Working Group 4:
Addressing Gaps and Promoting Educational Equity
Policy Paper Template (max 2 pages)

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Introduction

TWG4 focuses on moving towards digital equity by addressing onsite sustainable innovation with digital technology, namely the classroom. With no concern for sustainability from day one, most initiatives promise results that will not be achieved. Though such a rhetoric may be necessary for getting the attention of partners, their initiatives will likely be short lived, and with little lasting impact. If there is no thought of sustainability such as money to continue the project after the founder has left and long term infrastructure there will be a failure in developing the place (Gichoya, Hepworth, & Dawson, 2006).

The absence of sustainable classroom-based innovation with digital technology is a reality in both developed and developing countries. It may be that digital tools and resources are underused given the pressures of curricular demands in developed countries (Cuban, 2015). In developing countries where digital access is still rare, once a project is over, the use of technology, if any, becomes more difficult : hardware and software become obsolete, connectivity is too expensive, technical support and professional development are lacking. In other words, more often than not capacity building comes to a stop, and scalability does not occur (Breuleux et al., 2000; Looi & Teh, 2015).

Innovate Practices

Many innovative practices take place inside and outside the classroom. The ones presented in the EDUsummIT 2015 Discussion Paper are cases come from all five continents, and refer to sustainability according to the ISTE's (2009) essential conditions to effectively leverage technology for learning: 1) shared vision; 2) empowered leaders; 3) implementation planning; 4) consistent and adequate funding; 5) equitable access; 6) skilled personnel; 7) ongoing professional development; 8) technical support; 9) curriculum framework; 10) student-centred

learning; 11) assessment and evaluation; 12) engaged communities; 13) support policies; and 14) supportive external context). Exemplars of these cases are available at the following url: https://drive.google.com/folderview?id=0B3cOxtlUwbekfnhpcFpxSTRFN0hReUNnSDJ2ejRFNXpSZ1VORW5RRnVSaVJlS0hBT0YtOEk&usp=drive_web

Issues and Challenges for Practitioners and Policy Makers

Policy makers ought to give special attention to the curriculum framework enforced, and its alignment with implementation (e.g., ICT use in support of student-centred learning), assessment and evaluation. In spite of abundant access to technology in developed countries, curricula and testing measures are perceived by teachers as limiting their use of ICT (Fu, 2013). Developing curricula and testing measures so that ICT use in the teaching-learning process becomes increasingly perceived as necessary, is the long-term challenge facing all education systems.

Such "next-generation alignment" requires that governments generate partnerships with universities, philanthropic foundations, teacher and parent associations, and businesses. Successive cycles of data-driven decision-making will be necessary, and they will likely turn into political issues when competitive demands surface.

Meanwhile, third-party organizations (e.g., foundations) that want to make a contribution (money, time, and energy) toward digital equity process, are encouraged to produce policy guidelines that target sustainable innovation in settings of their choosing. They will have to manage their own expectations, and those of those they want to serve. They will have to choose between long-term commitments that in some settings keep improving the level of presence of the essential conditions identified by ISTE to effectively leverage technology for learning ("spikes" of innovation, Florida, 2005). It is important for them to understand that as well as short-term actions likely to first seduce and later disappoint teachers and learners.

Policy Recommendations

1. Given the presence of ISTE's essential conditions in the exemplary cases provided by co-authors, projects initiated by governments and/or third-party organizations and their partners are strongly suggested to examine their innovation on a sustainable path towards digital equity by referring to these conditions for project conception, implementation, and evaluation.
2. To establish and nurture "spikes" of innovation through partnership.

Recommended Readings (up to 10)

Breuleux, A., Laferrière, T., & Lamon, M. (2002). *Capacity building: Research and development into the effective uses of ICT*. Paper presented at the Pan-Canadian Education Research Agenda Symposium ''Information Technology and Learning'' April 30 – May 2. Montreal, Quebec. Retrieved from: http://www.cesc.ca/pceradocs/2002/papers/ABreuleux_OEN.pdf

Cuban, L. (2015). The lack of evidence-based practice: The case of classroom technology. Retrieved on August 25th from https://larrycuban.wordpress.com/2015/02/05/the-lack-of-evidence-based-practice-the-case-of-classroom-technology-part-1/

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Fu, J. S. (2013). ICT in Education: A Critical Literature Review and Its Implications. *International Journal of Education and Development using Information and Communication Technology (IJEDICT),* 9, (1), 112-125.

Gichoya, D., Hepworth M., and Dawson R. Factors affecting the success and failure of government ICT projects in developing countries. *Proceedings of the 2nd International Conference on E-Government.* Dublin, Ireland. 2006.

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Looi, C.-K., & Teh, L.-W., (Eds.) (2015). *Scaling educational innovations.* Springer.