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Policy Paper

Enabling learning environments

The role of non-formal and informal learning in fostering citizenship and digital competences.

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Foreword

Education has a crucial role to play at a time when democratic values are increasingly challenged and digital technologies are transforming how we access information, exercise our rights and participate in society. Developing the competences needed to navigate these changes is fundamental and cannot be reduced to acquiring technical skills or knowledge about democratic institutions. The environment in which people learn is equally important; whether they respond to learners' needs, encourage their active participation in society and support them in applying what they have learned in everyday life.

With this in mind we present SOLIDAR+'s new Policy Paper, *Enabling Learning Environments: The Role of Non-Formal and Informal Learning in Fostering Citizenship and Digital Competences*. This publication reflects a conviction at the heart of SOLIDAR+'s work: education is a lifelong process that extends far beyond the classroom. Drawing on the experiences of our members and existing research, this paper examines what makes learning environments enabling and how they can strengthen learners' confidence, autonomy and meaningful participation in social and democratic life. The paper highlights the importance of participatory approaches, accessible learning opportunities and trust-based relationships, alongside the need for stable funding and institutional support to sustain the work of non-formal and informal learning providers. It also points to the value of closer cooperation between these providers and formal education institutions.

Across Europe, civil society organisations create spaces where people belong, learn through dialogue, collective action, and engagement within their communities. Their contribution to citizenship and digital competence development is significant yet remains insufficiently recognised and supported.

At SOLIDAR+, we remain committed to defending education as a public good and ensuring that everyone has opportunities to learn, develop key competences and exercise their rights throughout life. I hope this publication encourages greater political commitment to creating and sustaining learning environments that support meaningful participation in democratic life in an increasingly digital society.

Mikael Leyi
Secretary General of SOLIDAR & SOLIDAR+



Executive Summary

Citizenship and basic digital competences are essential for people to exercise their rights, participate in democratic life and navigate an increasingly digital society critically and independently. This policy paper examines what makes learning environments enabling for the development of these interconnected competences, with particular attention to the contribution of non-formal and informal learning (NFIL).

Drawing on academic literature and insights from a focus group with SOLIDAR+ members, the paper examines the educational practices and conditions that support competence development. The findings highlight the importance of connecting learning to people's lived experiences, fostering dialogue and critical reflection, enabling learners to influence educational processes and creating opportunities to apply competences in everyday and civic life. Trust-based relationships and individualised guidance also play an important role in strengthening learners' confidence and autonomy, supporting their ability to use and further develop their competences beyond educational activities.

The analysis highlights the distinctive contribution of NFIL providers, whose community connections and pedagogical flexibility can facilitate access, meaningful participation and continued learning. It also underlines the complementarity of formal, non-formal and informal learning, which offer different but mutually reinforcing opportunities for competence development. However, the capacity of NFIL providers to create enabling learning environments depends on adequate resources, sustained institutional support and cooperation across learning settings.

Building on these findings, SOLIDAR+ calls for sustainable funding for NFIL, investment in inclusive and participatory pedagogies, stronger support for digital citizenship education, sustained cooperation between education providers and more accessible recognition and validation of competences acquired through NFIL.

“ Citizenship and basic digital competences are essential for people to exercise their rights, participate in democratic life and navigate an increasingly digital society critically and independently. ”

1 Introduction and background

1.1 Policy context

Citizenship and digital competences are part of the key competences for lifelong learning, understood as the foundation for personal development, employability and active participation in peaceful, inclusive and sustainable societies.[1] These competences are developed from a lifelong perspective, in formal, non-formal and informal learning settings.[2] The Union of Skills, the EU's current overarching strategy for education, training and skills, and its Action Plan on Basic Skills present basic skills as the foundation of key competences, and identify digital and citizenship skills, alongside reading, numeracy and science, as the basic skills needed to participate fully in society, democratic life and the economy.[3] These two areas are increasingly interconnected: as everyday life and work become more digital, people need the skills to navigate digital environments alongside the citizenship competences to engage critically and responsibly within them.

