantage

"Students taking GCSE Maths and English online classes delivered using BigBlueButton have achieved a full grade point higher than the equivalent in-person classes. It's a remarkable example of evidence-based learning in the virtual classroom"

— *Kim Blanchard, Director of Digital Education and Artificial Intelligence at Activate Learning* ([Source](#))

Educational institutions that choose—or continue—to partner with Blindside Networks benefit from

- **Commercial Hosting:** Instructor training, platform customization, and fast support response times based on a partner-focused mindset.
- **Flexible, Compliant Deployment:** Support for SaaS or on-premises deployments, and alignment with GDPR, ISO 27001, and FERPA-aligned practices provide institutions with confidence in compliance and data sovereignty.
- **Secure Recording Ownership:** Institutions can set access policies to recordings (via one-time-use links) along with visibility and retention rules.
- **Enterprise Analytics:** Institutions can analyze and drill-down into student engagement, feature usage, and instructional time across all sessions.
- **Integrated Reporting:** Send analytics from every session back to the institution for further integration with LMS data for unified reporting.
- **Deeper integration:** Integrative class roster, student alerts, and other custom data from LMS to assist educators in delivering personalized feedback during session

Blindside Networks manages all contributions to the BigBlueButton project, leveraging the global community and ensuring the highest quality solutions delivery.

Blindside Networks Roadmap Highlights

BigBlueButton's roadmap is shaped by input from a global community of educators and developers. All development is public via GitHub, reflecting the project's commitment to transparency and openness. Blindside Networks uses customer feedback, community input, and education-sector trends to guide each release cycle.

- **Deeper Moodle Integration:** Direct access to Moodle's data during the live session that includes automatic attendance tracking, send session reminder emails, and trigger automatic activity completion—eliminating numerous manual administrative tasks
- **LMS Data Visibility:** Live view of student data from the LMS to aid educators in giving more personalized feedback during the session.

- **Enhanced Learning Analytics Dashboard:** Graphical view of engagement and assessment to pinpoint students that may be struggling

These updates reflect the active, forward-looking nature of the BigBlueButton project and Blindside Networks' commitment to continuous innovation aligned with education-sector needs.

While BigBlueButton's interface may appear familiar to longtime users, the platform has evolved significantly since its early pandemic-era deployments. Institutions benefit today from a more robust, performant, and compliant system, supported by an improved WebRTC media stack, live analytics via Watchtower, and deeper LMS integration. The consistent interface also reduces training overhead for educators and staff, making transitions seamless and minimizing support needs.

"Blindside Networks is a wonderful company! Their online meeting and webinar platform is unmatched, and their customer support is always there to assist with a smile."

— *Stephanie Edwards, Trustburn Review* ([Source](#))

Blindside Networks continues to earn the trust of new clients and the loyalty of long-standing institutions by delivering a platform that drives both instructional excellence and operational efficiency.

Investment Protection Through Open Source

BigBlueButton's open-source foundation ensures institutions are not locked into costly proprietary ecosystems. This means:

- No licensing fees for core features
- No vendor lock-in—institutions retain full control over deployment and customization
- Transparent development and roadmap planning via [GitHub](#), empowering self-hosting institutions or those with technical partners

Scaling Cost Advantages

Blindside Networks offers a capacity-based pricing model, unlike commercial platforms that charge per host, per attendee, or impose session caps. This helps institutions:

- Predict costs based on actual usage
- Avoid ballooning fees during semester starts or exam seasons
- Scale instruction without managing per-user billing

No Hidden Fees

All instructional features—including breakout rooms, polling, and engagement analytics—are bundled at no extra cost. This avoids:

- Purchasing separate polling or analytics tools
- Surprise charges for core educational features
- Procurement delays due to contract fragmentation

Operational Efficiency

Institutions using integrated platforms like BigBlueButton report fewer help desk tickets related to conferencing tools, since educators use familiar LMS interfaces and built-in tools.

