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Learning *the Digital* Lifelong. - Key Messages -

Positions and reflections from the perspective of
Education for Democratic Citizenship/Human
Rights Education.

DIGIT-AL – Digital Transformation in Adult
Learning for Active Citizenship

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<https://dttools.eu>

Contact: pirker@adb.de | daniela@partnersbg.org



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The DIGIT-AL project of seven European organisations is dedicated to digital transformation as a topic of Education for Democratic Citizenship/Human Rights Education. It revolves around the question of how democracy and adult education can respond to the challenges associated with digitalisation in society, the economy, politics and culture. Supported by the EU Commission (Strategic Partnership Adult Education Erasmus+), we develop handouts for educators in adult education and disseminate good practice on how digitalisation can be addressed in the broad fields of adult education.

Learning the Digital: context

The European Union has defined its goal of upholding safety, privacy, inclusion and democracy in digital transformation (DT). Several regulations, such as the [Digital Services Act](#) and [Digital Markets Act](#) (EC DSAP, 2021) encompass a single set of new rules applicable across the EU to create a safer and more open digital space. The Digital Services Act and Digital Markets Act will determine what platforms are (still) allowed to do and how the rules of the game of digital capitalism will work. The [Circular Economy Action Plan](#) (EC CEAP) suggests a right to repair. As a result of the way [New rules for Artificial Intelligence](#) (EC New rules for AI) are developed and implemented, a market for data-sensitive and democratic innovation is emerging - a European way of dealing with AI or, at least, a European-dressed American way. How Europe defines and enforces the [Next Generation Internet](#) (Next Generation Internet Initiative, 2020) influences how free, decentralized, competitive, and accessible the Internet and digital single market inside and beyond Europe will be. The [General Data Protection Regulation](#) (GDPR, 2016) is another significant landmark that has positioned the EU globally as a region where digital transformation aims at asserting democratic principles and human rights.

Digital transformation affects all fields of human life, including political participation and decision-making. In the worldwide competition to advance and defend economic positions, digitalisation is expected to play a decisive role. Moreover, the economic transformation toward digitalisation is expected to make a key contribution to sustainable development. There is growing hope that science and technology can help solve global problems, but also fear that the digital economy can perpetuate – and even exacerbate – long-standing and recent environmental challenges.

In 2020, the developments around the COVID-19 pandemic cast a spotlight on the ongoing processes of digital transformation, which have advanced to a stage at which the platform economy, Artificial Intelligence (AI) and Big Data form foundations of everyday interactions; they are broadly applied and required and have become central pillars of a new digital economy. National governments and companies across Europe naturally have ambitious expectations regarding this development, partly since there is hope that an economic recovery will follow a greener and more digitalised path. The EU aims to become a global leader in an ethical AI and Big Data approach, as expressed in the EU Commission's communication, the [Coordinated Plan on Artificial Intelligence 2021 Review](#) (EC COM(2021) 205 final ANNEX), and the 2020 [White paper on artificial intelligence](#) (EC White Paper AI, 2020), in continuation of the earlier [Digital Agenda for Europe](#).

The [European Strategy for Data](#) (EC COM(2020) 66 final) is led by the vision of a balanced “European way”: “In order to release Europe's potential we have to find our European way, balancing the flow and wide use of data, while preserving high privacy, security, safety and ethical standards”. In particular, this vision builds on a “single European data space”.

In the context of these progressive developments in the EU, our [DIGIT-AL project](#) has found that key topics are being negotiated at the European level often independently of national regulation and of technical discourses, which too often remain in isolated boxes such as regulating digital platforms, the circular economy, and data protection. Discussions often stay in the professional sphere of those affected, while a connection to the larger societal implications is missing.

Responses and initiatives of education and learning

Digital transformation is a development affecting multiple aspects of our everyday lives. Given the gradual, revolutionary nature of this transformation, it is not commonly evident how deeply this transformation affects everyday life. Individuals are generally not conscious of the enormous financial and economic efforts being undertaken by single companies, and there seems to be almost no linking of the momentous political shift taking place to maintain economic market positions. The large companies that are visible to the user on interfaces such as Google and

Facebook, which dominate the discourse on digitalisation are only the tip of the iceberg working on a global scale in the fields of infrastructure, hardware, and software data extraction. In order to achieve a more complete picture of the Internet and the different paths toward digitalisation, we need education facilitating knowledge and an understanding of the diversity of centralised, platformised, free, open, not-for-profit and proprietary actors in the Internet.

