

Understanding digital skills for wellbeing

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Stacey Wedlake, Technology and
Social Change Group (TASCHA),
University of Washington
Information School



Risks to Covid intersect with digital & social inequalities

Exposed & Unconnected

Line worker in congregate workplace

Face to face purchasing and communication

Exposed & Connected

Health worker

Digital purchases only

Digital communication if possible

Sheltered & Unconnected

Rural farmer

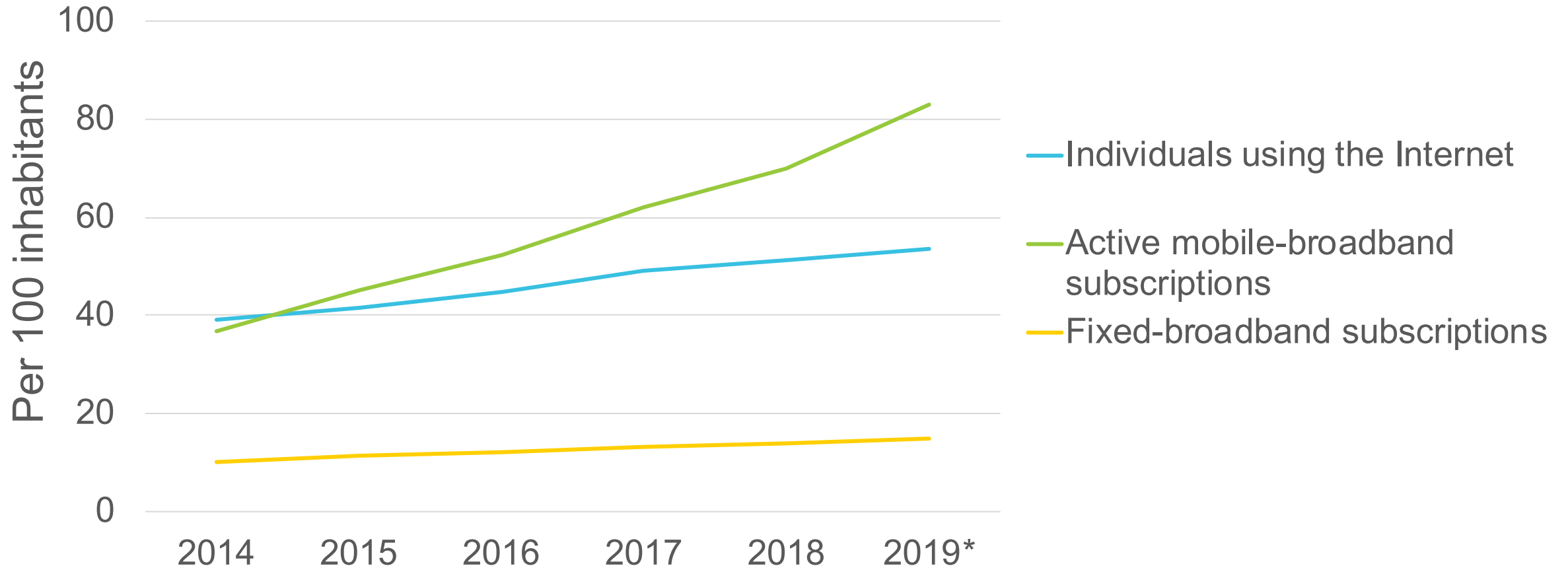
Face to face purchasing and communication

Sheltered & Connected

Works from home

Purchases and communicates digitally

Far more people worldwide use the Internet on their mobiles than any other device



