



Researching education, improving learning

ICILS 2018 Project Update

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Country participation

- Chile, **Denmark**, **Finland**, **France**, **Germany**, **Italy**, **Kazakhstan**, **Korea (rep. of)**, **Luxembourg**, **Moscow (region of the Russian Federation)**, **Portugal**, **Uruguay** and the **United States of America**

Countries listed in **bold** are also participating in the the CT international option.

Milestones – 2017/2018

Instrument Preparation

July to October 2017

- Successful transition to alternative student instrument delivery system
 - Tutorial
 - Five CIL assessment modules
 - Two CT assessment modules
 - Student questionnaire
- Finalization of all instruments
 - Student assessment and questionnaire
 - Teacher, ICT coordinator and principal questionnaires

November 13, 2017

- Main survey instrument release

Milestones – 2017/2018

Field Operations

November 20 to 23, 2017

- Field operations and scorer training meeting (Hamburg)

January 2018

- Pilot testing of student instrument delivery system using translated instruments (selected countries)

February to June 2018

- Main survey data collection (Northern Hemisphere countries)

Milestones – 2017/2018

Field Operations

June 2018

- Main survey field operations and scorer training (Southern Hemisphere countries)
 - Webinar across 5 days
 - Refresher of key field operations content and completion of practice/training tasks

September to December 2018

- Main survey data collection (Southern Hemisphere countries)

Milestones – 2017/2018

Assessment Framework

January to July 2018

- Finalization of draft ICILS 2018 assessment framework

July to August 2018

- NRC framework review

September 2018

- Framework revision and submission to IEA PEC

October 2018

- Post-PEC revision and preparation for publication (underway)

Timeline and next steps

Timeline and next steps



| Milestone | Date or period |
|---|----------------------------|
| Main survey data collection (Northern Hemisphere) | February to June 2018 |
| Final review and production of assessment framework | October 2018 to March 2019 |
| Main survey data collection (Southern Hemisphere) | September to December 2018 |
| Data preparation and analysis | June 2018 to March 2019 |

Timeline and next steps



| Milestone | Date or period |
|---|-------------------------------|
| International Report development and database preparation | November 2018 to October 2019 |
| Assessment Framework Release | Early 2019 (TBA) |
| NRC Meeting 5 Jyväskylä, Finland (review of International Report) | 17 to 21 June 2019 |
| International Report release | November 2019 |
| Technical Report release | March 2020 |
| International Database training | March 2020 |
| ICILS 2023 NRC Meeting 1 | March 2020 |

ICILS 2023



ICILS 2023 will...



- investigate the ways in which young people are prepared for study, work and participation in a digital world
- generate internationally comparable indicators of students' computer and informational literacy and computational thinking
- monitor changes in computer and information literacy and computational thinking over time
- examine the use of digital technologies in schools, in particular how they are used to develop students' core digital competencies
- support countries to make informed decisions about how best to prepare students for life in an age of constantly evolving digital technologies.

What will be assessed in ICILS 2023?



- CIL
 - the ability to use computers to investigate, create, and communicate in order to participate effectively at home, at school, in the workplace and in society
- CT (international option)
 - the ability to recognize aspects of real-world problems which are appropriate for computational formulation and to evaluate and develop algorithmic solutions to those problems so that the solutions could be operationalized with a computer

Who will provide data for ICILS 2023?



- Students in Grade 8 (or equivalent)
 - Randomly sampled from each participating school
- Teachers of Grade 8
 - Randomly sampled from each participating school
- School principals and ICT coordinators from each participating school
- National centers (through a national contexts survey of country-level policies, curricula and resourcing)

Why participate in ICILS 2023?



UN SDG target 4.4 is by 2030 to:

substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.

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*substantially increase the number of youth and adults who have relevant skills, including **technical** and vocational skills, for employment, decent jobs and entrepreneurship.*

Indicator 4.4.1 is:

the proportion of youth and adults with information and communications technology (ICT) skills, by type of skill.

Why participate in ICILS 2023?

ICT skills measured and reported on in ICILS (CIL)

- Adaptable technical use skills based on understandings of technological conventions
- Essential life skills associated with searching for, accessing and managing digital information
- Information evaluation (critical thinking) skills in a time ever increasing access to information from known and unknown sources
- Productive communication skills that utilize the features of technology to access audiences and enhance audience understanding
- Knowledge and critical thinking skills associated with the safe, secure and responsible production and consumption of digital information

Why participate in ICILS 2023?



ICT Skills measured and reported on in ICILS (CT)

- Adaptable problem solving skills for recognizing the potential for computer-based solutions to real-world problems
- Skills associated with data collection and evaluation to:
 - plan solutions to problems
 - evaluate solutions
- Generalizable algorithmic-thinking skills that support the specification of problems to support the generation of logically, algorithmic solutions

Project Management Structure - 1



- International Study Center at ACER
 - conceptual direction and overall study coordination
- IEA Hamburg
 - field procedures, data management, sampling, weighting, scaling and software systems for non-student instruments
- IEA Amsterdam
 - Quality assurance (instrument preparation and field operations implementation) and country liaison
- SoNET Systems
 - student instrument software systems

Project Management Structure - 2



- Project Advisory Committee
 - Expert review and advice on substance of assessment framework, instrumentation, analysis and reporting
- IEA Technical Executive Group
 - Expert oversight and technical advice on study design, analyses and reporting
- National Research Coordinators
 - Essential contribution to all aspects of study design and implementation



ICILS 2023 Timeline

March 2020

1st meeting of NRCs

2020-mid 2021

Framework revision, establishment of testing platform and instrument development

Late 2021

Finalization of framework and instruments

Early 2022

Field trial

Early 2023

Main survey data collection in Northern Hemisphere countries

Late 2023

Main survey data collection in Southern Hemisphere countries

Late 2024

Publication of the results

Early 2025

Launch of a public-use database and documentation

Thank you

Questions



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