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Digital skills for adults: many flowers bloom, but gardens and gardening tools are underdeveloped

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The importance of digital skills has grown gradually over recent decades, given the push towards digitalisation and the expansion of technology into all areas of life. Combined with the COVID-19 pandemic, which imposed an urgent transition to remote learning and work, and simultaneously forced citizens to reflect upon and work at improving their digital skills, it is unsurprising that adult digital skills have become a prominent topic in policy research and discourse.

While existing literature recognises the significance of this topic, its utility for the analysis of the existing provision of digital skills to adults has been limited. More specifically, the literature concerning certain aspects of adult digital skills appears relatively rich (e.g. on the digitalisation of learning, the conceptualisation of digital skills, and the measurement of digital skills). However, the coverage of specific courses and programmes is less extensive in the literature. This makes it difficult to gain a sufficiently broad, informed overview of the existing approaches and initiatives on the provision of adult digital skills.

As the examples below illustrate, there are a large and increasing number of projects and policies that focus on helping adults in the European Union to acquire or improve their digital skills – in the words of the title of this policy brief, “many flowers are blooming”. However, only in a few Member States do ecosystems exist that systematically organise this provision into a structured system that is truly accessible to everybody – hence the assertion that “gardens” are lacking.

This problem relates not only to the absence of these “gardens”, but also to a lack of “gardening tools” – the set of good practices required to foster such ecosystems. This is an important area for future research, and requires a related infrastructure to foster data collection, as well as a greater focus on impact evaluation to understand the impact and effects in both the short and the long term. In essence, it is crucial that policymakers and researchers recognise the need to map and analyse the provision of adult digital skills to enable the formulation of good practices. Such practices, while attending to national circumstances, can be disseminated across Europe and be useful in efforts to coordinate European policies and initiatives on the topic.

Emerging “gardens”

At the strategic level, one option is to focus on developing **a specific ecosystem for digital skills**. One well-developed recent example is Italy’s National Strategy for Digital Skills (Ministero dell’Istruzione, 2020), led by the Department for Digital Transformation. This department has worked with various line ministries – in particular the Ministry of Education, but also the Ministry of Economic Development – on the digitalisation of learning for continuous training. One of the objectives of the strategy is to “equip 70% of the population with at least basic digital skills and bridge the gender skills gap in the ICT sector,” and “to double the rate of Italian citizens with advanced digital skills (78% of young people with higher education, 40% of workers in the private sector and 50% of civil servants)” (Digital Skills & Jobs Platform, 2021). To achieve this, the strategy proposes to create education paths for adults within schools, as well as training paths within the non-formal educational circuit. Outside the education system, the strategy also proposes training in digital skills, as well as awareness campaigns carried out with the help of neighbourhoods, local communities and public spaces such as libraries, to create networks of assisted access points and digital facilitation stations.

In addition, Italy also uses fiscal instruments to stimulate digital skills in the context of its Industry 4.0 training tax credit. This applies to 30-60% of eligible expenditure in categories related to Industry 4.0, in which there is a large overlap with digital skills.

Other similar examples focusing specifically on digital skills include Portugal's Portugal INCoDe.2030 and Belgium's Digital Belgium Skills Fund - all long-term visions for digital education, with well-developed goals and a range of tools for tackling gaps in adult digital skills.

Policy frameworks for digital skills can also be embedded into **broader strategies**. For example, in Ireland, the Government adopted a comprehensive Adult Literacy, Numeracy and Digital Literacy 10-Year Strategy for Ireland. More frequently, the wider framework is an overall digitalisation strategy – e.g. in Slovakia, Lithuania, or the Netherlands. A good example is **Digital Austria in 2050** ([Digital Austria website](#)), enacted in 2019, which includes a focus on adult digital skills with two especially relevant goals. First, the digital transformation of the educational system, which includes the “certification of digital skills development programmes,” with the additional aim of strengthening basic digital training in further education (Digital Skills & Jobs Platform, 2021). A second objective of the strategy is to ensure that all citizens have basic digital skills (ibid.). In relation to adult skills, the overall digital strategy is complemented by a specific, targeted initiative – a **Digital Skills Check**¹. Interestingly, this system, introduced in 2021 specifically for digital skills, is also available to cover the costs of professional training in digital skills (IT management, cyber security, e-commerce), but only for SMEs (including the self-employed). It can fund 80% of the costs, up to EUR 1,000 per employee, and up to 10 checks per company.