A lack of understanding of the data business models of the digital economy, of how states would like to make use of digitalisation and absence of public discussions and learning opportunities about the socio-political impact of digitalisation leads many adults to the impression that digitalisation takes place behind a curtain of complexity. It cannot be the aim of democratic governance to get sound information about developments only in response to data breaches and scandals. Instead, we must invest in education that prepares the public broadly and, more specifically, civil society, to respond to these complex topics and to strongly advocate for the democratic and human rights dimension as part of the digital transformation.

The constructive role of Education for Democratic Citizenship

If most of the transformation that takes place is invisible, how can the curtain be lifted for the average individual? The purpose of Education for Democratic Citizenship and Human Rights (EDC/HRE) (CoE CM/Rec (2010)7) is to initiate and develop critical thinking and to be able to recognise opportunities for digitalisation in line with peoples' needs in democratic contexts. Various questions need to be discussed, since there are complex implications for equal rights, social rights and fundamental rights, the distribution of wealth, health and social benefits. There is arguable hope that digitalisation could be instrumental in achieving a more just and equal society.

EDC/HRE has the aim to strengthen the understanding of digitalisation's social impact, and accompany the discussions about different directions of digitalisation by emphasis on impact orientation.

Digitalisation has shown that it might overcome social problems and injustice, however, there is also evidence of digitalisation reproducing and perpetuating the exploitation of labour and of the environment, and of structurally maintaining an unjust and discriminatory situation in the world.

One could certainly state that "in such a mess education plays a role". Along with educational institutions at the national level, the Council of Europe and the European Union have already started to develop guidance to meet this challenge. Such initiatives include the digital competence frameworks (DigComp and DigCompEdu) (Carretero et al., 2017; Punie et al., 2017), the Digital Education Action Plan (EC EC SWD(2020) 209 final), the initiatives on digital youth work (EC Digital Youth Work 2018) and the various Council of Europe initiatives on education and youth work in digitalised worlds (Şerban et al., 2020; CoE DCE). All these provide political orientation for action.

Vast initiatives in the entire field of lifelong learning are testimonials for the ongoing efforts being undertaken in various fields of education, training and youth to pave the way for holistic processes of lifelong learning. There are several questions that emerge in relation to education and learning. These relate to the governance of digitalisation, the tools used, the complex horizons tackled by education—technically, literally and socially—and the entry of Artificial Intelligence into the field. These challenges raise questions that pertain not only to human rights and democracy but also require the specific expertise of democracy and human rights education to formulate and ask questions, to define challenges, and to provide means for learning and actively shaping this ongoing transformation. Furthermore, if digital space provides new opportunities to exercise citizenship, to learn, to form and express personality and to interact and collaborate, digital transformation and digitalisation should become vitally important fields of Lifelong Learning (LLL).

Governance

A European way to digitalisation is the result of a strategy and very different policies in different fields, not only in education and learning. We would like to address in this section aspects that we identified as relevant to share also across the sectors and Directorate Generals sharing a responsibility for digitalisation in Europe. Several experts from other fields, from civil society, EU commission or industry welcomed us because they feel the need that education about *the Digital* should prepare Europeans not only as users but also as democratic citizens for the transformation. Such, this paper is also a contribution to a future dialogue.