The need to strengthen these competences is reflected in persistent inequalities. The Digital Decade Policy Programme sets a target for 80% of people aged 16–74 to gain basic digital skills by 2030.[4] However, in 2025, the EU average stood at 60% and progress at the current pace would leave the target unmet until 2037.[5] The shortfall is particularly pronounced among older people, people with low educational attainment and people living in rural areas, who may face greater social and economic consequences from digital exclusion. The Commission identifies the limited reach of existing provision, which largely centres on formal education and workforce-based training, as a structural challenge for reaching those groups of people, as well as people with disabilities and marginalised groups facing discrimination.[6]

Similar disparities affect citizenship competences. The Action Plan on Basic Skills reports disparities in civic knowledge among students according to socio-economic background and gender.[7] Although these findings concern formal education and one dimension of citizenship competence, they highlight the importance of examining how educational opportunities support the development of citizenship competences across different groups of learners. The European Democracy Shield identifies citizenship education and media and digital literacy as key for democratic resilience and calls for initiatives beyond formal education and training to reach people of all ages and socioeconomic backgrounds.[8]

2037

At the current pace, the EU's 2030 target for basic digital skills will be met 7 years late.

Addressing these disparities requires attention not only to the availability of learning opportunities, but also to the conditions in which learning takes place. Educational approaches, relationships, opportunities for participation and institutional support can shape whether learners are able to develop and practice citizenship and digital competences. Several European policy frameworks recognise the role of learning environments and educational approaches in supporting this process. The Council of Europe's Reference Framework of Competences for Democratic Culture emphasises the importance of democratic contexts, pedagogies and methodologies, and the principle of learning about, through and for democracy.[9] Its Recommendation on Developing and Promoting Digital Citizenship Education similarly highlights the role of learner-centred approaches and opportunities, as well as the need to co-design with learners, and to develop digital citizenship across different settings, including through families and communities.[10] At EU level, the Council has called for safe and inclusive learning environments that support common European values and democratic citizenship.[11]

Non-formal and informal learning (NFIL) providers are particularly relevant to this discussion because they offer learning opportunities beyond formal education and can complement formal provision through different approaches, experiences and opportunities for participation. In this context, the specific features of learning environments that foster citizenship and basic digital competences, and the contribution of NFIL providers to creating them and addressing inequalities in access to and participation in learning, warrant closer examination. This paper therefore maps the key elements of enabling learning environments, examines the role of NFIL providers in creating and contributing to these environments, and considers how learning in such contexts can complement formal education.

1.2 Purpose and contribution of the paper

SOLIDAR+ membership mission is to advance social justice through education. With a particular focus on strengthening democratic participation and inclusion, SOLIDAR+ and its members work to ensure that all learners have access to quality, public education in a lifelong learning manner. Their work on Global Citizenship Education (GCE) explores how education can equip people to critically examine global inequalities and power relations, understand shared responsibilities and take action towards more just, inclusive and sustainable societies. This work also recognises the importance of developing the competences needed to engage critically with social and political issues and participate meaningfully in democratic life, including in

an increasingly digital society. Achieving this requires learning opportunities that are accessible to diverse learners and support the development of citizenship and basic digital competences across different learning contexts.

SOLIDAR+'s recent publications have examined the contribution of education to inclusive societies and democratic participation, with particular attention to GCE and the role of NFIL. *Intersecting Pathways: Inclusive Education for Active Citizenship* (2024) explored the causes and consequences of educational exclusion, highlighting learner-centred approaches, community involvement, diversity and inclusive governance as key elements of inclusive education.[12] Its work on GCE has further examined how education can support democratic participation while addressing socio-economic inequalities and barriers to inclusion. *WE ALL BELONG: The Role of GCE in Supporting Democratic Participation and Addressing Current Global Challenges* (2023), and *Beyond Barriers: Strengthening Global Citizenship Education for Inclusive Societies* (2025) highlighted the contribution of civil society organisations to GCE provision, particularly for systematically marginalised groups, as well as the need for more inclusive, participatory and socially grounded approaches.[13] *Global Citizenship Education and Democratic Participation in Europe* (2024) similarly emphasised the importance of practical learning experiences, supportive educational environments and educator training in fostering democratic engagement, including in digital spaces.[14]

Taken together, these publications establish the importance of inclusive education, equitable access to learning and the contribution of civil society to developing citizenship competences. They also point to the need to consider not only who can access learning opportunities, but how learning is organised and supported. This year's paper builds on these findings by examining the features of learning environments that enable people to develop and practise citizenship and basic digital competences, and the contribution of NFIL providers to creating such environments.

