



AI-POWERED CLASSROOM SOLUTION

Smart Classrooms for Higher & Professional Education

One system for teaching, recording, and hybrid learning
— with AI built into every classroom, trusted by leading
universities worldwide.

AI-ENHANCED

HYBRID-READY

CAMPUS-WIDE

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SECTION ONE

About ClassIn

Company overview, global presence, and university trust

01

Trusted by Leading Universities Worldwide

PARTNER INSTITUTIONS

SUSS | IAL · National University of Singapore
PEKING UNIVERSITY · TSINGHUA UNIVERSITY

60,000+ institutions across 6 countries

CHINA · SINGAPORE · MALAYSIA · JAPAN · SOUTH KOREA · VIETNAM · PHILIPPINES

Founded 2014 · Purpose-built for education

ClassIn at a Glance

The world's leading integrated classroom technology platform. Purpose-built for education since 2014.

3B USD

Valuation (Tencent / Hillhouse / SIG)

60K+

Institutions Served

200M+

Sessions Completed

50M+

Educators & Learners

4.5M+

Monthly Active Users

600+

Engineers & DevOps

1,000+

Staff Globally



RECOGNIZED BY

Named to GSV Global EdTech 50 — one of the world's most transformative education companies.



RECOGNIZED BY

Endorsed by SUSS & IAL — winner of the **innovSpur** innovation grant in Singapore.

Southeast Asia Office

EEO / ClassIn Service commitment — **1-hour response, 12-hour daily local support, 7 days a week**

Trusted by Universities Worldwide

60,000+ institutions across 150+ countries — including leading research universities and strategic global partners.

SINGAPORE & SOUTHEAST ASIA



GLOBAL UNIVERSITIES



GLOBAL PARTNERS



SECTION TWO

Solution Architecture & Scenarios

One integrated system — hardware, software, and AI
working together

02

One Solution. Three Layers.

Hardware + Software + AI — working as one coordinated system

HARDWARE



ClassIn Board

65"-110" 4K, anti-glare, low-latency touch



Auto-Tracking Camera

4K dual-lens, AI auto-track teacher & student



360° Ceiling Mic

32 mics, 80m² pickup, beamforming

SOFTWARE



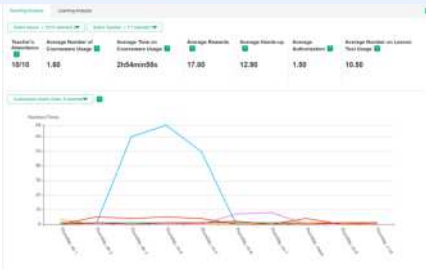
Teaching OS

Whiteboard, annotation, polls, quizzes



Virtual Classroom

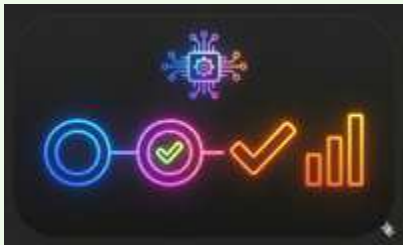
Livestream, whiteboard, replay



LMS & Central Management

Scheduling, recording, enrollment

AI



AI Agents

Math, science, language



AI Evaluation

Auto lesson scoring



AI Reports

3-layer learning reports



ClassClaw

AI digital employees

Four Scenarios, Four Outcomes

01

In-Person Interactive Teaching

Higher engagement through real-time interaction — not passive lecture.



02

Voice Lift Without Wearables

Natural amplification campus-wide — eliminates managing, charging, and sanitising hundreds of wireless microphones.



03

Panopto-Ready Lecture Capture

Every class becomes a searchable, replayable asset — capture is a by-product of the same teaching setup, not a separate system.



04

Hybrid Teaching

Seamless remote participation in the same interactive space — no second platform needed.



SCENARIO 1

In-Person Interactive Teaching

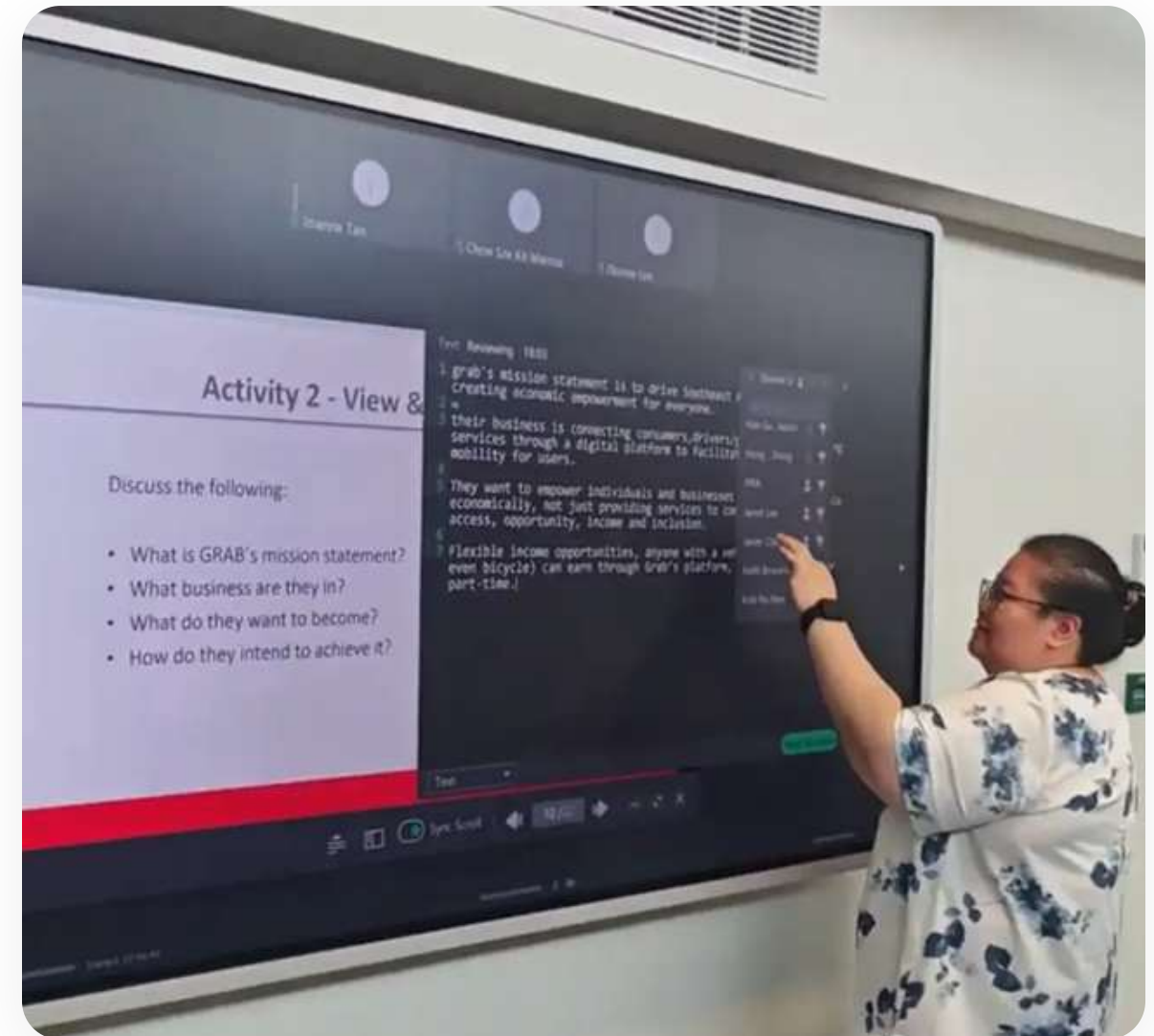
ClassIn turns the display into a **teaching cockpit** — everything runs on the board, no laptop, no dongle, no extra app.