- Exercising active citizenship and expressing democracy in digital environments must be guided by the *same principles as in non-digital environments*: inclusion, diversity, tolerance and human rights. Digital transformation, particularly, should not widen inequality by leaving behind those already disadvantaged in some way through new factors of exclusion. The focus of civil society should shift from attention to specific digital platforms or services (and a mere user perspective) to the digital ecosystem and the impact of democracy and human rights in digitalisation – toward a systemic perspective.
- *Human rights considerations* should be core in policies and governance related to the digital economy, education about the digital, and digitally facilitated social development. It is important to recognise human rights as a feature of the digital transformation, in the same way that rights are a key feature of our everyday existence: safety and security, health and welfare, being treated with respect and as an equal, exercising basic freedoms to speak, associate, practice and learn as people choose. Human rights are the core ingredients of life. Following Human Rights principles means following clear standards to hold decision-makers and governance accountable.
- Supporting *Civil Society Organisations (CSOs)* should play an important role in the enactment of an open data and open source policy. CSOs are an honest broker and an important connector of citizens and policy, in holding the technical development accountable to human rights principles and as advocates of fundamental democracy-related principles like openness, freedom, free and unconditional accessibility and human-centred Internet services and structures. CSOs are also intermediate between citizens and established educational institutions and as partner of education they are a *new space* for new non-formal or informal learning offerings and experiences.
- *Accessibility to digital learning* for all is a core demand and should be provided as a public good. The full range of instruments should be enforced at all levels and from all those responsible for enabling vulnerable groups to gain from quality education in regard to the wider sphere of digitalisation, but especially for the sphere of digital learning.
- It is imperative that governments provide wide *internet coverage, equipment and IT maintenance services* at affordable costs, but at the same time ensure that no compromises are made on civil rights and human rights.
- When government services and corporate networks operate through Internet platforms, *citizens' use of these platforms* need to be ensured and made accessible by the governments and employers. It is a task for EDC to ask for these provisions.
- *Architectures and designs of ICT and platforms* in line with the European strategy should be expanded: FAIR principles, interoperability, rights-sensitivity and non-centralisation (Go Fair) should apply.
- Digitalisation, in Europe needs to be *governed democratically, ethically, participatory and consciously* on all levels – in Europe, in the member states and on local level. Europe with its

digitalisation approaches shares a specific responsibility to advocate and uphold these principles.

- Provide more *substantial investment in adult learning*, connected with a concrete and targeted approach towards *effecting structural change* in the provisions, systems and structures of adult education and in the learning field. Governments and European programs, such as Erasmus + and others, must give priority to and provide financial support for capacity-building and digital infrastructures of CSOs, the non-profit sector in general and of educational providers.

Education and learning

Education and learning in Europe responded already to the digital transformation and proved their willingness to progress. In general we see progress toward a competence-centered and transformative approach of digital learning, especially in the youth field. The ambition of the DigComp framework, for instance, is to support people to apply digital competence in all spheres of life and to integrate learning about *the Digital* from a key-competency perspective. Under the conditions of dynamically progressing digitalisation we are advocating for further development: toward a socio-political and more systemic perspective on digitalisation in education and learning, also translating the underlying assumptions of a human-centered European digital way into education by integrating learning about rights and democratic values more explicitly.

- Digital technologies have a huge influence on citizens' lives, with consequences for freedom, safety, and their role in society. Technology impacts human rights, such as freedom of speech and association, and freedom from harassment, exploitation, intrusion of privacy, violence, and human dignity, which is protected by the European Charter of Fundamental rights. Human rights must be respected and protected at all times, *facilitated explicitly and integrated in all learning about digitalisation*.
- Providing education and learning about digitalisation and digital transformation should aim at raising consciousness – theoretically and practically– about the conditions of a healthy, thriving economy and ecosystem. Education about digitalisation should focus on *increasing environmental and social sensitivity* both at the local and global level.
- Teaching technological knowledge and skills in the sense of educating about the digital should serve as a tool to *support the local and social development* of communities and citizens in sustainable ways (sustainable and social innovation), and should not be driven only by the needs of the commercial sector. Becoming technologically educated should represent a complex of skills, knowledge and attitudes, the core of which should be *related to ethics, sustainable living and human rights values*.
- Similarly, the ethical debates in education and learning should *not ignore* the profound aspects of the technological transformation and its effects on society, including the use of ICT in country commitments to deliver on the EU climate objectives and achieve sustainability.
- Supporting people in developing capacities to navigate digital transformation has to be done through such a human rights-based lens. Efforts should be made to *empower citizens* to exert social and political influence through digital means, control their own data, become aware of their rights as digital citizens, and to participate in civic life and democratic processes.
- Digital technology can hold great value for human rights and democratic development when democracy and human rights aspects in digitally co-shaped societies are constantly parts of public discourse and also renegotiated with and among citizens. This process of *renegotiation is a fundamental task* for citizenship education.

- Literacy to acquire, interpret and publish information, and to subsequently *use information for civic action*, is becoming increasingly relevant for citizens. Especially data literacy and data-driven investigation/exploration should not be treated as a priority for IT specialists but rather, be *included in education broadly*, so that more citizens might benefit from digitally available information.
- *Education about online collaboration* should aim to reach learners as civically engaged persons, as producers of digital content and parts of social groups. It should include approaches such as digital self-organization, e-petitions, participation in digitally-facilitated (public) planning processes and digital activism, rather than being limited to overly-narrow workplace-related learning.

