

ICILS  
2013  
IEA



# International Computer and Information Literacy Study

Progress report to IEA General Assembly

October 4-7, 2010

Gaborone, Botswana

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# 2010 at a Glance



- 22 countries and/or education systems have expressed interest in ICILS
- These are: Canada, Chile, Croatia, Cyprus, the Czech Republic, Estonia, Denmark, Germany, Hong Kong (SAR), Israel, Japan, Netherlands, Norway, Poland, Russian Federation, Saudi Arabia, Slovak Republic, Slovenia, Spain, Sweden, Thailand, and the United States of America.

# 2010 at a Glance



- June 21-24, NRC Meeting 1- Amsterdam
- 28 representatives from 18 countries and two representatives from the EU
- EU currently plans to support study in the same way as ICCS
- Preliminary instrument and framework development continuing with review process about to begin

# 2010 at a Glance



## **Student test modules**

- Draft storyboards have been created for five 30 minute test modules. These will be available for review from Friday, 1 October 2010.

## **Assessment framework**

- The assessment framework will be available for review from Friday, 22 October 2010.

## **National Context Survey**

- The national context survey will be available for review from Friday, 22 October 22 2010.

# 2010 at a Glance



## **Student questionnaire**

- The student questionnaire will be available for review from Friday, 5 November 2010.

## **Teacher questionnaire**

- The teacher questionnaire will be available for review from Friday, 12 November 2010.

## **School questionnaire**

- The school questionnaire will be available for review from Friday, 19 November 2010.

# ICILS Test Modules and Website



## Modules

Five modules are available for review on the website. They are presented as slide shows that show the items and tasks and include notes for reviewers about specific functionality of some tasks and how all tasks are planned to be scored.

- Sleep Survey – use online collaboration software, edit a survey and present data in a report
- Band Competition – edit an image and use simple website builder to advertise a school band competition

# ICILS Test Modules and Website

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- Collaboration –a general skills module based around collaborative workspaces and including issues around creating profiles and information sharing
- School Trip\* – help plan a school trip and produce a an itinerary including a web-based map
- How We Breathe\* – research and create a presentation to explain breathing to Grade 4 students

Website

[iccs.acer.edu.au](http://iccs.acer.edu.au)

\* Module idea taken from NRC Meeting 1

## Home

### IEA International Computer and Information Literacy Study (ICILS)

Computer and information literacy refers to an individual's ability to use computers to investigate, create and communicate in order to participate effectively at home, at school, in the workplace and in the community. CIL brings together technical competence and intellectual capacity to achieve a communicative purpose.

IEA ICILS will measure international differences in CIL and computer use in Grade 8 (or its national equivalent) students. There is an option also to sample Grade 4. It will also collect information about contexts (at the student, school and system level) in which CIL is developed.

## Timeline



icils-timeline

## Broad Research Questions

1. What variations exist between countries, and within countries, in student CIL?
2. What aspects of students' use of computers and other ICT's are related to student achievement in CIL?
3. What characteristics of students' technological backgrounds are related to student achievement in CIL?
4. What individual/personal student characteristics are related to student achievement in CIL?

## Instruments

- Computer-based test of CIL delivering a range of authentic assessment modules in a seamless environment.
- Student questionnaire
- Teacher Questionnaire (including links to IEA SITES 2006)
- School Questionnaire (including links to IEA SITES 2006)
- National Context Survey

## Welcome Jfraillon

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## Module Storyboard Downloads

[Band Competition](#)

[How We Breathe](#)

[School Trip](#)

[Sleep Survey](#)

## Modules

+ [Instructions for Reviewers](#)

+ [Band Competition](#)

+ [How We Breathe](#)

+ [School Trip](#)

+ [Sleep Survey](#)



## Notes: Home Page

This page has public sections (Home, About, Contact) and secure sections available to users depending on their login credentials (What's New Consortium, Item Review, NRC, PAC).



## Instructions for Reviewers

### Overview

The review process begins on 01/10/2010. Module storyboards will be made available in two batches. The first batch includes Band Competition, How We Breathe, School Trip and Sleep Survey. The second batch will be made available on 08/10/2010 and includes General Skills and a spreadsheet which maps all items against the framework.

### Steps

1. Download a module storyboard from the 'Module Storyboard Downloads' panel on the right.
2. Play the storyboard slideshow (shortcut is F5 for PowerPoint) to get the best view without your presentation software's menus.
3. Click on an item from the 'Modules' navigation menu on the right.
4. Enter a comment, where you feel it is necessary, for each item. Please remember that, where comments are not made, we will assume that you are satisfied with the item, or agree with the comments of other reviewers.
5. Use the rating tool to enter a rating for each item on each of the four rating categories.

The rating tool functions by hovering the cursor over the rating you wish to allocate to each category and then clicking on the rating. The number of stars selected will then change colour. Your ratings will be saved when you submit the comment for each item. Please read the descriptions below to help you interpret each rating category.

### Scoring Details

In the notes section of each storyboard slide is a section called Scoring Details. This section explains how each item is scored. For skill based items it defines the correct sequence of events. For large tasks it provides examples of how the criteria are defined and categorised for rating by markers.