- Infinite whiteboard with saveable annotation
- Live polls, quizzes, random pick, timer
- Student screen mirroring (BYOD)
- Mini-blackboard for whole-class response
- Real-time answer distribution view

87% of students report higher engagement vs. traditional lecture

USED BY

NUS · Peking University · SUSS |
IAL

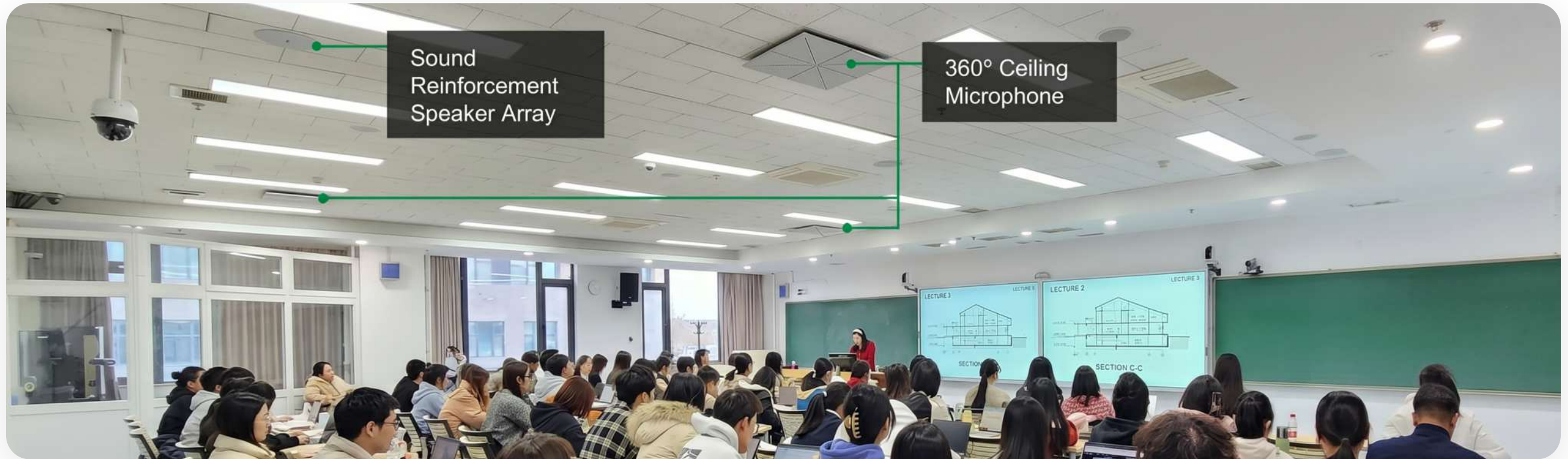


In-person classroom at Temasek Poly School of Business

SCENARIO 2

Voice Lift Without Wearables

360° ceiling mic array — **32 mics, 80m range, 1° adaptive beamforming** — paired with ceiling speaker array. Real-time AI denoise.

**BEFORE**

- ✗ Hundreds of wireless mics
- ✗ Daily charging & sanitising
- ✗ Lost & damaged units

AFTER

- ✓ Teacher walks in & speaks
- ✓ Zero hardware management
- ✓ Always campus-ready



wearable devices to manage, charge, or sanitise

USED BY

NUS CTLT · ITE · Central Library

SCENARIO 3

Panopto-Ready Lecture Capture

Capture is a natural output of the **same hardware that powers teaching** — not a separate recording system bolted on top.

- Every class auto-recorded — no teacher action required
- Dual-stream: teacher camera + board content, synchronised
- Native Panopto / Kaltura / Zoom Cloud compatibility
- Searchable playback — students replay any moment, any time

Walk in. Teach. Walk out. — the class is already recorded, indexed, and ready for replay.



USED BY

NUS Office of Human Resources · Panopto Remote Recorder deployment

SCENARIO 4

Hybrid Teaching & Guest Lectures

Online and in-person students share **one interactive space** — same board, same whiteboard, same polls. No operator needed.

- Ceiling mic + auto-tracking camera for remote participants
- Guest lectures & cross-campus collaboration
- Individual catch-up sessions

"The class is defined by who is enrolled, not who is in the building."

1 shared space — no second platform, no operator

USED BY

SISU · Stanford Center Beijing · BNU



Stanford Center Beijing · telepresence seminar room

SECTION THREE

Hardware

ClassIn Board, AI cameras, ceiling microphones

03



ClassIn Board — The Teaching Anchor

The most advanced interactive flat panel designed for education.

- 4K ultra-clear, anti-glare, eye-friendly (low blue light cert)
- Low-latency writing — near-zero lag
- Built-in 8-array mic + speakers
- Built-in Windows for cloud file access
- Available 65" / 75" / 86" — wall-mount or mobile stand

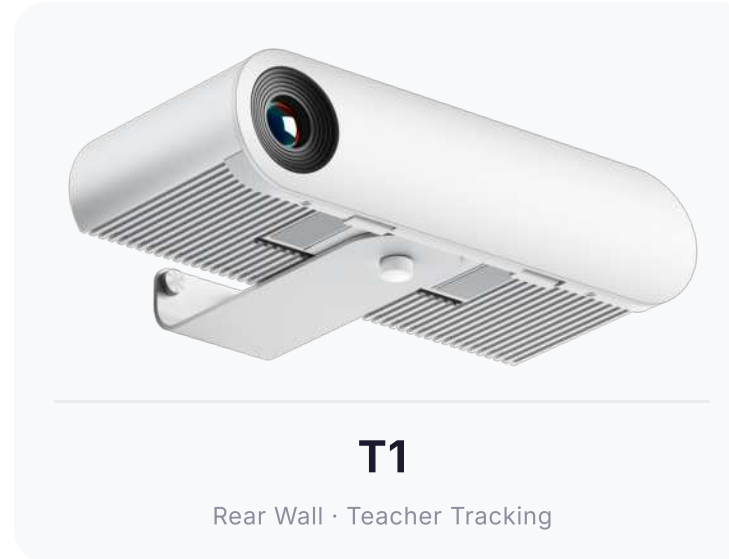
CERTIFIED BY



AI Camera System — Visibility

4K dual-lens auto-tracking camera. **Wide-angle + close-up**. No operator needed.

- 8.42MP, digital zoom + multi-power
- **T1** (rear wall) — teacher tracking
- **S1** (front) — student capture
- Dual purpose: hybrid visibility + lecture capture



Dual-camera deployment — wide-angle classroom view + auto-tracked close-up, no human operator

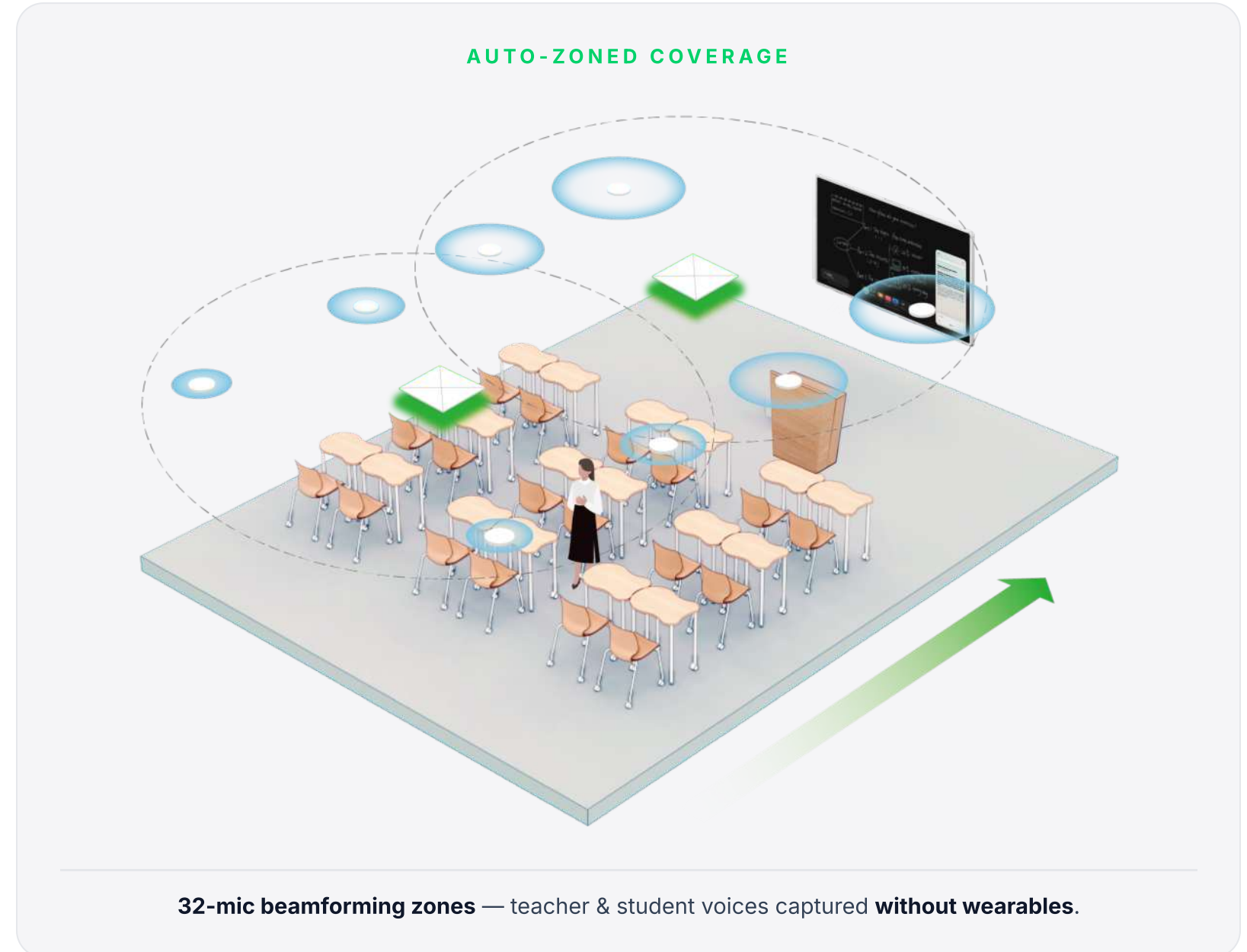
Ceiling Mic + Speaker — Capture & Reinforcement

One system, two jobs — voice lift and lecture capture audio — feeding both local speakers and the recording platform.

