EDUsummIT 2017
Working Group 7: Learning from national policy experiences
Research Plan
February 2017

David Gibson, Curtin University, Australia
Jill Downie, Curtin University, Australia

(a) Key issue and questions to be investigated by the group during the pre-Summit period (from February to August)

In the context of the increasing relevance of information and communication technologies (ICT) and the global transition towards an information and knowledge society, school systems have been facing increasing challenges involved in preparing students for successful participation in the digital age. In many countries, this is leading to manifold efforts and changes in national policies towards ICT integration.

In order to learn from recent national policy experiences, during the pre-summit period TWG 7 will:

(1) Collect, share and analyse a range of policy approaches in different school systems, countries and parts of the world in order to identify successful strategies and framework conditions that help policies to unfold and help people make use of them in practice.
(2) Develop and discuss emergent themes in the national research on and experiences with ICT-related policies.
(3) Examine the interfaces, boundaries and overlaps of research, policies and educational practices.

(b) How is your group's research related to policy and practice?

TWG 7 plans to collect and review information concerning recent national-level research, policies and practice in order to develop new knowledge about how countries are developing, learning and making use of ICT-related national policy experiences.

(c) Objectives and expected outputs (in addition to the pre-Summit

discussion paper)

We will solicit ideas, tasks and responsibilities from group members and ask them to participate in developing potential outputs of the group's work. One aim is to contribute to a Journal (special issue of the EduSummIT) and to share the findings in the scope of international conferences. More outputs are feasible but need to be discussed further within the group.

(d) Means of communication within the group

E-Mail-lists and joint work on online-shared documents.

Timeline

Since August is a holiday month in many parts of the world and in some parts summer holidays even starts in July, the group plans to terminate the joint work of the group on the pre-Summit paper in mid June and leave it to the group leaders to finalize it to send it in by end of July.

Please see below

1. **(1) List and bios of group members**
2. **(2) State of the art, questions and interesting topic towards "Learning from national policy experiences "put together by group members**

List and Bios of Members of TWG 7

David Gibson, Australia (TWG 7 leader)

Curtin University (co-hosted EduSummit 2015 Bangkok), Director of Learning Futures and UNESCO Chair of Data Science in Higher Education Learning and Teaching (see http://oasisapps.curtin.edu.au/staff/profile/view/David.C.Gibson). Dr. Gibson provides thought leadership and vision for transforming e-learning at Curtin, provides group leadership and mentorship to researchers in the learning sciences (cognitive science, psychology, human-computer interface research, learning theory, digital media learning, emerging trends and horizons of digital learning experiences, arts and media learning, data mining and learning analytics in mental model research) and in the scholarship of teaching and learning (technology-enhanced pedagogical content knowledge, action research in classrooms, applied learning theory, exploratory research methods in social sciences). Currently, he is working to unify digital learning and delivery on a new platform that can provide the university with adaptive curriculum and assessment into the foreseeable future while helping reach the university mission. The game-inspired e-learning of the future, which the Learning Futures team at Curtin Learning and Teaching is developing, is highly interactive, personalized, scalable, and effective and will help Curtin University lead the world with unique offerings and approaches.
EduSummIT experience: 5th participation in an EduSummIT (The Hague 2009; Paris 2011; Washington 2013, Bangkok 2015; Borovets 2017)
Contact: david.c.gibson@curtin.edu.au

Jason Zagami, Australia

Griffith University, Immediate Past President Australian Council for Computers in Education, Editor Australian Educational Computing. Research in Educational Technologies (Virtual Environments, Neural Interfaces, Remote Participation), Computer Science in K12 Education, and Educational Gaming.
EduSummIT experience: 2nd participation in an EduSummIT (Bangkok 2015 TWG9)
Contact: j.zagami@griffith.edu.au
Details: jason.zagami.info

Jill Downie, Australia

Professor Jill Downie was appointed to the position of Deputy Vice-Chancellor, Academic at Curtin University in July 2012. From 2007 – 2012 Jill was Pro Vice-Chancellor of the Faculty of Health Sciences and also Professor of Nursing at Curtin University. . She is the Education representative on the Australian National Commission of UNESCO and a Fellow of the Australian Institute of Company Directors. Professor Downie is an established national and international researcher with numerous grants, publications and conference presentations, including keynote addresses. In her role as DVC Academic, Jill is responsible for teaching and learning across the University; Student Support Services which include the Library, Counselling and Disability Services, Health Services, the Curtin Stadium/Recreation Services and Child Care. The Careers Service, Housing, Learning Centre, Student Services from Admissions through the continuum to Graduation, Ethics, Equity and Social Justice, the Centre for Aboriginal Studies and the University's Indigenous strategy.
EduSummIT experience: 2nd participation in an EduSummIT (Bangkok 2015)
Contact: j.downie@curtin.edu.au

John Wilson, Australia

John was a secondary teacher of English, teacher educator in Scotland and researcher into trainee teacher selection and student learning. As Foundation Professor of Education at Victoria University (VU), Melbourne from 1992-2000 he co-ordinated Language Australia's Network Node for Victoria that undertook a government funded *'Literacy Learning Through Technology'* project 1998-2000 using ICT to promote literacy skills. He has extensive consultancy experience in teacher education and HRD, and is currently in Dhaka, Bangladesh as international pre-service teacher education specialist

on an ADB Teaching Quality Improvement Project to develop national competency standards for secondary teachers, including in ICT.
EduSummIT experience: 2nd participation in an EduSummIT (Bangkok 2015)
Contact: jdewarw@gmail.com

