



KISS EdTech

The Hidden Cost of EdTech Complexity

While EdTech enthusiasts celebrate "app smashing" and sophisticated tool combinations, research reveals that complex systems fail at rates approaching 70%. Every additional tool creates exponential complexity and multiplication of failure points—authentication chains, data dependencies, version incompatibilities, and support complications. When carefully crafted lessons collapse because of a single failed connection between apps, we're creating environments where failure isn't just possible, but probable.

Core Principles for Sustainable EdTech

- **Embrace Intentional Simplicity:** Apply the KISS principle and calm design philosophy, choosing tools that disappear into the background and enable learning rather than requiring management, with every component serving a clear pedagogical purpose.
- **Design for Real Contexts:** Choose solutions that work reliably within actual operational constraints—bandwidth limitations, device capabilities, and technical support levels—rather than ideal conditions that may not exist.
- **Minimize Cognitive Overhead:** Reduce extraneous cognitive load that competes with learning by eliminating unnecessary interface elements, workflow steps, and decision points that tax working memory.
- **Build for Equity and Sustainability:** Prioritize tools that work across different technology access levels, connection speeds, and technical fluency while reducing rather than increasing teacher workload and potential burnout.

Essential Questions for Reflection

1. Does this technology make learning more accessible and effective, or does it primarily make us feel more sophisticated as designers?
2. What would happen if we accomplished the same learning goal with 50% fewer moving parts?
3. How might our complex systems create barriers for learners with limited technology access or technical fluency?

Every piece of technology we add to a learning experience should pass a simple test: Does this make learning more accessible and effective for our learners, or does it primarily make us feel more sophisticated as designers?