- 360° ceiling mic: **32 mics, 80m, 1° beamforming**
- AI denoise eliminates background noise in real time
- Speaker array: balanced amplification, no external amp
- Cascadable for large spaces

One mic feeds both local speakers and the recording platform — not two separate systems.

ClassIn Ceiling Mic + Speaker Array



32-mic beamforming zones — teacher & student voices captured **without wearables**.

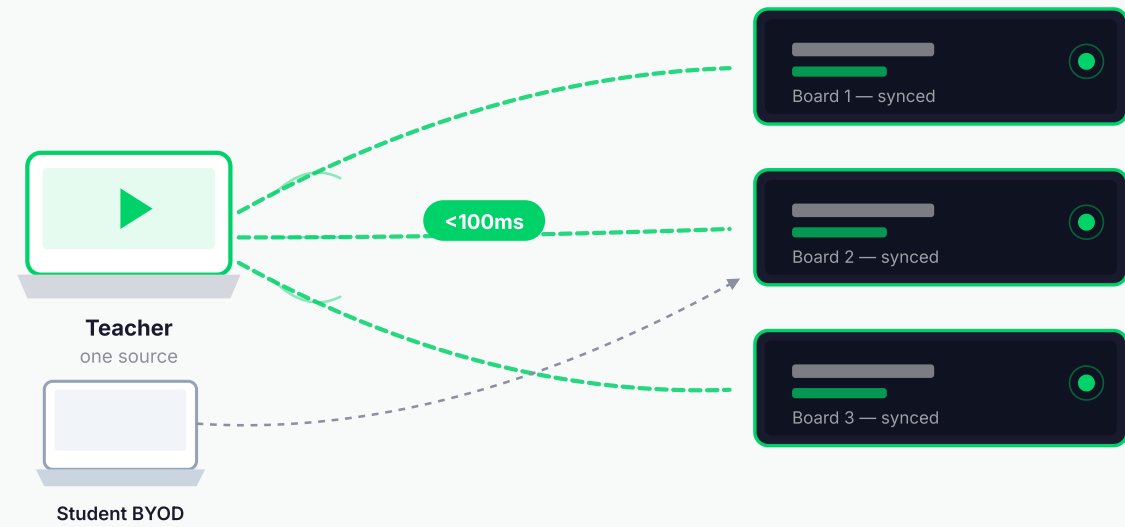
Wireless Casting & Multi-Screen Sync

Multiple ClassIn Boards display the same content wirelessly — ideal for wide, L-shaped, or multi-room classrooms.

- One source, synced to **3+ ClassIn Boards** in real time
- Sub-**100ms** latency — no visible lag across screens
- BYOD casting: students mirror laptops to the main board with one tap
- Zero cabling — ideal for L-shaped, wide, or multi-room classrooms

No HDMI runs. No AV switcher. No IT ticket — teachers just cast.

1 SOURCE → MULTI-SCREEN SYNC



Roundtable discussion classroom — one teacher source synced across 5 boards for full-room visibility

Panopto-Compatible Recording Topology

Standard HDMI + network topology — drops into existing Panopto / Kaltura / Zoom Cloud stacks with no custom middleware.

FOR IT & AV TEAMS

4 INPUT SOURCES PER ROOM

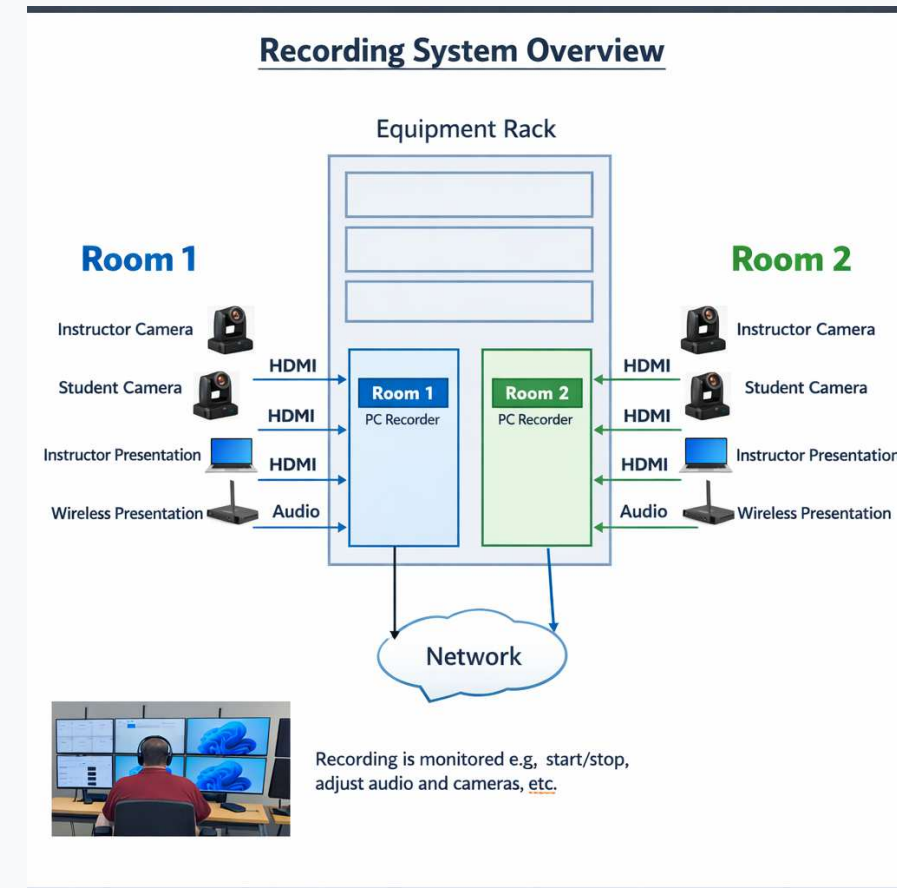
- Instructor Camera · HDMI
- Student Camera · HDMI
- Instructor Presentation · HDMI
- Wireless Presentation · Audio / HDMI

SIGNAL CHAIN

Per-room PC Recorder → Network → **Panopto cloud**

- No external encoder required
- HDMI passthrough — native resolution preserved
- Each room encodes independently — no single point of failure

Central monitoring — all rooms from one operator station. Scales horizontally: **add a room, add a recorder.**