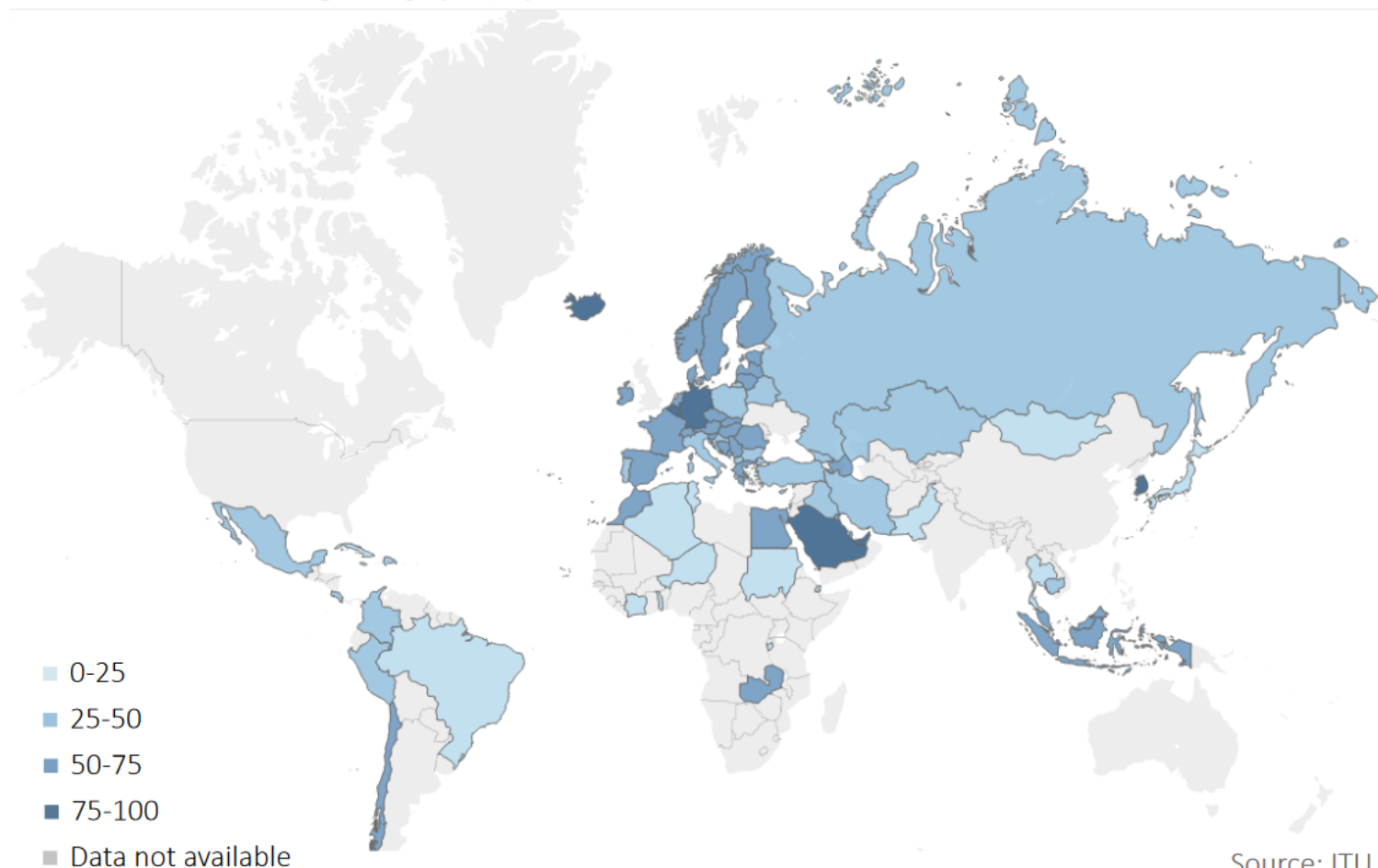
Note: * Estimate

Source: ITU World Telecommunication /ICT Indicators database

Still need to focus on basic skills

In 40 of 84 countries with available data, **less than half** the population possesses **basic computer skills** such as copying and pasting or sending an e-mail with an attachment.

Percentage of people with basic skills, in 2014-2018



Source: ITU.

What digital skills do people need?



Frameworks can help ID skills

DigComp

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

EU JRC

Digital Literacy Global Framework

- 1.DigComp +
- 2.Devices and software operations
- 3.Career-related competences

UNESCO

Digital Skills to Tangible Outcomes

- 1.Operational
- 2.Information Navigation
- 3.Social
- 4.Creative
- 5.Mobile

van Dursen et. al

How do we
know if
people have
the skills
they need?