Against this background, the paper has two objectives:

1. To map the understanding of crucial elements for learning environments to foster the development of citizenship competences and basic digital competences.

2. To examine the specific role of non-formal and informal learning providers in creating and contributing to these environments and highlight how the knowledge and skills gained in such contexts can complement formal education.

> **"The question is not only who can access learning opportunities, but how learning is organised and supported."**

Together, these objectives guide the paper's examination of the conditions that enable citizenship and basic digital competence development, the contribution of NFIL providers to creating such conditions, and the potential for learning across formal, non-formal and informal settings to complement and reinforce one another.

1.3 Methodology

This paper adopts a qualitative approach, combining a review of academic literature and policy documents with insights from a focus group with SOLIDAR+ members.

Academic literature was identified through targeted searches on Google Scholar using combinations of terms including "non-formal education and competence", "non-formal education and citizenship competence", "non-formal education and digital citizenship education", "critical digital competence" and "non-formal and informal education and competence development". Publications were selected based on their relevance to learning processes, educational approaches and conditions supporting competence development. Additional sources were identified through the reference lists of selected publications and further searches on themes emerging during the research. Studies examining formal education were also included where relevant to the analysis.

The review was complemented by EU policy documents, including European Commission communications and strategies and Council of the EU recommendations and conclusions, as well as Cedefop guidelines and Council of Europe frameworks and recommendations on key competences, democratic citizenship, digital competence, validation and lifelong learning. Previous SOLIDAR and SOLIDAR+ publications on global citizenship education, inclusive education and the recognition of non-formal and informal learning were also considered to situate the analysis within the organisation's broader policy work.

A focus group with five representatives of SOLIDAR+ member organisations was held in September 2026 to gather practitioners' perspectives on learning environments supporting citizenship and basic digital competences. The discussion addressed educational approaches, participation, inclusion, the contribution of NFIL providers and challenges encountered in their work. The focus group notes were examined alongside the literature to identify recurring themes, points of convergence and challenges raised by members.

Three sources, one analysis

Academic literature
Google Scholar searches & reference lists

Policy documents
EU, Cedefop, Council of Europe, SOLIDAR+ publications

Focus group
5 SOLIDAR+ member representatives, September 2026

2 Conceptual and analytical framing

This section outlines the key concepts underpinning the paper's analysis. It first defines citizenship and digital competences, before examining the concept of enabling learning environments and the distinctions between formal, non-formal and informal learning. Building on these definitions, it introduces the analytical framework used to examine the conditions that support competence development and the contribution of non-formal and informal learning providers.

2.1 Competences

The Council Recommendation on Key Competences for Lifelong Learning defines key competences as a combination of knowledge, skills and attitudes needed for personal fulfilment and development, employability, social inclusion and active citizenship, among other aims.[15] These competences develop throughout life and through formal, non-formal and informal learning across a range of contexts, including educational institutions, workplaces, families and communities.

The Council of Europe's Reference Framework of Competences for Democratic Culture (RFCDC) provides a complementary perspective by examining the resources that underpin competent action.[16] These comprise values, attitudes, skills, knowledge and critical understanding. Values guide judgements about what is desirable and how to act; attitudes shape how individuals respond to people, issues and situations; skills enable them to carry out actions and processes effectively; and knowledge and critical understanding allow them to interpret and evaluate information, ideas and experiences rather than accept them unreflectively.

The RFCDC also emphasises that competence involves mobilising and coordinating these resources in response to the demands of a particular situation. Competence is therefore not simply a matter of possessing knowledge or skills, but of being able to draw on relevant resources critically and appropriately in context. This distinction is important for understanding how learning environments can support not only the acquisition of competences, but also opportunities to practise and apply them.[17]

2.1.1 Citizenship competence

Citizenship competence is the ability to participate actively and responsibly in civic and social life. It involves understanding social, economic, legal and political structures, as well as global developments and

“ Competence is not simply a matter of possessing knowledge or skills, but of being able to draw on relevant resources critically and appropriately in context. ”

sustainability, and having the skills to engage critically with public issues, work with others and contribute to collective decision-making. It is underpinned by knowledge, skills and attitudes consistent with respect for human rights, democracy, equality, diversity and social cohesion.[18]