Example: 2-room deployment · scales linearly to campus-wide rollouts

SECTION FOUR

AI-Enhanced Teaching

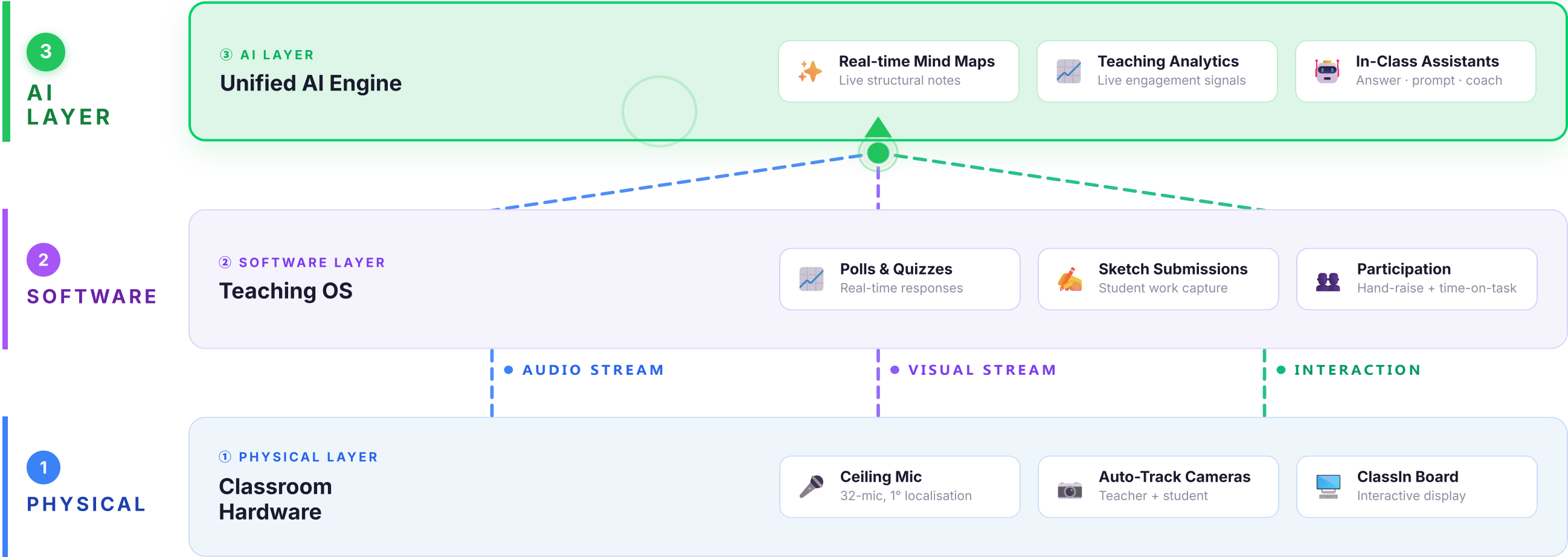
Real-time, multimodal, integrated into the classroom

04

Why ClassIn AI Is Different

THE INTEGRATED FOUNDATION — THREE LAYERS, THREE STREAMS, ONE LIVE ENGINE.

ClassIn's AI is **real-time and multimodal** — because it owns **all three layers** of the classroom stack, and each layer feeds a live data stream **up into** the AI engine simultaneously.



The hardware **captures** the classroom. · The software **structures** the interaction. · The AI **understands** both — **live**.

AI FEATURE 1

Real-Time AI Summary & *Mind Map*

During class — not after. **One AI engine. Two live outputs.** Both built as the lesson unfolds.

 **SPEECH → SUMMARY**

LIVE · IN CLASS

Classroom Recording

Demo Mode

Speech Summary 29405365:06

1. Basic Information

This brief class, recorded on November 28, 2025, lasted approximately one minute and consisted of 13 speech segments. The main topic was **collaborative learning**, focusing on its principles and effectiveness. The atmosphere appeared informative and motivational, with the teacher aiming to highlight the value of group-based learning in an engaging and concise manner.

2. Speech Summary

The teacher introduced **collab** aiming to highlight the value engaging and concise manner.

AI Summary

Daily

 **Speech Summary**
AI quick organize, save sorting time

 **Classroom Notes**
Build structure, easy review tracking

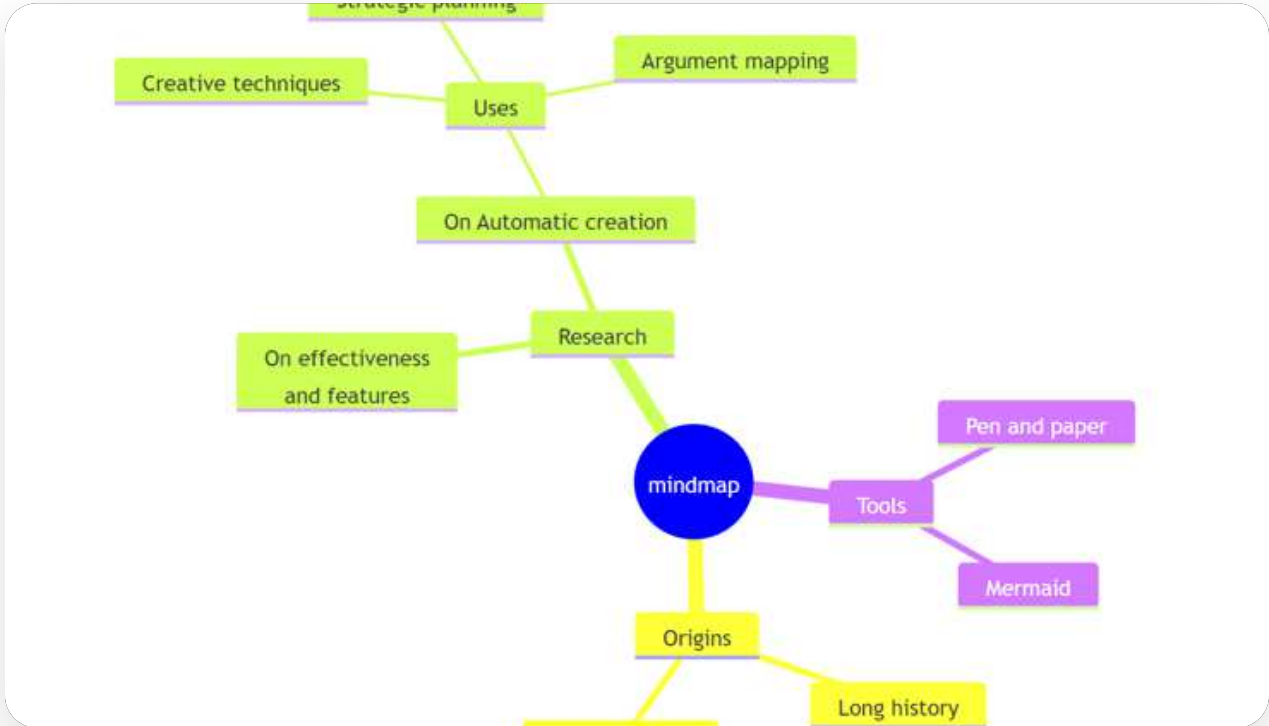
 **Mind Map**
Visualize, inspire creative thinking

Real-time transcription + AI-structured notes

Auto-tagged topics · Searchable playback

 **VISUAL → STRUCTURE**

LIVE · BUILDING



Live mind map — nodes added as teacher speaks

Students see lesson structure emerging

The mind map **grows with the class** — and so does the summary.

