COMMENTARY ON DIGITAL LITERACY & THE DIGITAL ECONOMY

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Three Primary Questions

- What skills and competencies can define a person's digital literacy?

- What level of digital literacy (% of the population) is sufficient for development of a digital economy?

- What percentage of the population should be digitally literate?

Addressing Some Definitional Matters

- Digital Literacy is the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills (American Library Association)

- A skill is the ability to use one's knowledge effectively and readily in execution or performance (Merriam-Webster Dictionary)

- A competency is the combination of knowledge, skills, abilities and personal attributes that contribute to enhanced employee performance and ultimately result in organizational success.

Two Comments

- Knowledge is a key component of the definitions of both skills and competencies.

- Skills are a subset of competencies.

Q1: What skills and competencies can define a person's digital literacy?

Common Essential Digital Literacy Skills (taken from four lists)

Competency	# of Times Mentioned
Online safety, security, and privacy	4
Coding	3
Collaboration	3
Information evaluation & critical thinking	3
Data bases [management, analysis)	3
Internet usage & online communication	2
Presentations, formal communications	2

Note. This is a summary of four lists of "essential digital literacy skills. There were a total of 19 skills mentioned when the four lists were combined.

Competencies vs. Skills

Competency	Associated Skills
Evaluate Information Critically	Discriminating between opinion and information substantiated by evidence.
	Identifying and rectifying logical fallacies and errors.
	Critically evaluate wide-ranging information sources for currency, reliability, authority, and perspective.

Q2: What level of digital literacy (% of the population) is sufficient for development of a digital economy?
Q3: What percentage of the population should be digitally literate?

Digitalization & the American Workforce (Brookings Institution, November, 2017)

- Studied 545 U. S. occupations, approximately 90 % of the total number of occupations in the U. S.

- For each occupation, they assigned a rating of zero to 100, the rating reflecting the amount that each required use of digital technology.

- They compared the ratings in 2016 with the ratings in 2002.

- The average score for all occupations rose from 29 in 2002 to 46 in 2016, a 59 percent increase.

- There was a substantial increase in occupations that traditionally been associated with digital literacy: warehouse workers, from a rating of 5 to a rating of 25; roofers, from a rating of zero to a rating of 22; parking lot attendants, from a rating of 3 to a rating of 26.

There are two different populations

- One population consists of those who make a living in a technology or technology-related field. The previous table focuses on this audience. This population includes approximately 7% of the U. S. workforce. The specific competencies they need will depend on the demands of their jobs within the technology field.

- The second population consists of those who make a living in other fields. They need to be "informed consumers" of digital technologies. Of the competencies listed in the table on slide #6, online safety, security, and privacy; information evaluation and critical thinking; and Internet usage and online communication would seem to be the most relevant.