2.1.2 Digital competence

Digital competence is the confident, critical and responsible use of digital technologies for learning, work and participation in society. It encompasses finding and evaluating information, communicating and collaborating, creating digital content, protecting data and privacy, staying safe and solving problems. It also involves understanding the opportunities, limitations and risks of digital technologies, alongside the ethical and legal considerations that shape their use.[19]

Citizenship and digital competences increasingly intersect in digital environments, where accessing and critically evaluating information, communicating and collaborating with others, exercising rights and responsibilities, and participating in public life involve both competences. Digital citizenship education (DCE) addresses this intersection by supporting learners in developing the knowledge, skills, values and attitudes needed to engage actively, critically and responsibly in digital society.[20]

2.2 Learning environment

A learning environment encompasses the physical, social and cultural contexts in which learning takes place, including the relationships, interactions and institutional arrangements that shape learners' experiences.[21] It extends beyond formal educational settings to include workplaces, local communities and civil society, reflecting the range of contexts in which learning occurs throughout life.[22] From this perspective, a learning environment is not simply a place where learning happens, but an interconnected whole encompassing the learners involved, the activities through which learning takes place, the relationships that shape participation and the ways in which learning is applied.[23] Understanding learning environments therefore requires attention to both learners' experiences and agency and the wider social, cultural and institutional conditions that shape them.

2.3 Formal, Non-Formal and Informal Learning

Formal learning refers to the acquisition of knowledge, skills and competences within an institutionalised, organised and structured educational or training setting, such as a school, university or vocational training institution. It is intentional and characterised

Digital competences

- Finding & evaluating information
- Communicating & collaborating
- Creating digital content
- Protecting data & privacy
- Staying safe
- Solving problems

by defined learning objectives, planned learning activities and established arrangements for teaching and assessment, and typically leads to a recognised qualification or certification.[24]

Non-formal learning refers to the acquisition of knowledge, skills and competences through institutionalised, intentional and planned learning activities with defined objectives and some form of learning support, such as guidance from a teacher, trainer or facilitator. It can take place in a variety of settings, including workplaces, community organisations and online environments, and encompasses activities such as workplace training, structured online courses, workshops and educational programmes organised by civil society organisations. Although it takes place outside or alongside formal education and training, its outcomes may be validated and may lead to certification.[25]

Informal learning refers to the acquisition of knowledge, skills and competences through everyday experiences and activities related to work, family life, leisure and social participation, which are not institutionalised, explicitly organised around learning objectives or structured learning support. It can occur through interpersonal relationships, practical experiences, volunteering, cultural and sporting activities, youth work or everyday responsibilities. Such learning may be intentional or unintentional from the learner's perspective, and its outcomes may also be recognised or validated.[26]

Although non-formal and informal learning differ in their degree of organisation and intentionality, they can coexist within the same educational and community settings.[27] Civil society organisations, youth organisations, adult education providers and other community-based actors may organise structured learning activities while also creating opportunities for informal learning through participation, collaboration and shared responsibilities. This paper examines both dimensions, considering how providers contribute to learning environments in which citizenship and basic digital competences can be developed through organised educational activities and everyday social practices.

2.4 Enabling learning environments

For this paper, an *enabling learning environment* is understood as one in which educational practices, relationships, resources and institutional arrangements support inclusive participation, meaningful learning and competence development. Such environments provide learners with opportunities to engage actively in learning, develop and practise competences, and strengthen their capacity to apply what they learn in different contexts.

This approach builds on the understanding of competence as the ability to mobilise knowledge, skills and attitudes in response to the demands of particular situations.[28] The analysis therefore considers how different elements of learning environments shape learners' opportunities to participate meaningfully, exercise agency within learning activities, and progressively develop and apply their competences beyond the immediate learning context. It then examines how NFIL providers contribute to creating these conditions through their pedagogical approaches and relationships with learners and communities, and how connections between formal, non-formal and informal learning can enable learners to build on their experiences across different settings. Particular attention is paid to the distinction between participation in learning activities and opportunities to exercise agency, develop autonomy and apply learning beyond the immediate educational context.

