TWG 7: Indicators of Quality Technology-enhanced Teaching and Learning
Research Plan

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Focus, rationale, and scope
Since the 1990s, many countries have launched major initiatives to integrate ICT into teaching and learning in schools. Such initiatives often involve considerable investments and the rationales put forward for these are generally to improve the accessibility and quality of education. In particular, there is an increasing emphasis for ICT use in education to foster in students 21st century skills, such as problem solving, creativity, critical thinking, communication and collaboration. While there have been many efforts at institutional, system or cross-national levels to gauge the state of ICT adoption at the level of provisions (e.g. computer:student ratio, internet access, teacher training opportunities, etc.), there is a dearth of research on the actual pedagogical adoption of ICT in education, or their benefits and impact on student learning and school performance. This theme aims to develop a conceptual framework for the development of indicators that can be used to monitor and evaluate the impact of ICT use on the quality of teaching and learning at classroom, institution and system levels, supplemented by a set of preliminary indicators for illustrative purposes.

Objectives
The specific objectives for this theme include:

- To develop on the basis of literature a conceptual model of the impacts of ICT implementation strategies on multiple levels of the education system: from individual, classroom, school, district to the system level— There is increasing recognition that whether and how ICT is used for learning at the classroom level is influenced by a complex interplay of factors at multiple levels. Further, for ICT use to contribute to learning outcomes beyond the traditionally important knowledge and skills requires changes in policy and practice at multiple levels, which can be considered also as an integral part of the outcomes resulting from the implementation strategies.

- To identify a core set of quality indicators for technology-enhanced teaching and learning at the different levels based on the above conceptual framework—These are the indicators associated with the quality of impacts identified in the conceptual framework.

- To develop a preliminary mapping of the indicators to existing cross-national studies, and common national/institutional monitoring and evaluation mechanisms—This will provide
an overview of how to develop an operationalizable plan for systematic collection of data for the indicators by drawing maximally upon existing sources and mechanisms of related data collection.

Relationship to Policy and Practice

The conceptual framework, indicators and mapping would guide monitoring and evaluation efforts at cross-national, national and institutional levels, allowing policy makers and practitioners to gauge the extent and quality of Technology-enhanced Learning longitudinally over time, and to modify their ICT in education strategies accordingly.

Proposed Outputs

- A discussion paper on indicators of quality ICT-enabled teaching and learning as an EDUsummit 2015 deliverable
- A policy paper on indicators of quality ICT-enabled teaching and learning as an EDUsummit 2015 deliverable
- A special journal issue on the theme

Timeline

- 15 August 2015: draft discussion paper and draft policy paper to Wing.
- 30 October 2015: finalized discussion paper and policy paper.
- 31 January 2016: all papers for special issue submitted.