Lifelong learning in the transformation

Since digital transformation affects all people at all ages and across economic, political, social and environmental contexts, it requires a holistic and lifelong learning approach to assist learners in developing capacities to acquire digital competences. However, the focus of policies is partially set to youth, partially on the narrow skill set required in vocational contexts. We don't want to question the necessity for these priorities but want to raise awareness that under the condition of continuous (formal, non-formal and informal) learning *the Digital*, a lifelong learning approach should be strengthened. Europeans need learning and development opportunities in several life phases and several social roles.

- Europe's educational institutions should facilitate the development of creative integrated approaches of learning digital transformation—approaches accessible and *applicable for people from various backgrounds and in various contexts*, which apply a democratic citizenship and human rights perspective.
- These processes should go *beyond the spatial context of a seminar room, a MOOC or other digital-only space*. Holistic learning requires a design of learning that connects the elements of digital and presence learning and experiences collected across different social roles, and promotes collaboration between different fields and sectors of learning. Accordingly initiatives and programs on the European (E+) and member state levels should support and reflect the different learning provisions programmatically and financially in a meaningful way.
- Education through digitalisation in the form of digital education has to support learners in developing a *human rights perspective when applying, understanding and using digital technologies*.
- It is important to assist learners in *exploring relevant skills*, including technical and vocational skills for employment, decent jobs and entrepreneurship. Such education and learning in digital transformation is a core aspect of Education for Sustainable Development in all its domains, but especially for reaching SDG 4: “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”, in Europe and worldwide.
- Facilitate the implementation and further development of digital literacy through formal and non-formal education *in all ages and life phases*.

Policies in education and learning

- Recognize the *significance of Education for Democratic Citizenship/Human Rights Education*, which has experience in translating the meaning and relevance of human rights and democratic principles to learners, and create learning provisions accordingly. It involves developing critical thinking and breaking down socio-political complexity to support people in developing competences to study and access these topics and, as a result, build their positions around political issues. Furthermore, active citizenship education is empowering citizens in their everyday lives to become involved in policy discussions and public discourses. Especially *rights-related and participation-related approaches are gaining relevance for an innovative pedagogy of the digital*. Its aims and goals should be reflected also in calls and priorities.
- Accordingly, educational frameworks should include and go *beyond technical skills and aim to include ethical, social and transformative aspects* related to democracy and human rights, such as dimensions of power, equality, justice, freedom, inclusion and fundamental rights. The *ongoing development of the competences frameworks* such as Digicomp, Lifecomp and Entrecomp for the EU context, which are closely interrelated with the EU initiatives on digitalisation, are particularly important for incorporating democratic governance, fundamental rights provision and citizen-driven digitalisation as core dimensions.
- Give learners the right and sufficient time to participate in *Education and Training related to EDC/HRE (Education for Democratic Citizenship/Human Rights Education)*. Given that closing skills gaps and achieving further qualifications will no doubt become increasingly cost- and time-intensive, approaches that combine work and study are most likely to create conditions for gaining adequate skills.
- Realise and harness the full potential of the *Belem framework of action, dimension 3* (civic education) for adult learning in an LLL context, and ensure a more substantial role of NGOs and civil society in this process.
- European budgets and funding should be allocated to groups and consortia, which *combine expertise in theory and practice*. There should be more, enforced cooperation between *research, data activists and educational institutions/practitioners* in the field of digital transformation. The cascading effects of projects should be enforced and enabled to go from pilot developments to enabling broad applications.

For educational providers

Many learning about *the Digital* is nowadays taking place outside established educational institutions. Beyond providers of EDC/HRE also many other adult education institutions are addressing digital competence. Also civil society and science is contributing with awareness raising, digital tools and educational efforts to learning the Digital. We advocate for more collaboration and inspiration from each other because we see a huge potential for increased impact and also innovation in pedagogy in increased collaboration: There is enough space for exploration in territory of a pedagogy of *the Digital*.

- Providers of lifelong learning, specifically centres of lifelong learning could offer *accessible, affordable and high-quality content* in order to prepare people to develop digital literacy and to acquire relevant skills via digital technology.
- The development of a *literacy of the digital* as such is a precondition for the education and learning field – related to policies, digital infrastructures, governance, capacities of educators, AI supported learning and instruments.