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### Module Storyboard Downloads

[Band Competition](#)

[How We Breathe](#)

[School Trip](#)

[Sleep Survey](#)

### Modules

– [Instructions for Reviewers](#)

[Instructions for Reviewers](#)

+ [Band Competition](#)

+ [How We Breathe](#)

+ [School Trip](#)

+ [Sleep Survey](#)

### Notes:

### Instructions for Reviewers (1)

This page has practical instructions for reviewers about how to manage the review process and briefly defines the different criteria to be used in the review.

## Rating Categories

|  |       |
|--|-------|
| Interest level – 1 (low) to 5 (high)             | ☆☆☆☆☆ |
| Authentic context – 1 (low) to 5 (high)          | ☆☆☆☆☆ |
| Priority for inclusion – 1 (low) to 5 (high)     | ☆☆☆☆☆ |
| Relevance to CIL Construct – 1 (low) to 5 (high) | ☆☆☆☆☆ |

## Ratings

### 1. Interest level

How interesting is the task for the students? Here we refer to motivational aspects of the task. Will students find the question stimulating? Will the students feel rewarded after completing the question (the "aha" feeling)? Does the item have an interesting context? Does the stimulus have an interesting attractive layout? Is the perspective presented unusual or challenging? Will students relate the task to their personal experience? Use rating 1 for "not interesting", through to rating 5 for "extremely interesting".

### 2. Authentic context

Will students regard the context as authentic? Does it involve an authentic application of the knowledge and skill in the context provided? This does not mean that the students would necessarily encounter the context in their everyday life.

### 3. Priority for inclusion

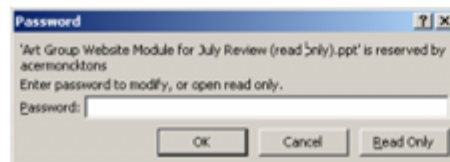
Assign a rating from 1 (low) to 5 (high) to indicate the priority you place on including the item in the field trial. A rating of "1" indicates a low priority for inclusion, "2" a low-moderate priority, "3" a moderate priority, "4" a moderate-high priority, and "5" a high priority for inclusion in the field trial. Factors that you should bear in mind when rating an item include how relevant the task is to how authentic the item context is, how much interest the item hold for the students, and how reliably it can be coded.

### 4. Relevance to CIL Construct

Is the task relevant according to the CIL construct? Does the task require students to employ skills defined in the construct?

## Storyboards

Storyboards can be downloaded from the panel on the right at any time. Storyboards are read only. When opening a storyboard you will be prompted with a message "Enter password to modify or open read only". Simply click the "Read only" button



Comments are closed.



## Notes: Instructions for Reviewers (2)

This page has practical instructions for reviewers about how to manage the review process and briefly defines the different criteria to be used in the review.

## The IEA International Computer and Information Literacy Study (ICILS)

*How well are your students prepared for study, work and life in the information age?*

- *How does student computer and information literacy vary within and between countries?*
- *What factors influence students' computer and information literacy?*
- *What can education systems and schools do to improve students' computer and information literacy?*

### TIMELINE



#### ABOUT ICILS

The IEA International Computer and Information Literacy study (ICILS) is the first international comparative study of student preparedness for life in the information age—*the ability to use computers to investigate, create and communicate in order to participate effectively at home, at school, in the workplace and in the community.*

In total, ICILS comprises five international instruments.

#### **A student test of Computer and Information Literacy**

Each student will complete two 30 minute assessment modules\*. The modules include authentic computer based information literacy, management and communication tasks in a controlled online environment.

#### **A 20 minute student questionnaire**

The student questionnaire will be completed on-line and comprise questions about aspects of students' background, their use of computer technology and attitudes towards the use of computer technology.

#### **A teacher questionnaire**

The on-line teacher questionnaire will ask about teacher use of computers at school and outside school and about self-reported competency in using computers.

#### **A school questionnaire**

The on-line school questionnaire to be completed by the school principal will ask about computing resources and policies and practices regarding the use of information technologies at the school as well as school characteristics.

#### **A national context survey of ICT education**

The on-line national context survey will collect information on the participating education systems including policies, initiatives, infrastructure resources and practices relating to ICT education in schools.

#### **STUDENTS**

The target population for ICILS is Grade 8 with an option of an additional Grade 4 assessment.

For further information visit the ICILS website <http://www.acer.edu.au/icils/> or contact the IEA Secretariat <http://www.iea.nl/secretariat.html>

\* The ICILS test instrument will comprise three 30 minute modules in total delivered to students in a fully balanced rotation.



# 2011 and Beyond

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**Jan 31-Feb 4**

NRC Meeting 2- Hamburg

**January 2011 – December 2011**

Instrument refinement and pilot testing

**March 2011**

Publication of assessment framework

**March 2012 – May 2012**

Field trial

**March 2013 – May 2013**

Main survey (Northern Hemisphere)

**October 2013 – December 2013**

Main survey (Southern Hemisphere)

**December 2013 – October 2014**

Data analysis and preparation of reports

**November 2014**

Release of international report

**November 2014 – March 2015**

Preparation of international database

**March 2015**

Release of international database and technical report



Thank you