

Active-Learning Signals Instrumentation Checklist

Map interaction signals to the ICAP ladder, instrument the events, measure quality over frequency, and turn signals into action.

A. Map signals to the ICAP ladder

- Classify each interaction as Passive, Active, Constructive, or Interactive
- Treat watch-time as Passive - the lowest rung, not the headline metric
- Mark notes in own words and learner questions as Constructive
- Mark discussion and substantive peer replies as Interactive (top rung)

B. Instrument the events

- Emit xAPI statements (answered, noted, asked, commented) to your LRS
- Use SCORM cmi.interactions for quiz items inside an LMS launch
- Use Caliper AnnotationEvent for bookmarks, highlights, and tags
- Scope each run with a registration so attempts aggregate correctly

C. Measure quality, not just frequency

- Weight each event by ICAP mode (Passive 0, Active 1, Constructive 3, Interactive 5)
- Report the composition of engagement, not a flat click count
- Capture quiz response, correctness, and latency - not just the attempt
- Keep raw interaction counts out of the gradebook unless quality-weighted

D. Turn signals into action

- High watch-time + near-zero Constructive signals -> add an in-video question
- Questions or wrong answers clustered at one timestamp -> re-cut there
- Re-watch plus a wrong answer on a segment -> prioritise clarifying it
- No discussion on a cohort course -> add a prompt or peer-review step