- Teach digitalisation as a complex concept! This means to move from media education and digital learning towards the *three dimensions*: Learning *for* digitalisation: co-determining the digital transformation in society. Learning *about* digitalisation: social, cultural, economic impact of digitalisation in society. Learning *through* digitalisation: digital learning, digital tools and services in learning.
- Learning covers, beyond the from the user-perspective relevant technical skills, also *deeper and more systemic understanding* of datafication, digital monetisation, Big Data and AI, and the socio-cultural aspects of participation and digitalisation. Also a deeper understanding of technologies and software, and of tools and platforms which are in line with human rights and democracy standards needs to be integrated, respectively learning how human rights are affected by and through usage and participation of certain platforms and in the Internet.
- It is transformative learning. Facilitate with a competence-centred focus, treating *key competences as transformative competences*. In particular address transversal aspects as they are described in EntreComp (proactivity, creativity, innovation) and Lifecomp (learning-to-learn or self-competence). This needs to take place in and beyond the workplace in VET and other non-formal education settings, specifically in EDC/HRE, but also in other fields of adult and youth learning.
- *Non-formal education*, with its specific ability to *operate in open processes*, can provide a solution to address the low digital preparedness of young people and adults: this may apply to the labour market in the context of digital transformation, but ever more for developing the consciousness about the related individual, societal and political dimensions, in order to successfully navigate digitalisation. Non-formal training providers have to play a key role in offering a range of *alternative and flexible learning paths* to acquire the relevant digital competences.
- Train educators and pedagogical staff systematically, in line with the EU digital competency framework for educators *DigCompEdu* and enrich with core aspects of digital citizenship education, including fundamental rights and democratic principles, equity and also a focus on the social and environmental impact of technology inline with the intentions of the approach of Digital Citizenship Education (CM/Rec(2019)10; CoE Digital Citizenship Education).
- Train educators on understanding the dimension of *datafication in education* and of datafied educational processes *and how to apply and integrate data in education* in a rights-sensitive way (e.g. learning analytics, personal data processing), but also the *use of data in education* (in particular Open data, Open Educational Resources/ Creative Commons). Support educators in familiarizing themselves with *other digital measures and their potential for education*: micro-credentialing (i.e. Open Badges), digital learning accounts (ILA), digital portfolios, ...
- In the non-profit and education sectors, the potential of various technologies should be identified, not only from an engineering perspective, but from a user's perspective as well. This would include providing *analysis of various technologies and outlining their benefits* for education, citizen participation and engagement under a lifelong learning perspective, starting from a young age.
- There is a growing need for *NGOs to promote policy conditions that are conducive to the use of digital technologies*. In order to tap the full potential of digital technologies, appropriate frameworks need to be put in place. These include adequate funding instruments, access to information, comprehensive infrastructures, non-discriminatory access, and strong partners
- Civil society and expert organisations in the fields of consumer data protection and human rights should *cooperate more closely*. Education researchers and practitioners need support to achieve digital competency in order to utilise available platforms, open data and digitalised public sources of information.

Overcoming the digital divide together

Digitalisation can have a positive and negative impact. It might contribute to solve social problems and to more inclusive societies, but also deepen divides. Working together to contribute to a cohesive and inclusive (digital) society is a common effort of education, policy, and for other stakeholders in the social, cultural, environmental and economical fields.

- *Digitally marginalised individuals* and groups (in result often with lower digital literacy) need specific attention. It is especially important to provide such opportunities for those who need support during and in the aftermath of the COVID-19 pandemic.
- Ensure inclusion by working to reduce the digital divide, and by *providing infrastructure, equipment and internet, as well as appropriate methodologies* to ensure that educators have the necessary digital skills and are able to transfer them to learners.
- Equip both *women and men equally* with the newest technology and training. Invest specifically in mentoring of women and girls upgrading their skills and pay a specific attention to female teachers and educators.
- Both formal and non-formal education, including adult learning, should make a special effort to avoid widening the digital gap, *lowering barriers to digital access and participation* and enabling every citizen to be involved in all spheres of societal life.
- Barriers need to be identified from *the perspective of those which are confronted with barriers*. Priority should be given to *creating inclusive barrier-free spaces* with the help of digital technology.
- Support *educational providers and NGOs to reach special groups* such as elderly, people with disabilities, those living in areas less connected and others in need of support to acquire basic digital skills necessary for life, work and communication.
- Develop *a broad understanding of divides* and access in relation to social, political, technical and environmental dimensions in order to develop consistent provisions for access.

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