3 Findings

3.1 Enabling learning environments for competence development

3.1.1 Citizenship competence development

Findings suggest that citizenship competence development requires more than acquiring knowledge about democracy. Since competences encompass knowledge, skills and attitudes, citizenship education must also give learners opportunities to develop and practise the skills and attitudes involved in democratic participation. **Learning environments can support this by connecting education to learners' lived realities, encouraging dialogue and critical reflection, and allowing learners to experience democratic practices through collective decision-making.** Citizenship is therefore learned not only by understanding democratic principles, but also by putting them into practice.

Learners' lived realities emerged as a **key entry point** for citizenship education. Participants in the focus group with SOLIDAR+ members noted that concepts such as citizenship, democracy, equality and sustainability can feel distant when introduced in abstract terms, whereas experiences and concerns learners recognise from everyday life make these issues more accessible and relevant.

Relevance makes issues accessible, but understanding them develops through interaction with others. **Dialogue** and the exchange of different perspectives allow learners to construct and critically examine their understanding of political and societal issues. Hoskins and colleagues, in their examination of citizenship learning through social participation both inside and outside schools, describe this as **meaning-making,** defined as learning by participating.[29] Their findings identify less formalised, contextualised and student-led approaches, particularly those based on dialogue and discussion, as the most effective strategies for developing citizenship competences. Similarly, Milana and Sørensen, in their in-depth case studies of two non-formal adult education activities organised by Danish Folk High Schools and Day High Schools, introduce the concept of **negotiation of meaning** to explain how citizenship competences are developed when learners encounter different perspectives, question assumptions and jointly reconsider their interpretations of societal issues.[30] The experiences of SOLIDAR+ members point

How citizenship competences develop

Lived realities – connecting learning to learners' everyday experiences

Dialogue & critical reflection – exchanging perspectives, questioning assumptions

Democratic practice – experiencing collective decision-making

the same way. Representatives emphasised discussion-based workshops, exchanges of perspectives and critical reflection, and described creating opportunities for learners to explore issues together, question information and reach their own conclusions rather than receive predetermined answers. Through collective dialogue, learners express their opinions, engage with those of others and learn to navigate disagreement and plurality.

Importantly, these processes of meaning-making are themselves shaped by how learning environments are organised. Citizenship competences are not developed solely through discussing societal issues and democratic principles, but through opportunities to experience and practise them. **When learners help shape activities, collectively set rules and take part in shared decision-making, they can practise citizenship competences within the learning process itself.** The focus group highlighted the importance of horizontal relationships, treating participants as equals and creating opportunities for meaningful influence over learning activities. In such environments, democratic participation becomes both a means of learning and something learners practise, and reflection on democratic principles is tied to the responsibilities, disagreements and negotiations involved in putting them into practice.

The distinction between being consulted and having influence is particularly relevant here. An ethnographic research study on civic participation in Madrid compares grassroots movements, where participants negotiated differences and made collective decisions, with an institutional consultation concerning the Legazpi Market, where residents could express their views but had limited influence over outcomes.[31] While the former provided opportunities to practise negotiation, build agreements and take collective responsibility, the latter generated frustration and feelings of exclusion. The extent to which participants can influence decisions therefore shapes both their experience of participation and the opportunities for democratic learning it provides.

Whether learners can participate meaningfully also depends on the **social relationships** within the learning environment and how **educators** facilitate the learning process. Milana and Sørensen argue that exchanging perspectives requires educators to facilitate discussions in which learners can question established interpretations and develop their own understanding, rather than simply work towards consensus.[32] SOLIDAR+ members described the same role: not providing ready-made answers, but encouraging learners to reflect critically, consider different perspectives and draw their own conclusions. **Facilitation is important also in addressing power relationships that arise**

> **“ The educator’s role is not to provide ready-made answers, but to encourage learners to reflect critically and draw their own conclusions. ”**

within a group of learners. A study examining a participatory media-education initiative in Agrigento showed how opportunities for collective creation and expression were accompanied by conflicts and unequal group dynamics, highlighting the **role of educators in mediating disagreements and supporting meaningful participation of all learners within a group.**[33] Research in formal education points in the same direction: a systematic literature review of studies examining the impact of citizenship education on active citizenship outcome shows how relationships and activities can matter more than civics lessons in promoting democratic values, and that positive student-teacher relationships are associated with greater societal involvement and citizenship knowledge.[34] The relationships between educators and learners, and among learners themselves, shape who gets to participate, whose voices are heard and ultimately what people learn from putting democratic principles into practice.

