WebRTC Live-Learning Readiness Checklist

Pressure-test a live-learning product against the four classroom gotchas before you pilot. Companion to the Fora Soft Learn article on WebRTC for live learning.

A. Latency budget

- [ ] Target sub-second glass-to-glass delay for the interactive tier (aim 150-400 ms).
- [ ] Confirm the use case is a conversation (WebRTC), not a one-way broadcast (HLS).

B. Network, firewall, and TURN cost

- [ ] Test on a locked-down school/corporate network (ports 80/443 only), not just home Wi-Fi.
- [ ] Run TURN over TLS on port 443 so relayed media traverses strict firewalls.
- [ ] Model the relay-bandwidth bill at your real relayed-learner share before pricing.

C. Scaling topology

- [ ] Rule out a peer-to-peer mesh beyond ~6 active video senders.
- [ ] Use an SFU for the interactive seminar; add a broadcast tier for the lecture hall.

D. Recording for the catalog

- [ ] Record server-side from the SFU — never rely on the instructor's browser tab.
- [ ] Trim, compose, transcode, and publish via CDN; emit xAPI Video Profile statements.

E. Captions and compliance

- [ ] Ship real-time live captions (WCAG 2.1 AA, SC 1.2.4) — a procurement requirement.
- [ ] Confirm WebRTC media is encrypted by default (DTLS/SRTP) for buyer security review.

F. Build vs buy

- [ ] Never build the WebRTC media engine — rent a managed API or run an open-source SFU.
- [ ] Invest engineering in the learning layer: roles, tracking, recording, LMS bridge.

Companion to: 'WebRTC for Live Learning: Why It Is the Default, and Its Classroom Gotchas'
www.forasoft.com/learn/elearning-video/articles-elearning/webrtc-for-live-learning



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This checklist tests a live-learning product for latency, TURN, scaling, recording, captions and the build-or-buy line. We wrote seven volumes on that stack: Volume 3 covers WebRTC and real-time delivery, Volume 4 voice processing and accessibility, and Volume 1 encoding for the recorded catalogue.

WHAT YOU WILL FIND INSIDE

- WebRTC and real-time delivery
- Voice processing for classrooms
- Accessibility and subtitles
- Encoding recordings for VOD

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