Gardening tools – aggregators, virtual providers and place-based networks of providers

It is also productive to zoom in and consider examples of good practices of various types of provision, as opposed to merely looking at broader policy frameworks. Such good practices can thus be likened to sharp and well-designed gardening tools. We shall consider aggregators (i.e., portals that bring together training provision organised by others and provide information and access to it), virtual providers (i.e. a more sophisticated version of the same approach, where such platforms also provide access by pre-selecting participants and/or funding their training), as well as place-based networks of providers focusing specifically on digital skills (i.e. in-person providers organised around a particular geographical locality).

Starting with an example of an aggregator, one innovative approach is that of the Dutch government website **Informatie Punt**² (Information Point), which provides advice and directs users to information and opportunities for digital skills learning, including physical locations close to one's home. The target group addressed depends on the level of the skill concerned, and may occasionally involve users being required to have certain language skills.

Virtual providers differ from aggregators, as they are directly involved in provision through a combination of application processing, selection and funding. For instance, **PortálDigi**³ (“Digiportal”) is a virtual provider operating under the auspices of the Czech Ministry of Labour and Social Affairs and funded by the ESF. It is a closed platform developed specifically to improve the digital competences of employees and employers (and including other services besides digital training modules). The platform contains several courses specifically aimed at digital competences, structured according to the type of competence or job role. The modules can also be downloaded and integrated into any learning management system.

Another case – a larger system fully focused on digital skills – is **Pane e internet**⁴ (“Bread and internet”), a regional initiative of the Emilia-Romagna government in Italy, active since 2009. Its overall objective is to develop “the digital competence of citizens through a training path that goes from digital literacy to the acquisition of a broad vision of digital in the life of everyday (digital culture).” Among its activities, Pane e internet provides digital skills training for beginners as well as more advanced users and trainers. The courses for beginners (called “alphabetisation” courses) have small class sizes of 12-15 people and an average duration of 16 hours, while the more advanced courses can accommodate larger groups and are more differentiated in their structure.

¹ For more information, see: <https://www.ffg.at/ausschreibungen/DigitalSkillsChecks-2-Ausschreibung>

² For more information, see: <https://www.hetinformatiepunt.nl/>

³ For more information, see: <https://portaldigi.cz/>

⁴ For more information, see: <https://www.paneeinternet.it/>

An interesting twist on the notion of the virtual provider is France's **Pix portal**.⁵ This was created by the French government in 2016 as a non-profit organisation, bringing together a number of public actors to support an improvement in the general level of digital skills. The portal encompasses a broad spectrum from assessment through skills development to certification. Skills development is achieved through specific user challenges and the Pix Pro service – a platform for companies and training organisations to develop their own digital skills modules.

Moving on to place-based strategies aimed at deeper intervention, a good example, open to wider society in Portugal, is **I Am Digital**.⁶ This initiative has ambitious goals for a country of 10 million people, namely: “to prepare 30,000 volunteers so that they can provide basic digital training and create 1,500 digital skill training centres in partnership with local authorities and organisations throughout the country.” The project is realised by A2D Consulting, and its funding comes from Caixa Geral de Depósitos (a Portuguese state-owned banking corporation, and the second largest bank in Portugal).

The concrete case studies above, covering various types of provision, demonstrate that there is added value in identifying diverse good practices in adult digital skills provision as part of the creation of ecosystems that are both robust and holistic.

⁵ For more information, see: <https://pix.fr/>

⁶ For more information, see: <https://portugaldigital.gov.pt/en/training-people-for-digital/available-training-in-digital-skills/i-am-digital/>



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