











Policy Recommendations and Guidelines for Educators

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Context

In a society increasingly driven by data and marked by rapid advancements in human-technology interactions, the significance of data literacy is becoming more pronounced. Within this context, the EU Erasmus+ Project "DALI: Data Literacy for Citizenship" has created educational games on data literacy for adult learners. We also provide recommendations at various institutional levels—macro, meso, and micro—based on insights gleaned from a literature review on data literacy and input from stakeholders from Norway, Germany, Spain and the UK.

Macro level policy recommendations

- 1. Local governments must prioritize open access to data, ensuring that relevant data is readily available to end users.
- 2. State regulations should rigorously enforce EU laws on data protection, privacy, and disinformation, holding tech giants and start-ups accountable.
- 3. Raise awareness about the significance of data literacy through various initiatives, including disseminating educational materials and information via public broadcasting as well as endorsing informational campaigns.
- 4. Investment in public education plays a pivotal role in cultivating a data-literate population. Educational institutions, including adult education providers, should be equipped to teach data literacy as an integral part of the curriculum, while public libraries should be prepared to offer services related to data access.
- 5. The successful implementation of all recommendations hinges on two crucial factors: a) dedicated funding earmarked specifically for government agencies, educational institutions, and teachers, and b) a collaborative effort between the education technology sector and national authorities.

Meso level policy recommendations

- 1. Embracing a multidisciplinary approach, educational institutions must take the lead in crafting and offering data literacy-focused curriculum and activities. Simultaneously, organizations should establish data infrastructures and provide training and upskilling opportunities to enhance data literacy among their staff.
- 2. Educators and learners must critically reflect on the ethical use of data. It is advised to use open data and game-based approaches in teaching & learning data literacy related subjects.
- 3. Local stakeholders need to promote digital literacy in all levels of education and in the public debate. Stimulating community participation in public affairs and making the data literacy related resources understandable for non-expert users are key. A suggested approach is to use a shared platform where courses and community resources are openly available.

- 4. Design and implement data literacy workshops for citizens, particularly marginalized communities, offering activities on how people engage with data, how they learn to use a series of devices and applications in an ethical and safe way, and what their interaction with data means to them.
- 5. It is paramount to know how to make people interested in digital data. Understanding what interests, excites and motivates individuals to seek data literacy will strengthen communities, participation, and citizenship.

Guidelines for Educators

- 1. Educators require training in the various data literacy tools and frameworks to acquire the competences to use data in their teaching. This in turn enables learners to develop, apply, and reflect on their data skills.
- 2. The teaching and learning of data literacy can benefit from game-based learning approaches and open data sources in real-life contexts.
- 3. Data literacy is interconnected with various literacies, such as political literacy. Learners should grasp the fundamental tenets of democracy, comprehending the socio-political elements that shape the creation and management of data within a data-driven economy.



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