<5s to first node · 13+ auto-tagged topics · 0 post-class processing time

AI Lesson Analytics

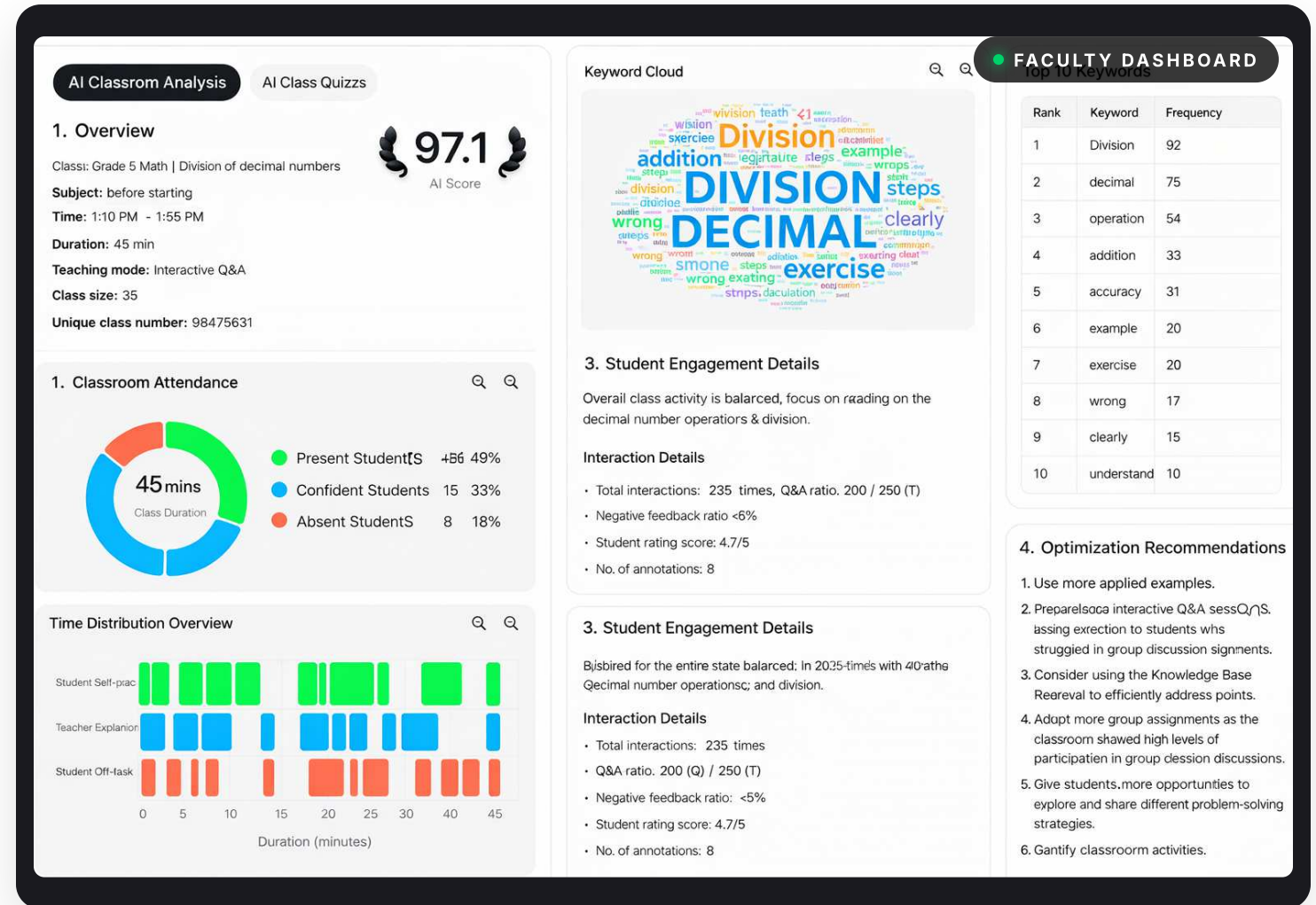
WHAT THE AI MEASURES

- Engagement score & real-time pacing analysis
- Time-on-task breakdown — teacher vs. student vs. off-task
- Participation distribution & interaction count
- Keyword cloud from lesson content

AI score
per session

interactions
analyzed

negative
feedback ratio



Lesson Analytics dashboard · Grade 5 Math session · Co-developed with East China Normal University

Co-developed with East China Normal University

Built on pedagogical research, not just telemetry — every metric validated by education faculty.

of joint development

classes analyzed in validation study

metrics grounded in pedagogical research

AI FEATURE 3

AI Teaching Assistant — With Full Classroom Context

Built-in AI co-teacher with complete multimodal classroom context — not a generic chatbot retrofitted with your lesson plan.

LIVE CLASSROOM CONTEXT

- **Hears** every spoken response
- **Sees** board content, slides, annotations
- **Receives** poll, quiz, and sketch-board data

Every answer grounded in what actually happened in this class — not in training data from the internet.

● CLASSIN AI TEACHING ASSISTANT

Teacher

"Which students struggled with today's poll on **cell division**?"

ClassIn AI

Based on today's class (45 min):
Poll Q3 (mitosis phases): 8 students answered incorrectly → **Emma, Liu Wei, Kenji +5 more**
These 8 also had low engagement during the **12:15 sketch task**
Suggested follow-up: **5-min recap on prophase → metaphase**

Generate personalized review ↗

STUDENT PERFORMANCE

Today's Class · 45 min

● Emma Chen	92%
● Li Wei	88%
● Kenji Tanaka	64%
● Priya Shah	52%
● Marcus Okoye	48%
... 25 more	

Class Average71%

AI FEATURE 4

AI Agent Store — Every Board, a Custom AI Workstation

Open platform for teachers to build and deploy custom AI tools — no coding required. Pre-curated agents, or bring your own.

20+ AGENTS AVAILABLE

PLATFORM CAPABILITIES

- Curated agents: **Math Solver** · **Science Tutor** · **Essay Grader**
- Schools upload their own agents — **no coding required**
- Every board becomes a **customisable AI workstation**

20+

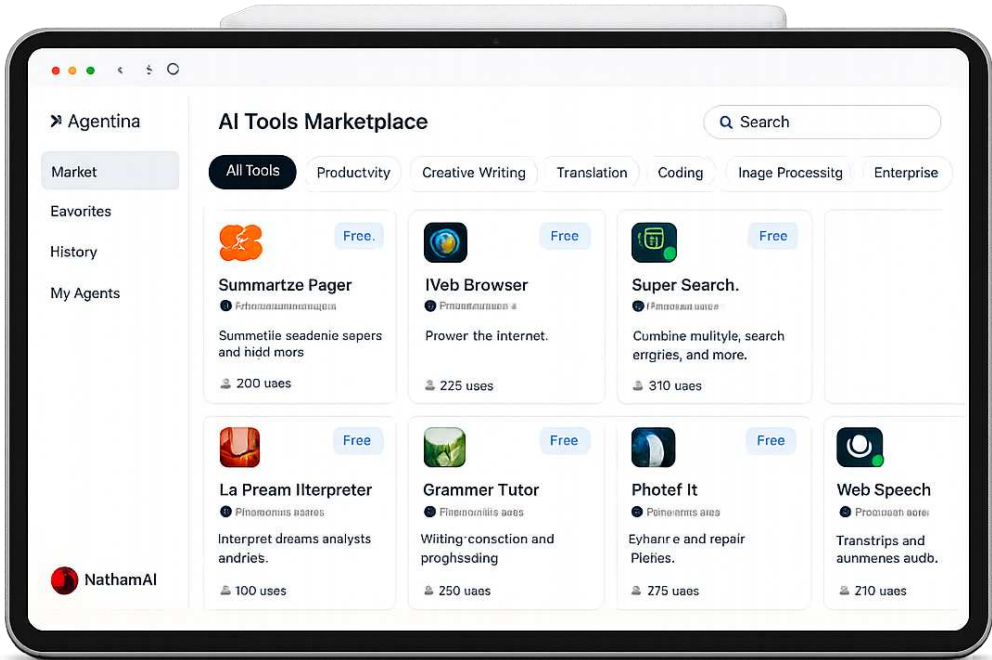
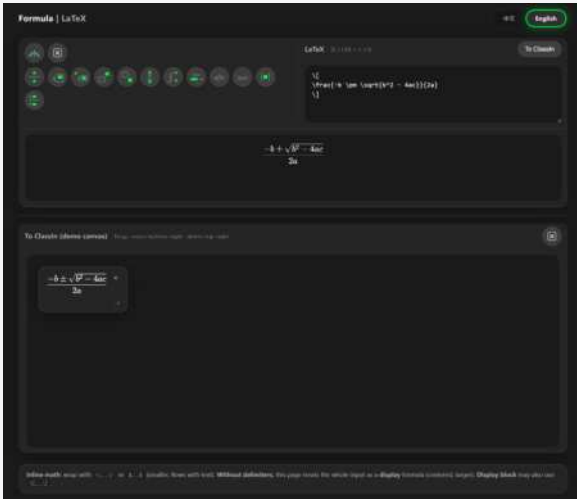
curated agents
ready to use

0

lines of code
to deploy

1 click

from board
to live agent



CUSTOMER SPOTLIGHT

NTU · LATEX FORMULA AGENT

A professor at NTU built a **LaTeX agent in an afternoon**. Students write equations by hand — the agent converts them to formatted LaTeX, ready to paste into papers.

Zero engineering tickets. Zero coding.

SECTION FIVE

Teaching Tools & Platform

Whiteboard, real-time assessment, group collaboration

05

Why ClassIn — Purpose-Built for Teaching

Three categories of competitors. Three structural reasons ClassIn wins — not on price, not on features, but on what the product was built for.

vs. General AV Solutions

× THE TYPICAL STACK

Zoom Rooms · Teams Rooms · Google Meet Rooms
Conferencing hardware repurposed for teaching

✓ CLASSIN

Teaching OS — whiteboard, polls, quizzes, annotation, mirroring, AI analytics all built in.

vs. Standalone Recording

× THE TYPICAL STACK

Panopto · Echo360 · Kaltura Capture
Recording-only platform bolted onto existing AV

✓ CLASSIN

Capture is a by-product of the same hardware. No separate encoder, no parallel system. **One investment, three capabilities.**

vs. Bolt-On AI Tools

× THE TYPICAL STACK

Otter.ai · Fireflies · Read.ai · Course Hero
Post-class transcript + summary via API

✓ CLASSIN

AI runs **live during the lesson** with full multimodal access — audio, visual, interaction. Not a post-class plugin.

Other solutions equip a room. **ClassIn equips a teacher.**

PROOF — WHO CHOSE CLASSIN OVER THE ALTERNATIVES

60K+

Institutions chose **teaching OS** over conferencing-first solutions

NUS

Deployed ClassIn **alongside** Panopto Remote Recorder

ECNU

Co-developed the AI engine — not API-integrated

TEACHING TOOL 1

Interactive Whiteboard — A Saveable, Infinite Canvas

Not a passive display — every stroke, every annotation, every board state preserved as a teaching artefact.