Finally, the connection between citizenship learning and learners' lived realities should not be limited to the starting point of the learning process. Learning environments should also create opportunities for learners to apply what they have learned to the societal issues and challenges affecting their lives and communities. Hoskins and colleagues emphasise the importance of connections between learning experiences in educational settings, families, peer groups and wider communities.[35] Milana and Sørensen similarly emphasise the **importance of ongoing exchanges between educational institutions and the public sphere, through which learners can engage with societal debates, strengthen their awareness of local and global issues and develop a greater sense of political efficacy.**[36] SOLIDAR+ members likewise stressed the importance of encouraging learners not only to critically understand the problems affecting their communities, but also to reflect on what they can do to address them, individually and collectively. **Learning providers therefore have an important role in connecting educational activities with opportunities for civic engagement,** allowing learners to put their developing competences into practice beyond the learning environment and strengthening their sense of agency and capacity to contribute to change in their communities.

3.1.2 Basic digital competences development

Findings suggest that the enablers for learning environments to support basic digital competences are the combined practical learning with individualised guidance and opportunities to use digital technologies independently. As in citizenship education, learning needs to be relevant to participants' experiences and circumstances. Developing basic digital competences

also requires attention to how practical skills, confidence and the ability to navigate technologies without assistance relate to one another.

Connecting digital learning to learners' everyday needs and interests is particularly important for initial and sustained engagement. Examining digital mentoring as an approach to supporting adult digital inclusion, Marshall and colleagues emphasise that effective digital mentoring begins with understanding learners' previous experiences with technology, their attitudes towards it and what they hope to achieve.[37] Rather than focusing exclusively on a predefined set of technical skills, learning should be organised around tasks that participants find relevant to their lives. SOLIDAR+ members described supporting learners with applying for jobs, booking medical appointments, accessing administrative services and completing online forms, tasks that respond to concrete needs and that learners can practise and use outside the educational setting. Needs and interest-driven activities can encourage older adults' engagement with digital technologies: learning providers should address intrinsic motivation in the target group through their interests, needs, desired and personal reasons for developing digital competences. In this regard, Beh and colleagues warn to not treat older learners as a homogeneous group defined by limited digital skills and point instead to the importance of identifying and using differences in experience, motivation and interest to develop targeted programmes.[38]

Hands-on practice and individualised guidance are central to developing the ability to use digital technologies. Experiential learning, practical exercises and flexible teaching approaches that can easily adapt to learners' needs and levels of experience are particularly crucial.[39] This requires particular attention to learners' prior knowledge: a study based on interviews with digital-skills instructors in Flanders describes how unfamiliar terminology, devices and applications can make apparently simple tasks demanding for older beginners.[40] A digital task labelled as "basic" may presuppose knowledge the learner does not yet have, so support needs to start from the learner's actual starting point and guidance needs to be individualised. Guidance should also aim to build **autonomy**. SOLIDAR+ members distinguished between helping someone complete a digital procedure and supporting them to carry it out themselves. Submitting an online application with an educator's help does not mean a learner can complete a comparable task alone. Learning activities therefore need to let participants try tasks themselves, receive explanations and feedback, and gradually take more responsibility for completing them.

Trusting and supportive relationships shape whether this progression is possible. Learning to use unfamiliar technologies can involve acknowledging difficulties, asking for help and making mistakes, particularly for people with limited experience or confidence. Marshall and colleagues describe productive digital mentoring as a relationship in which learners set their own goals, take an active part in learning and receive support adapted to their circumstances.[41] Similarly, Smit and colleagues highlight the effectiveness of informal digital education for learners with limited digital skills, linking it to personalised support and trust-based relationships between volunteers and participants.[42] Their findings also show how **the social dimension of community-based learning fosters feelings of safety, familiarity and positive affirmation, creating conditions in which learners feel more comfortable engaging with unfamiliar technologies.** SOLIDAR+ members likewise emphasised the value of trust, patience and personalised guidance, including the need to accommodate different learning rhythms. These relationships support learners in asking questions, experimenting and persisting through difficulties, strengthening the confidence needed to use digital technologies more independently.