5. When Compliance Matters: Competitor Risk Highlights

BigBlueButton received the *Outstanding Growth Award* at MoodleMoot Global 2023, recognizing its strong adoption and educational focus. ([Source](#))

Blindside Networks takes a proactive approach to compliance and privacy. In contrast, high-profile compliance violations from mainstream conferencing providers highlight the risks of relying on platforms that are not built specifically for education:

- **Zoom (2020, U.S.):** This FTC complaint accuses Zoom Video Communications of misleading users about end-to-end and 256-bit encryption, improperly storing

unencrypted cloud recordings for up to 60 days, and secretly installing a stealth “ZoomOpener” web server on Macs to bypass Safari’s security safeguards without proper notice or consent. ([FTC Source](#))

- **Zoom (2021, Germany):** The Hamburg Data Protection Authority investigated Zoom’s handling of cross-border data transfers, citing potential GDPR violations. The scrutiny led to stronger privacy commitments by the company. ([The Record](#))
- **Microsoft 365 (2024, EU):** The European Data Protection Supervisor found that the European Commission's use of Microsoft 365 infringed several provisions of Regulation (EU) 2018/1725, the EU's data protection law for its institutions. The Commission failed to provide appropriate safeguards for personal data transferred outside the EU/EEA and did not sufficiently specify the types of personal data collected or their explicit purposes. As a result, the EDPS ordered the Commission to suspend all data flows to Microsoft and its affiliates in countries without an adequacy decision by December 9, 2024. ([EDPS Source](#))
- **Microsoft Teams Bundling (2023, EU):** The European Commission launched an antitrust investigation into Microsoft for unfairly bundling Teams with Microsoft 365. Microsoft responded by unbundling Teams for customers in the EEA and Switzerland. ([Microsoft EU Blog](#))

These examples underscore the need for institutions to select partners with education-focused compliance strategies, transparent deployment models, and third-party oversight.

By contrast, Blindside Networks offers:

- Open Source code base that has received multiple security scans, along with regular 3rd party penetration of hosting infrastructure
- A GDPR-compliant Data Processing Agreement (DPA)
- Hosting options in Canada, United States, Europe, and other compliant jurisdictions
- FERPA-aligned deployment best practices
- Access to an external Data Protection Officer (DPO)

These safeguards help institutions maintain trust with students, faculty, and regulators—especially where personal data and academic records are involved.

6. Conclusion: Why Institutions Choose—and Stay with—Blindside Networks

Blindside Networks offers more than just hosting—it delivers expert support directly from the original developers of BigBlueButton. With over 17 years dedicated to building and advancing open-source virtual classroom technology, our team understands the instructional, operational, and compliance needs of modern education.

Whether you're considering Blindside Networks for the first time or continuing a trusted relationship, institutions benefit from:

- Lower long-term costs through bundled instructional and engagement tools
- A platform that evolves based on educator feedback and academic priorities
- Direct integration into the LMS ecosystem for greater instructional efficiency
- Deployment flexibility and data sovereignty controls
- A proven track record of responsive service and reliable infrastructure

As institutions prioritize instructional quality, regulatory compliance, and digital autonomy, Blindside Networks stands out as the partner of choice for delivering scalable, secure, and education-first virtual classrooms. BigBlueButton continues to evolve—not only to meet today's needs but to support the future of digital learning.

7. Company Profile: Blindside Networks

Empowering Education Through Open Source Innovation

Blindside Networks is the creator and primary steward of BigBlueButton, the open-source virtual classroom platform built specifically for educators. Founded in 2008 and headquartered in Ottawa, Canada, Blindside Networks partners with educational institutions around the world to deliver secure, scalable, and fully integrated virtual learning experiences.

We specialize in hosting and supporting BigBlueButton for schools, universities, and training organizations that require deep LMS integration, robust privacy controls, and instructional tools designed to improve learner engagement.

With a strong focus on compliance, we support GDPR and FERPA-aligned deployments, offer a Data Processing Agreement (DPA), and provide hosting options in Canada, Europe, or customer-managed cloud environments. Our roadmap is driven by the global education community, and our development is fully transparent through public GitHub repositories.

Blindside Networks also leads the global BigBlueButton open source project, which today includes over 200 contributors and integrations with Moodle, Canvas, Sakai, Schoology, and D2L.

Quick Facts

- **Founded:** 2008
- **Headquarters:** Ottawa, Canada
- **Core Product:** BigBlueButton virtual classroom platform
- **Deployment Models:** SaaS, on-premises
- **Built into:** Moodle, Canvas
- **Key Integrations:** Sakai, D2L, Schoology
- **Compliance:** GDPR-ready, ISO 27001 in progress, FERPA-aligned practices
- **Open Source Leadership:** 200+ global contributors
- **Website:** www.blindsidenetworks.com
- **Contact:** info@blindsidenetworks.com

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9. Organizations Relying on Blindside Networks

