United Nations
Educational, Scientific and
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GLOBAL ALLIANCE TO MONITOR LEARNING

SUSTAINABLE DEVELOPMENT GOALS

Task force 4.4: Progress report

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GAML6
August 2019
Yerevan, Armenia

A refresher on target 4.4

Target 4.4: By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship

(Global) Indicator 4.4.1: Percentage of youth and adults with information and communications technology **(ICT) skills** by type of skill

▶ **Not a learning outcome indicator**: indirect (but correlated with measures of skills)

(Thematic) Indicator 4.4.2: Percentage of youth and adults who have achieved at least a minimum level of proficiency in **digital literacy skills**

▶ **Learning outcome indicator**: direct = focus of task force

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Measurement strategy

Questions towards global reporting Standard expected GAML outputs	TF activities 2017/18	2018/19	2019/20
Relevance: what is being assessed? e.g. competence and assessment frameworks			
What is the least common denominator? ▶ **Global content framework**	**X**		
Has a learning assessment taken place? ▶ **Catalogue of learning assessments**	**X**		
How do different assessments map against the global content framework? ▶ **Evaluation of content alignment**		**X**	
▶ Content coding scheme		X	
Implementation: who is being assessed and how? e.g. sample/coverage, modality			
Are the assessments technically robust? ▶ Evaluation of data quality			X
Interpretation: what do results mean? e.g. reporting scale, performance levels, benchmarks			
How does learning improve? ▶ Learning progression			X
A score that is attached to each learning level ▶ Reporting scale			X
What level should learners achieve on that scale? ▶ Minimum proficiency level			X

Digital literacy global framework

Commission 1:
Hong Kong University Centre for Information Technology in Education

Law et al. (2018)

Would EU's DigComp fit as global framework?

Process

a. Review of 43 digital literacy frameworks; focus on:
▶ 7 national frameworks with clear competencies
▶ 3 popular enterprise frameworks
b. Consultation (a) with experts and (b) online

Key recommendations

Add two competence areas

0. Hardware and software operations

1. Information and data literacy
2. Communication and collaboration
3. Digital content creation
4. Safety
5. Problem solving

6. Career-related competences

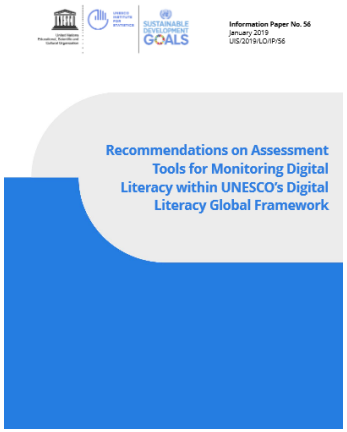
= use examples of digital literacy in major economic sectors e.g. agriculture; energy; finance; and transportation

Mapping of assessment tools

Commission 2:
Mart Laanpere

▶ map digital literacy assessments to DLGF

▶ evaluate assessments and recommend next steps on tool for indicator 4.4.2



Process

Review of prior mapping exercises:
▶ Carretero et al (2017) (22 assessments)
▶ Siddiq et al. (2016) (30 school-based assessments)

Good practices: self-reporting and knowledge

▶ **Estonia** DigComp school test grades 9/12
▶ **France** Pix: advanced platform and item design

Recommendations

▶ **Self-report**: 3-5 point scale, <20 min
▶ **Knowledge-based test**: extension for selected competency areas to enhance validity
▶ Pilot: 1000+ in 3 languages, validate, steering group
▶ Software architecture similar to Pix: e.g. upload data anonymized form; software and test items in Github; responsive user interface; test runs on smartphones etc.

EU experience from monitoring DigComp

DigComp

For citizens

DigCompEdu

For teachers

Three assessment efforts

- **Low-skilled adults**
  (in need of further development)

- **Teacher skills**: self-assessment and knowledge
  = survey in five countries at all education levels
  (e.g. all universities in Spain)

- **SELFIE**: self-assessment tool for schools
  = views of students, teachers and school leaders on
  how technology is used in their school