Measuring digital literacies: Junior high-school students' perceived competencies versus actual performance

# Details

## Year

2018

## DOI

10.1016/j.compedu.2018.06.030

## Issued

2018

## Language

English

## Volume

126

## Start Page

## End Page

## Authors

Porat E.;Blau I.;Barak A.

## Type

Journal article

## Journal

Computers Education

## Publisher

Elsevier BV

## Topics

Literacy and skills

## Sample

Participants included 280 Israeli junior-high-school students in the seventh grade (approximately 13 years old). The students attended a variety of geographically dispersed Hebrew-speaking schools in the state education system. The participants included 142 (50.7%) boys and 138 (49.3%) girls

## Implications For Policy Makers About

Other

## Other PolicyMaker Implication

encourage training that aims to develop the digital literacies of school students

# Abstract

The widespread belief is that youth, "digital natives", who live their entire lives in media-rich
digital environments and are ubiquitously connected through social networks, naturally develop
digital competencies. This study investigated digital literacies among 280 junior-high-school
students with the aim of comparing participants' perceived digital literacy competencies and
their actual performance in relevant digital tasks. The findings showed that only a few of participants'
perceived skills were related to their actual performance. Generally, participants displayed
high confidence in their digital literacies and significantly over-estimated their actual
competencies. This gap was most evident in social-emotional skills, which were, on average,
perceived by students as their strongest skills, while their actual level of performance was very
low. Positive strong correlations were found between participants' self-reported evaluations of
different digital skills, indicating their perception as a single factor, while actual performance
tests revealed low-to medium-size correlations between different literacies. For educational decision-
makers, the findings highlight the importance of designing training programs aimed to
develop students' digital literacies, with a special emphasis on social-emotional competencies.
Such training may enhance important competencies needed, reduce unfounded self-perceptions,
and thus, develop efficient digital functioning in contemporary society.

# Outcome

The current study (Porata, Blau Barak, 2018) found that mastering one competency does not guarantee effective performance on other digital literacy tasks. medium correlations between the “branching”, “information - identifying the type source” and “information - critical evaluation” literacies suggest difficulties in constructing knowledge from associative non-linear navigation in hypermedia environments
and in evaluating the reliability and credibility of those resources. very low performance on social-emotional literacy tasks, which was the only literacy skill that was not significantly correlated with any other skill, calls for special attention. Regarding the second research question, which referred to the associations between self-perceived competency in different digital literacy domains, the findings showed that the correlations between the scales were all positive, significant and relatively high. findings suggest that self-evaluation of digital literacies is significantly more complex and less accurate. The weak association between DL performance and self-evaluation found in our study questions the validity of the methodology of investigating digital literacy as cognitive and/or social-emotional competencies based on self-report. The study findings clearly point at the gap between the self-perceived and actual level of digital skills,