LINKEDIN POST

See the Air: the Wireless Classroom simulators

By **Keith Parsons, CWNE #3** · 2026-10-06 · originally on LinkedIn

Download the PDF

Most of us learned Wi-Fi from someone drawing sine waves on a whiteboard and waving their arms to show a 'orthogonal'.

I've been that person at the whiteboard for over two decades.

The trouble is that everything we work with is invisible. The WLAN Pros Toolbox has a Wireless Classroom with 50 simulators you can drag, change and break.

Six of them are in the following slides:

Multipath. Walk toward a metal wall and watch the nulls show up every half wavelength, 6.25 cm at 2.4 GHz.

Rate vs Range. A ring for every MCS around the AP, and what wider channels and a higher basic rate do to them.

Airtime Fairness. One 6 Mbps client holding 53% of the air next to three clients at 867 Mbps.

Roaming Walk. Sticky clients, ping-pong, and what 802.11k, PMK caching and 802.11r each save.

Association, Frame by Frame, and the 802.1X and EAP Ladder, each with a mode that shows you where the exchange fails.

If you're studying for CWNA, predict what the number will do before you move the slider. And for the people who ask you for Wi-Fi help, there are 30 plain-language lessons you can send them.

It's free on iPhone, iPad, Android, Mac, Windows, the web and WLAN Pi: toolbox.wlanpros.com. No account, no ads, no data collected.

Which Wi-Fi idea did you learn from a whiteboard and still wish you could see move?

By Keith Parsons, CWNE #3, Wireless LAN Professionals. Free to read and share. Facts