BOARD CAPABILITIES

- Infinite whiteboard — write, draw, diagram, all **auto-saved to cloud**
- Import PPT / PDF — **annotate live**, save annotated version
- **One-tap tools** — timer, countdown, polls, random picker, hand-raise
- Laser pointer mode — for focused attention in large rooms
- Every annotation preserved — students **replay the board** after class



∞

whiteboard canvas
never runs out

0

cabling, dongles,
or extra apps

100%

board states
saved to cloud

ONE TOOLBAR — EVERY TEACHING TOOL ONE TAP AWAY



Write & Draw

Infinite whiteboard



Polls & Quizzes

Live responses



Timer

Countdown & stopwatch



Random Picker

Cold-call fairly



Hand Raise

Turn-taking



Laser Pointer

Attention focus

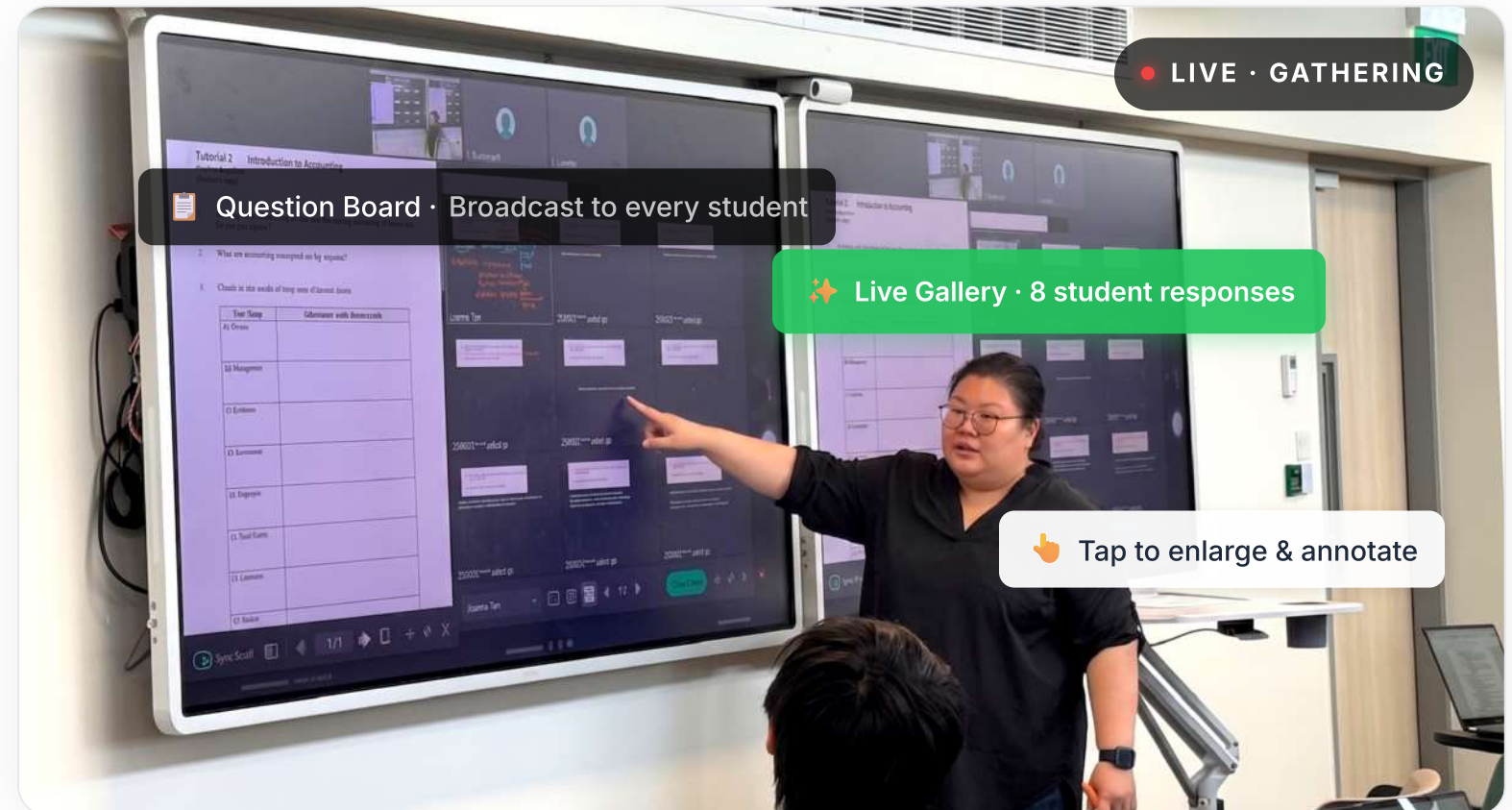
TEACHING TOOL 2

Sketch Board — Every Student's Thinking

Every student gets a personal mini-blackboard. All responses appear on the main board — see not just who got it right, but how each student thinks.

WHAT THE TEACHER SEES

- **Every student** writes, draws, or types — on their own device
- All responses appear **simultaneously** on the main board
- **Tap any response** to enlarge, annotate, discuss with class
- Error patterns visible **in seconds** — not after grading



✕ Traditional

- 3 students raise hands — rest stays in black box
- Correction happens next week, after grading

✓ With Sketch Board

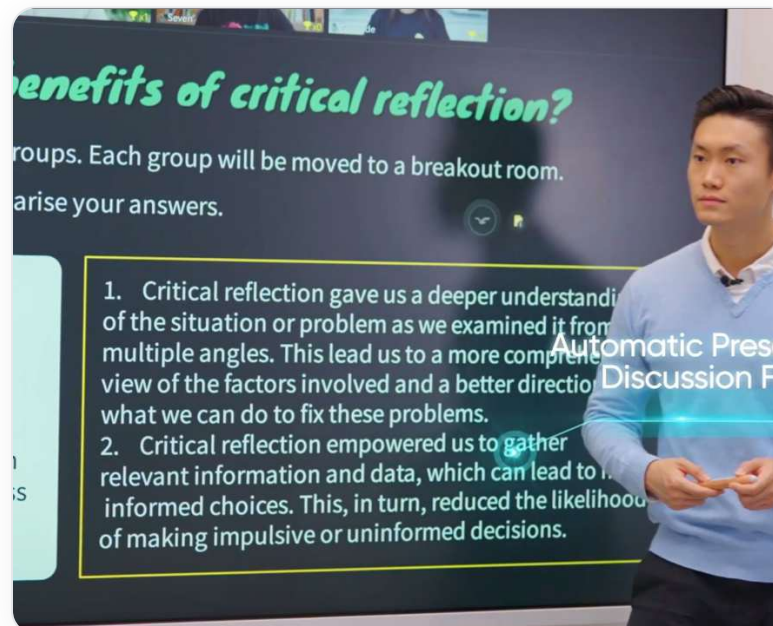
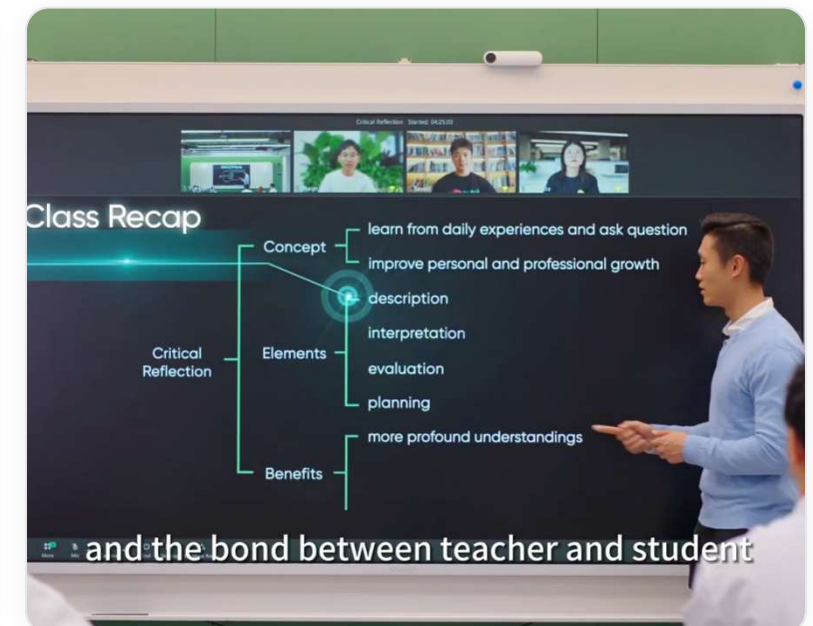
- **Every student** responds — visible on main board in real time
- Correction happens **in the same lesson** — not next week

● TEACHING TOOL 3

Group Discussion & Collaboration

Structured group work — teacher assigns groups, monitors all simultaneously, shares with one tap.

