Developing a better understanding of how educational technology research approaches can be sustained and scaled.

Sustainability relates to the degree to which a research approach can be maintained over time.
Scalability addresses applications of research to new contexts and different levels in educational systems.

How do you view INNOVATION?

- Idealization drives innovative practice
- Innovative practice drives idealization

Scalability and sustainability require understanding of increasing complexity of design.
Innovations change as they are ADAPTED to a context and become SUSTAINABLE.
Innovations change as they are made FLEXIBLE to be SCALED to new levels.

In RESEARCH:
Sustainability requires research designs that:
- incorporate partnerships, co-design, and intervention-research iterative cycles
- identify complexity of opportunities and constraints in intended context(s)
- ensure that technological innovation continues within changing context(s),
- require active ownership by all stakeholders

Scalability of research on technology integration can be defined by two dimensions:
- horizontal (e.g., cross-context);
- vertical (e.g., moving between levels of an educational system).

Designing for scalability requires:
- implications of research methods that afford vertical and/or horizontal adaptation, replication and reinvention of digital technology use in teaching and learning across educational systems,
- consideration of, and work within the cultural context to legitimize both dimensions.

Challenges, recommendations & strategies

1. Develop productive partnerships among all stakeholders to advance capacity building for ICT use in schools
   - Co-design research with real commitment, ownership, etc. from all stakeholders--at appropriate level
   Short Term
   - Model strategies and procedures for developing productive partnerships
   - Iterative cycles of research that include more stakeholders and context
   Long Term
   - Feedback loops to maintain innovations and student learning
   - Policy makers/technology companies see the value of research (this requires active communication of researchers to policy makers/industry

2. Identify research approaches that are sustainable and scalable and/or that support sustainability and scalability
   Short Term
   - Examine Literature: Document research that has been scaled and sustained (purposeful sustainability and scalability in (intent of work is sustainability and scalability) field of ICT)
   - Cross-literature review of common thread across multiple studies that reflect sustainability and scalability
   Long Term
   - Purposive knowledge-building in researchers’ design of scalable and sustainable research designs and findings.

3. Learning technologies that scale because of policy initiatives, not because of impact found in research (flip scalability)
   Short Term
   - Using research artifacts to deconstruct fads; we need to better equip ourselves to quickly communicate research knowledge to policy/industry
   - EDUsummit SWAT (Special Weapons and Tactics) team: a team that can respond quickly to policy initiatives on the basis of accumulated research results:
   Long Term
   - Actively involve policymakers/technology companies from the start