Louise Starkey, New Zealand

Louise gained experience as a classroom teacher, curriculum leader and senior manager in a range of New Zealand secondary schools prior to following a passion to research in the field of teaching and learning in a digital age. Her current focus in this area includes home learning in a digital age, conceptions of student centred education, digital divides, and educational policy to enable digital agency. Louise spent time as the Associate Dean (Teacher Education) and is currently a senior lecturer at Victoria University of Wellington.
EduSummIT experience: 2nd participation in an EduSummIT (Bangkok, 2015, Borovets, 2017)
Contact: louise.starkey@vuw.ac.nz

Sandra Elliott, United States

Senior Strategist at BrightBytes, responsible for education and corporate international partnerships. Sandra has extensive experience working at the school, district and state level in K-12 US education as well as within foundations and for-profit education companies. Her current focus is on technology enablement and enhancement of decision-making making particularly for educational leadership and early-insight systems.
EduSummIT experience: 1st participation in EduSummIT (Borovets, 2017)
Contact: elliott@brightbytes.net

[...]

(2) State of the art, questions and interesting topic

(a) State of the art (as background for discussion in Borovets)

http://k12sotn.ca/ for Canada

http://www.uis.unesco.org/StatisticalCapacityBuilding/Workshop%20Documents/Communication%20workshop%20dox/Paris%202014/ICT-learning-paradigms_EN.pdf for a model proposed for a meeting at UNESCO called by UNESCO Institute of Statistics. This project may be able to move forward if international support for implementation can be found.

https://tech.ed.gov/netp/ for US plan

http://www.iea.nl/fileadmin/user_upload/IEA_Documents/IEA_Newsletter_44_web.pdf (page 3 and 4), latest impact of research on ICT policies in Germany. In addition, in December 2016 first time a national framework of student competencies related to the "digital world" have been developed and released. First time all 16 German federal states agree on a joint framework,

covering 6 competence areas (cf.
https://www.kmk.org/fileadmin/Dateien/pdf/PresseUndAktuelles/2016/Bildung_
digitale_Welt_Webversion.pdf, pp. 15)

https://education.govt.nz/assets/Uploads/Towards-Digital-Fluency.pdf
provides a brief overview of policy priorities for the NZ context, written in
2015. A two yearly survey provides an overview of the access to digital
technologies in schools here is a summary of the latest report:
https://2020.org.nz/wp-content/uploads/2014/05/digital-technologies-in-school
s-2017_report.pdf Research that may be of interest includes an evaluation of
the effect of introducing broadband on student learning:
https://motu.nz/our-work/urban-and-regional/infrastructure/the-effect-of-fibre-b
roadband-on-student-learning/ A possible successful strategy?

The digital strategy for Irish schools:
https://www.education.ie/en/Publications/Policy-Reports/Digital-Strategy-for-S
chools-2015-2020.pdf

Palestine-
https://www.btcctb.org/publication/digitalizing-education-policy-paper-informati
on-and-communication-technology-education . This is a paper that
recommends policy.
Palestine has introduced a OLPC policy, from a media interview: "We have
other challenges, like a digitization program for grades 3 through 6. We want
to replace the schoolbag with tablets," Saidam said.

Thailand has also had a OLPC policy: (see introduction page 6-7):

http://www.lse.ac.uk/asiaResearchCentre/_files/ThaiGovScholarMichaelPears
on.pdf

The education policy fits within a 20 year strategy:
 http://www.cicc.or.jp/japanese/kouenkai/pdf_ppt/pastfile/h28/161026-10th.pdf

   (b)   Open Questions (useful to underpin discussion
          and to know what the members' questions are and
          what they are working on)

1. **What are the current issues concerning ICT policies around the world?**
    a. ICT curriculum related issues
    b. Issues related to access or resourcing of ICT infrastructure and technologies for schools, for children

2. **How are ICT policies anchored in plans, frameworks?**

3. **Do ICT policy plans refer to equity issues?**

4. **What drives IcT policy plans most (economy, pedagogy)?**
    a. who is influencing policy? (In the ICT area what influence do corporates/industry have)

5. **To what extent is ICT infrastructure referred to?**

6. **What indicators and standards regarding competences are used to describe the aims of future ICT policy plans?**

7. **To what extent are research used as a background for developing ICT policy?**

8. **What data about the use of ICT by educators, students, parents, etc. is needed by policy makers?**
    a. Access?
    b. Skill sets needed for optimum usage and current state of training?
    c. Expenditures and actual use and engagement by students and teachers?
    d. Pedagogical practices and professional learning needs?

9. **How frequently should it be collected and what is the best format for sharing it with policy-makers?**

10. **What information does the education sector (schools and central offices) currently share and is it in alignment with policy-makers needs?**

11. **Staying abreast of technology advancements in other countries that impact education, economics, etc.?**

(c)   Interesting topics (putting together aspects related to the topic and which should be integrated into our discussion)

1. **the relevance of preparing children for a life in the digital age**

2. **life long learning**

3. **changes in society**

Educationists and ICT policy makers believe that the full potential of ICT will be realised only when classroom teachers integrate it into their teaching. IEA ICILS (2013) findings suggest that most teachers use ICT simply for lesson preparation and presentational purposes. In fact very few teachers appear to use ICT to promote pupils' collaborative and creative learning. In that case, should policies be introduced to make required ICT competence a criterion for selection into teacher education programs? Or should policy be that achieving that level of ICT competence is an exit requirement from teacher training programs? i.e. prior to a newly qualified teacher taking up a teaching post in a school? Or should policy be that new teachers must reach the required standard by the end of the induction stage i.e after two years of teaching? Whichever of these options is accepted, what standard of ICT competency should policy makers set to be achieved, given findings of IEA study, ICIL (2013) on what technologically savvy 14-year olds can achieve, and its proposed follow-up viz. ICILS, 2018?