

---

## **Evidence-driven decision-making in the use of digital technologies in education**

David Hollow - co-Founder Jigsaw Education and Research Director EdTech Hub.

Building a culture of evidence-driven decision-making can help ensure that Educational Technologies (EdTech) are used to make a positive contribution towards addressing the global learning crisis. In 2008 I worked in Malawi and Ethiopia, conducting research on the impact of EdTech. During this time, the founder of the One Laptop per Child initiative suggested that my research was pointless. He said, confidently, that building evidence about EdTech in low-income countries was not necessary because the positive impact on learning was self-evident.

This mentality was indicative of many early-stage proponents of using digital technologies in education in low-income countries. Thankfully, significant progress has been made since then and there is growing global recognition that evidence should be central to decision-making (Akyeampong, *et al.*, 2023; Hollow and Jefferies, 2022; and Rodriguez-Segura, 2021). However, much work remains to be done. Too many EdTech programmes are still justified based on ‘outputs’, rather than ‘outcomes’ and entrenched economic and political incentives relating to EdTech often make evidence-driven approaches difficult to adopt (see Dercon, 2025).

This has significant implications for global education. The learning crisis is stark: in the world’s poorest countries, nine out of ten children cannot read at the age of ten (World Bank, 2022). There is a compelling social and economic case for addressing this crisis (Kaffenberger *et al.*, 2025) and yet funding for education is reducing significantly (UNESCO, 2025). Within this context, technology-based interventions are often presented as potential ‘solutions’, although the full financial costs are rarely measured accurately.

Influencing the detail of *how* technology is used in education is therefore crucial. The best way to do this effectively is by embedding practical evidence-building – through monitoring, evaluation, research and learning (MERL) – into all aspects of EdTech implementation and associated decision-making.

Everyone can contribute to building a culture of evidence-based decision-making in EdTech by asking the following question: *will this use of technology lead to an impact on learning outcomes that is cost-effective and works at scale?* Each part of this question is important and warrants unpacking.

- *An impact on learning outcomes:* this means ensuring that there is a demonstrable impact, over an appropriate time period, on the student learning outcomes related to the implementation. This should be based on statistically significant data that is generated using established learning assessment tools.
- *That is cost-effective:* this requires a transparent and consistent calculation of the implementation's cost-per-child (Mitchell and D'Rozario, 2022). This can be combined with learning outcomes data to undertake 'cost-effectiveness analysis' which enables comparison between implementations – a useful measure being 'Learning Adjusted Years of Schooling per USD 100' (Akyeampong, *et al.*, 2023).
- *And works at scale:* the small-scale success of an implementation will not necessarily be sustained when working with a large number of learners across diverse contexts. Decision-makers need evidence of what works within the complexities of their own large-scale systems.

The practical outworking of this is inevitably complicated, contested and requires significant methodological depth (see Hollow and Jefferies, 2022). However, asking the question can serve as an initial catalyst to build better evidence, 'raise the bar' on our expectations of EdTech, and establish greater structural accountability for educational outcomes.

---