Types of country-level assessments

Self assessments

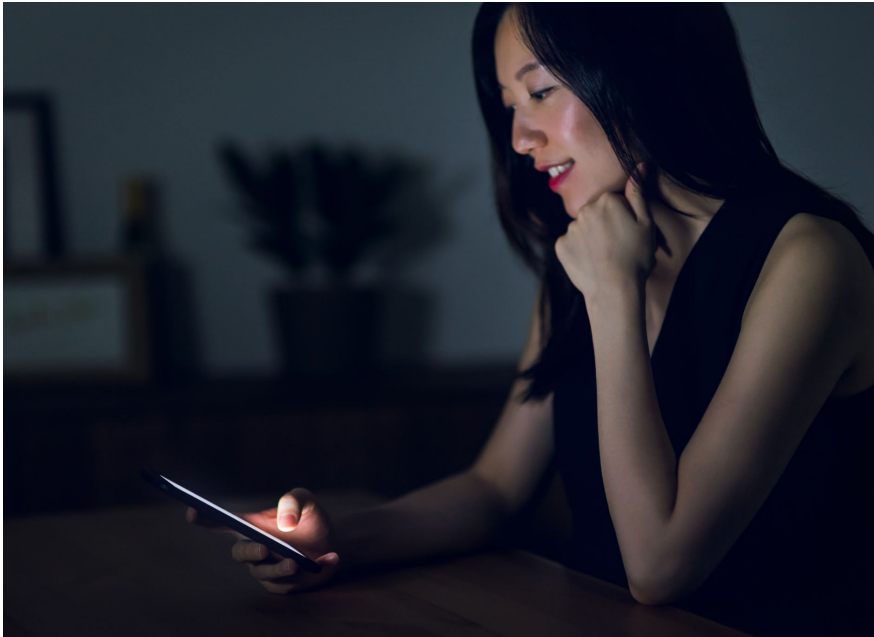
- Participants rate their own ability
- Eurostat, ITU household questionnaires, DiSTO

Knowledge based

- Tests skills using questions about factual or procedural knowledge


Performance based

- Measures actual performance on digital skills in realistic scenarios
- PIAAC, PISA



A country's approach will depend on the country's needs, capacity, and existing processes

See ITU's Digital Skills Assessment Guidebook for details and a step-by step assistance



When measuring
digital skills,
remember that
digital inequalities
often reflect
societies'
inequalities.



Additional references



- Carretero, G., Vuorikari, R., & Runie., Y. (2017). DigComp 2.1: The Digital Competence Framework for Citizens with eight proficiency levels and examples of use. Publications Office of the European Union.
<https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/digcomp-21-digital-competence-framework-citizens-eight-proficiency-levels-and-examples-use>
- ILO. (2020). As jobs crisis deepens, ILO warns of uncertain and incomplete labour market recovery. ILO.
https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_749398/lang--en/index.htm
- ITU. (2019). Facts and figures 2010: Measuring digital development. ITU. <https://itu.foleon.com/itu/measuring-digital-development/home/>
- Law, N., Woo., D., de la Torre, J., & Wong, G. (2018). A Global Framework of Reference on Digital Literacy Skills for Indicator 4.4.2. UNESCO-UIS.
- Robinson, L., Schulz, J., Dunn, H. S., Casilli, A. A., Tubaro, P., Carvath, R., Chen, W., Wiest, J. B., Dodel, M., Stern, M. J., Ball, C., Huang, K.-T., Blank, G., Ragnedda, M., Ono, H., Hogan, B., Mesch, G. S., Cotten, S. R., Kretchmer, S. B., Hale, T. M., Drabowicz, T., Yan, P., Wellman, B., Harper, M.-G., Quan-Haase, A., & Khilnani, A. (2020). Digital inequalities 3.0: Emergent inequalities in the information age. *First Monday*, 25(7).
<https://firstmonday.org/ojs/index.php/fm/article/view/10844>
- Temko, N. (2020). No jobs, so what future? Half the world's workforce on the edge. The Christian Science Monitor.
<https://www.csmonitor.com/World/2020/0506/No-jobs-so-what-future-Half-the-world-s-workforce-on-the-edge>
- Toyama, L. (2015). *Geek Heresy: Rescuing Social Change from the Cult of Technology*. Public Affairs.
- van Deursen, A., Helsper, E. & Eynon, R. (2016) Development and validation of the Internet Skills Scale (ISS), *Information, Communication & Society*, 19:6, 804-823, DOI: [10.1080/1369118X.2015.1078834](https://doi.org/10.1080/1369118X.2015.1078834)



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- Connect with me:
 - staceyaw@uw.edu
 - @StaceyAW