Discussion:

Building a Competent Digital Literate Workforce

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Building a Competent Digital Literate Workforce

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September 17, 2020

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Learning
Learning to tie your shoes

What are the steps?
Defining a Competency

Competency
The **observable ability of a person who has the knowledge, skills, and attitudes when performing tasks** in a given context. Competencies are trainable and measurable.

Competent
A person is competent who has the **ability to perform the tasks to the defined standard.**
What does it mean to be Digital Literate?
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

4.4.1
Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill

4.4.2
Percentage of youth/adults who have achieved at least a minimum level of proficiency in digital literacy skills
Five Domains

- Digital content creation
- Safety
- Communication and collaboration
- Information and data literacy
- Problem solving
Each domain has a set of competences. 21 total competences

<table>
<thead>
<tr>
<th>Competence Areas (Domain)</th>
<th>Competences</th>
</tr>
</thead>
</table>
| 1. Information and data literacy | • Browsing searching and filtering data, information and digital content  
• Evaluating data, information and digital content  
• Managing data information and digital content |
| 2. Communication and collaboration | • Interacting through digital technology  
• Sharing through digital technology  
• Engaging in citizenship through digital technologies  
• Collaborating through digital technologies  
• Netiquette  
• Managing digital identity |
| 3. Digital content creation | • Developing digital content  
• Integrating and re-elaborating digital content  
• Copyright and licences  
• Programming |
| 4. Safety | • Protecting devices  
• Protecting personal data and privacy  
• Protecting health and well-being  
• Protecting the environment |
| 5. Problem Solving | • Solving technical problems  
• Identifying needs and technological resources  
• Creatively using digital technologies  
• Identifying digital competence gaps |
<table>
<thead>
<tr>
<th>Foundation</th>
<th>Intermediate</th>
<th>Advanced</th>
<th>Highly Specialized</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
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</table>
What a person should be able to do for
*Competence Domain 2. Communication and collaboration*

*Competence 2.1 Interacting through digital technologies*

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<td>4</td>
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</table>
| At basic level and with guidance, I can:  
- select simple digital technologies to interact, and  
- identify appropriate simple communication means for a given context. | On my own and solving straightforward problems, I can:  
- perform well-defined and routine interactions with digital technologies, and  
- select well-defined and routine appropriate digital communication means for a given context. | Independently, according to my own needs, and solving well-defined and non-routine problems, I can:  
- select a variety of digital technologies to interact, and  
- select a variety of appropriate digital communication means for a given context. | As well as guiding others, I can:  
- use a variety of digital technologies in order to interact,  
- show others the most appropriate digital communication means for a given context. |
| 5          | 6            | 7        | 8                  |
| At advanced level, according to my own needs and those of others, and in complex contexts, I can:  
- adapt a variety of digital technologies for the most appropriate interaction, and  
- adapt the most appropriate communication means for a given context. | At highly specialised level, I can:  
- create solutions to complex problems with limited definition that are related to interacting through digital technologies and digital communication means:  
- integrate my knowledge to contribute to professional practices and knowledge and to guide others in the interaction through digital technologies. | At the most advanced and specialised level, I can:  
- create solutions to solve complex problems with many interacting factors that are related to interacting through digital technologies and digital communication means  
- propose new ideas and processes to the field. |
UNESCO
ICT Competency Framework for Teachers

Set of competencies teachers need to integrate ICT into their professional practice to facilitate students’ achievement of curricular objectives.
ICT Competency Framework for Teachers
Global Standards on Digital Literacy, Skills and Readiness in the OECD E2030 and UN SDGs

Reviewed 25 frameworks.

Global Standards on Digital Literacy, Skills and Readiness in the OECD 2030 and UN SDGs

“A Comprehensive, Adaptable, and Continuously Improving Digital Literacy and Skills Map for All Countries and Sectors.”

Competencies Here, There & Everywhere

Questions?

Thank You
Discussion:

Developing digital health skill standards and framework

Derrick Muneene
Unit Head, Capacity Building and Collaboration,
Digital Health and Innovation Department
World Health Organization
Department of Digital Health and Innovation
Digital Health Capacity Building for the health workforce

Skills and Standards for a Digital Workforce

Derrick Muneene
Unit Head, Capacity Building and Collaboration
Capacity Building and Collaboration Unit

World Health Organization
“...to build, especially through digital means, capacity for human resources for digital health, as appropriate, across both health and technology sectors, and to communicate areas of specific need to WHO in order to receive appropriate technical assistance” World health Assembly Digital Health Resolution – May 2018

Global digital health strategy on capacity building

SO 2
SO 3
SO 4

National Context

Leadership and governance

Strategy and investment
Services and applications
Legislation, policy and compliance
Workforce

Standards & interoperability
Infrastructure

Monitoring & Evaluation
One billion more people benefiting from universal health coverage (UHC)

One billion more people better protected from health emergencies

One billion more people enjoying better health and well-being

Global and National Digital health strategies

Draft Capacity Strengthening Strategic Framework for Digital health and Innovation Learning

Multisectoral, interagency

Contextualization

Knowledge

Attitudes

Skills

People

Tacticians

Strategists

Digital literacy

One billion more people enjoying better health and well-being
Draft Capacity Strengthening Strategic Framework for Digital health and Innovation Learning, cont

Adaptable Competent health workforce

Assessment frameworks

WHO Digital health courses (WHO Academy)

Development partner digital health course (e.g. DH101)

Academia digital health courses (Health informatics)

WHO Digital health Competency framework

Evaluation

Integration
Specific areas of collaboration

Development of a Digital health competency framework across actors in the pyramid

Development of a digital health workforce health workforce capability model

Development of digital health, health workforce courses

Spider Diagram of an Example Digital Health for CHW Program

Strategists
Tacticians
Practitioners

Contextualization
Multisectoral, interagency

Skills
Knowledge
Attitudes

People

Digital literacy

1
2
3
Discussion:

How to teach core competencies and manage credentials digitally

Michael Culligan
Co-Founder
Pyramid Learning
How to build a competent digital workforce
How to teach and manage credentials digitally

Externally credentialed certifications

- 50,000+ individuals
- 80% developing country based
- 40% local/national NGO
How to teach and manage credentials digitally (cont.)

- Guide to the DPro
- Certification Exams
- MOOC Curriculum
- Facilitated eLearning
- Mobile Self-Led eLearning
- DPro Starter
Discussion:

ICT4D Competency Building

Richard Heeks
Professor of Digital Development
Global Development Institute,
University of Manchester
Reflections on ICT4D Competency Building

Richard Heeks
Centre for Digital Development
University of Manchester, UK
https://www.cdd.manchester.ac.uk
Reflections from MSc ICT4D: ICT4D Champions as “Tribrids”

Managing ICT4D Projects

Developing ICT4D Systems

ICT4D Champion

Understanding Development

https://www.manchester.ac.uk/study/masters/courses/list/06237/msc-icts-for-development/
Reflections from MSc ICT4D: Competencies, Not Just Skills

ICT4D Knowledge

ICT4D Competencies

ICT4D Skills

ICT4D Attitudes
Reflections from MSc ICT4D: Competency Priorities

4D > ICT

Social > Technical

Tech in Use > Cutting-Edge
Towards Stronger ICT4D Profiles

Less of This

More of This

https://www.manchester.ac.uk/study/masters/courses/list/06237/msc-icts-for-development/
THANK YOU!

www.ict4dconference.org

New Episode every Friday! #ICT4D2020