- 01 Assign groups**
Each group gets a shared workspace.
- 02 Monitor live progress**
Teacher monitors up to 8 groups in one view.
- 03 Share to main screen**
Push any group's work to the main board. BYOD-ready.
- 04 Capture & summarise**
Ceiling mic auto-records and summarises discussions.

01 Assign groups**02 Monitor live progress****03 Share to main screen****04 Capture & summarise**

IT Integration, Security & Hosting

Built for Singapore's institutional requirements. Data sovereignty, LMS interoperability, and local support — designed for IT and procurement teams, not just teachers.



THEME 01

SG Data Hosting & Security

Singapore-region hosting available — data stays in-country. Institutional-grade access control, encrypted transmission, full audit trail.

sg Singapore AWS / GCP region

Role-based access control (RBAC)

End-to-end encryption + audit trail

SOC 2

ISO 27001

GDPR



THEME 02

Works with Your Stack

API-first integration with every major LMS and lecture capture platform. Retrofit your existing AV — no rip-and-replace.

LMS INTEGRATION

Canvas Moodle Blackboard D2L

LECTURE CAPTURE

Panopto Kaltura Zoom Cloud

AV Interoperability — HDMI / Crestron / Extron



THEME 03

Deployment & Local Support

Phased rollout from pilot to campus-wide. Local team in Singapore, 12-hour daily support, 7 days a week.

Pilot → Showcase → Standard → Campus
1 room → 3–5 rooms → 15+ rooms → All rooms

EEO Singapore · InnovSpur

12-hr daily support · avg response <30 min

INSTITUTIONAL READY · BUILT FOR IT AND PROCUREMENT TEAMS

SG

Singapore Data Region

Available on request



SOC 2 + ISO 27001

Enterprise-grade



Zero Rip-and-Replace

Works with existing AV



12-hr Local Support

EEO Singapore office

SECTION SIX

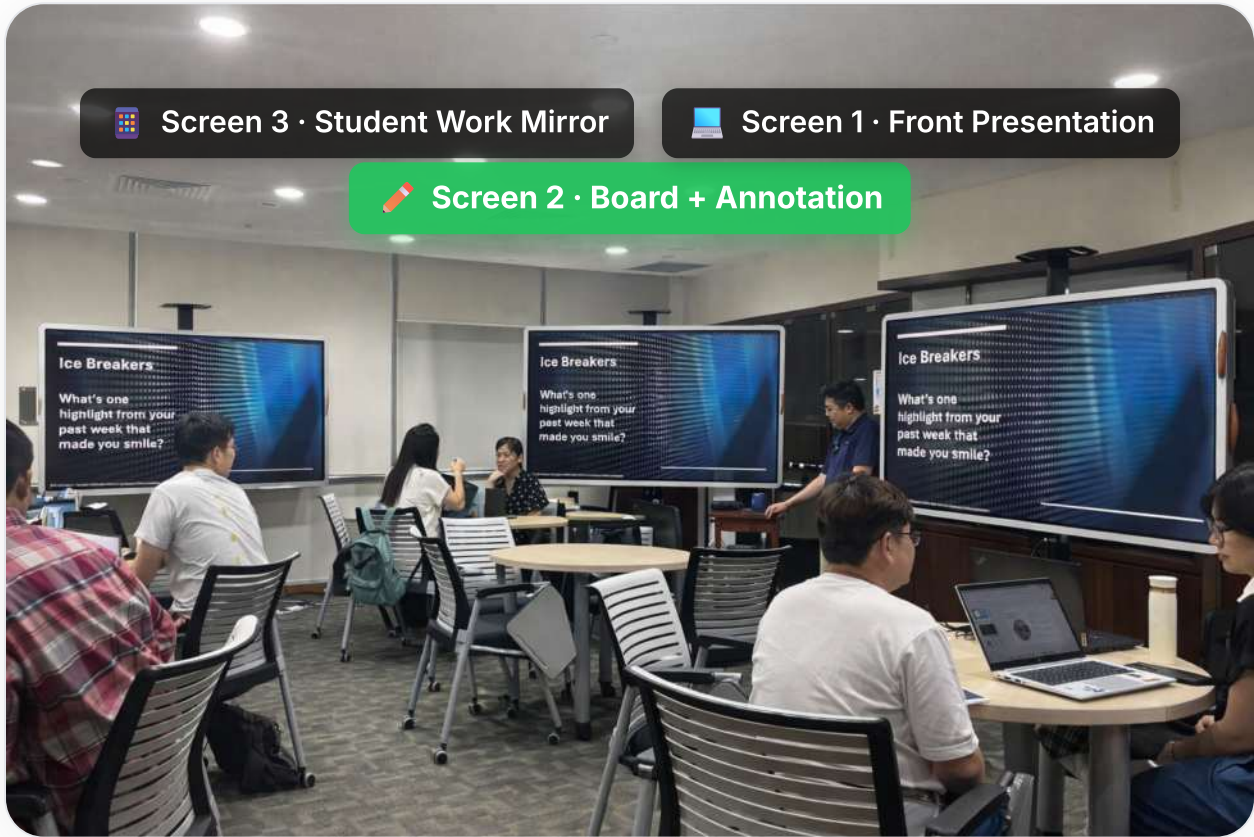
Case Studies: Southeast Asia

Real deployments, real outcomes — regional reference
projects

06

NUS — Office of Human Resources

Seminar Capture with Triple-Screen Sync



PAIN

Wide room needs recording across **three screens simultaneously**. Traditional setups require four separate systems — each with its own operator.

SOLUTION

Three synced ClassIn Boards + front/rear cameras + 360° ceiling mic → one Panopto-ready stream. **One operator, one workflow.**

RESULT

Zero-touch capture since Q4 2025. Auto-published to Panopto within 5 min. **99.8%** uptime across **300+** sessions.

NUS OHR Meeting Room · 3 synced Boards + cameras + ceiling mic · Live since Q4 2025

PROJECT SCOPE · TIMELINE · OUTCOMES

3

synchronized
screens

500+

students
served weekly

99.8%

uptime
since Q4 2025

<5 min

publish to
Panopto LMS

0

operators
required

CASE STUDY 02 SG SINGAPORE REFERENCE

DEPLOYMENT	ROOMS	STATUS
To be deployed in 2026	4	● Live

NUS — Centre for Teaching & Learning (CTLT)

Voice Lift for Seminar Teaching



PAIN

Every participant must be heard — especially in hybrid. Wireless mic fleets are a management burden.

SOLUTION

360° ceiling mic + speaker array. Teacher walks in and speaks. Everyone is heard.

RESULT

4 seminar rooms, to be deployed in 2026. Zero wireless mics managed. Validated by CTLT research.

NUS CTLT seminar room · ceiling mic + speaker array · no wearable microphones · to be deployed in 2026

PROJECT SCOPE · TIMELINE · OUTCOMES

4 seminar rooms deployed

360° pickup coverage per room

0 wearable mics to manage

32 beamforming mics per ceiling array

Q1 2026 in production since

CASE STUDY 03 SG SINGAPORE REFERENCE

NUS — Acacia Building Pilot Classroom

AI-Enhanced Pilot Classroom — Proof of Concept

DEPLOYED	ROOMS	STATUS
Q1 2026	1	● Pilot → Expanding



PAIN

Before campus-wide rollout, NUS needed a **low-risk way** to validate AI-enhanced teaching in a real classroom — not a demo lab.

SOLUTION

Single ClassIn Board + ceiling mic + camera. Full AI stack live from day one. **Minimal footprint, maximum AI visibility.**

RESULT

Deployed in **under 3 weeks**. Pilot success triggered plans to expand to **10+ rooms** across NUS campus in 2026.

“

Teachers have been using it in different ways. Students love it!

— NUS Faculty, Acacia Building Pilot

PILOT SCOPE · TIMELINE · OUTCOMES

1
pilot
classroom

<3 wk
from decision
to live

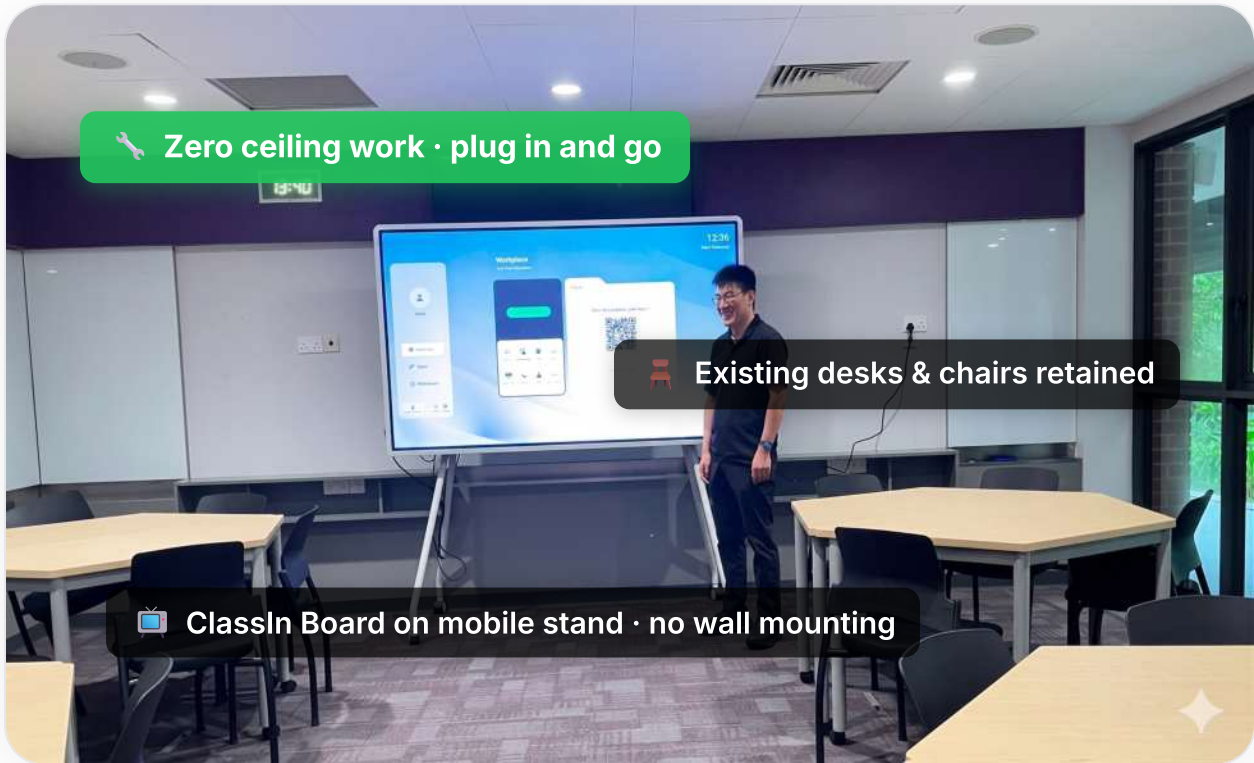
4
AI features active
from day one

10+
rooms planned
for 2026 rollout

Q1 2026
pilot live
since

NUS — Ridge View

Lightweight, Fast Retrofit — From Traditional Room to Smart Classroom **in Half a Day**



NUS Ridge View classroom · ClassIn Board on mobile stand · existing furniture retained

PAIN

Classrooms need smart capability — but **construction windows are scarce** and budgets don't stretch to renovation.

SOLUTION

ClassIn Board on mobile stand — plug in and go. **Traditional classroom becomes smart in half a day — no construction, no disruption.**

RESULT

Multiple Ridge View rooms live since Q4 2024. Each from **traditional to smart in half a day. Zero permits. Zero downtime.**

PROJECT SCOPE · TIMELINE · OUTCOMES

1/2 day

per room · traditional to smart

0

construction permits needed

Multiple

classrooms deployed

100%

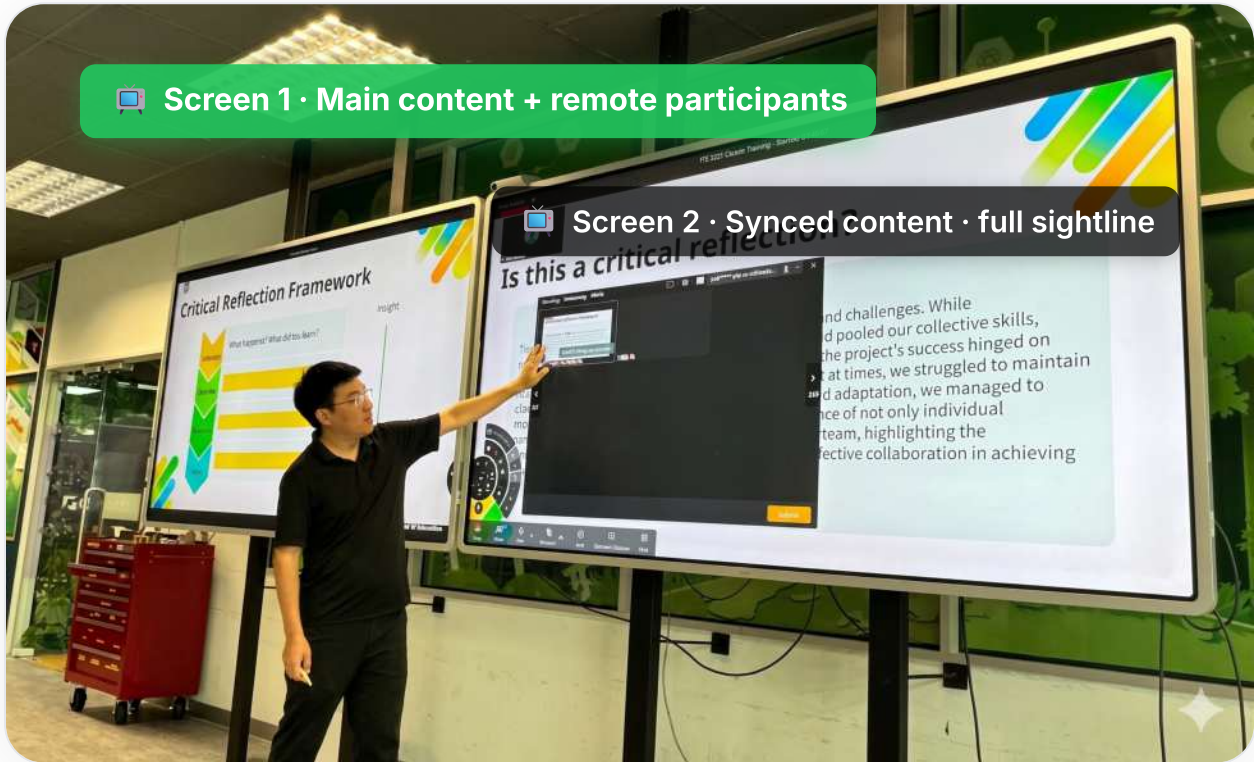
existing furniture retained

Q4 2024

live since

ITE — Institute of Technical Education

Dual-Screen Teaching with Voice Lift — **Three Scenarios, One Room**



ITE classroom · two synced ClassIn Boards + ceiling mic + always-on hybrid

PAIN

Wide classrooms have **three pain points at once**: back-row sightline, room-wide voice, and hybrid integration. Traditional AV solves each with a separate system — three budgets, three vendors, three workflows.

SOLUTION

Two synced ClassIn Boards + ceiling mic + always-on hybrid. **Three scenarios, one room, one vendor, one workflow.**

RESULT

Multiple ITE rooms live since Q3 2024. **100% sightline coverage** from every seat. Hybrid runs with **no operator, no second platform, no setup delay** — validated by ITE's blended learning review.

PROJECT SCOPE · TIMELINE · OUTCOMES

2
synced ClassIn
Boards per room

100%
sightline coverage
from every seat

0
wearable
microphones needed

Always on
hybrid mode
ready

Q3 2024
live
since

Temasek Polytechnic — School of Business

In-Person PBL Interaction — Future Learning Spaces for Project-Based Curriculum



Temasek Polytechnic School of Business · future learning space · flexible furniture + side-screen discussion zones + AI transcript

PAIN

PBL requires **rapid cycling** between discussion, sharing, and presentation. Traditional classrooms can't support this.

SOLUTION

Flexible furniture + side screens + BYOD + AI transcript. **Every mode — discuss, share, present — in one room.**

RESULT

2 spaces live since Q2 2025. Mode transitions **in seconds**. All discussions AI-transcribed.

“
The most user-centred EdTech collaboration.
— Dr. Shirley Ong Tan, Temasek Polytechnic

PROJECT SCOPE · TIMELINE · OUTCOMES

2
future learning
spaces

PBL-ready
flexible furniture
+ side screens

BYOD
casting from
student laptops

AI transcript
auto-recorded per
group discussion

Q2 2025
live
since

Thank You

We look forward to building the future of smart classrooms together.