Opportunities to apply and continue practising digital skills beyond educational activities are

equally important, as they allow learners to connect what they have learned with the practical demands of everyday life. Marshall and colleagues connect digital mentoring to the wider social environments in which people use technology, including families, libraries and community organisations, highlighting how digital learning extends beyond organised activities.[43] The practical needs identified by SOLIDAR+ members, such as applying for employment, accessing public services and managing administrative procedures, illustrate how learners can put their skills into practice in situations that matter to them. These experiences can help consolidate learning while strengthening learners' confidence and autonomy to navigate unfamiliar digital tasks and continue developing their competences independently. However, opportunities for continued practice also depend on access to devices, connectivity and accessible digital services. These wider conditions shape learners' ability to apply and further develop their competences beyond educational settings.

Finally, **citizenship and digital competence development are increasingly interconnected,** calling for educational approaches that address them together. As a growing part of social and civic life takes place online, meaningful participation requires not only the ability to use digital technologies, but also the capacity to critically assess information, form informed opinions and understand how technologies shape society. At the same time, **citizenship education can contribute to digital competence development by fostering the critical judgement and awareness needed to engage with digital environments beyond their technical use.** In their systematic mapping review of critical approaches to digital competence, Marín and colleagues highlight the importance of understanding the social and political dimensions of digital technologies.[44] This connection also emerged in the SOLIDAR+ focus group, where members emphasised the importance of helping learners assess the reliability of online information, recognise misleading content and navigate digital spaces responsibly. **Digital citizenship education offers a way to bring these dimensions together,** connecting practical digital skills with critical reflection on the role of technologies in society and the knowledge, skills and attitudes needed to exercise rights online and participate meaningfully and critically in democratic life, both online and offline.

3.2 The role of NFIL providers in creating enabling learning environments

The findings above identify conditions that support citizenship and basic digital competence development, including meaningful participation, dialogue, practical

“ Citizenship and digital competence development are increasingly interconnected, calling for educational approaches that address them together. ”

experience and opportunities for learners to exercise agency. NFIL providers can contribute to these conditions by connecting organised educational activities with the experiences, relationships and forms of participation through which people also learn in everyday life. Understanding this contribution requires looking both at what happens within NFIL activities and at how it relates to learning in other settings.

NFIL providers are particularly well placed to create these enabling conditions through their **proximity to learners** and their **embeddedness in local communities.** Their knowledge of the social contexts in which people live, work and participate in social life allows them to identify barriers to participation, respond to learners' interests and circumstances, and connect learning activities to their everyday experiences. SOLIDAR+ members emphasised the importance of understanding the communities they work with, with practitioners highlighting the need to know who participates in learning activities, their circumstances and what matters to them before deciding how to approach a topic. Beyond making learning more accessible and relevant, this proximity can help NFIL providers create **familiar and supportive environments** in which relationships of trust develop. This is consistent with findings from a comparative study of formal and informal educational settings which highlights the importance of trust-based relationships in community-based provision for strengthening learners' confidence and willingness to participate.[45]

A further contribution of NFIL providers lies in their **organisational and pedagogical flexibility,** which allows them to **respond to diverse learning needs and rapidly changing social and technological contexts.** Lee and colleagues describe how non-formal digital skills programmes can adapt their curricula, duration and delivery, while employing a variety of methods, including self-paced, instructor-led and project-based learning, to accommodate different levels of prior knowledge, schedules and learning goals.[46] Research on community digital mentoring similarly highlights the importance of tailoring support to learners' experiences, confidence and intended uses of technology.[47] SOLIDAR+ members described activities addressing practical digital needs, such as navigating administrative procedures, accessing public services and using technologies required in everyday life, illustrating how learning can be organised around participants' priorities rather than a predetermined sequence of skills. Lee and colleagues also highlight the capacity of non-formal programmes to respond to rapid technological changes.[48] This responsiveness is particularly relevant as digital technologies increasingly shape access to information, public services and opportunities for civic participation. By adapting both their pedagogical approaches and learning content to learners' needs and evolving digital practices, NFIL providers can support the development of digital and citizenship competences that remain relevant to people's everyday lives. However, adapting learning activities to different needs requires sufficient staff time, resources and opportunities for individualised support. The flexibility of NFIL provision should therefore be understood as dependent on the organisational and financial conditions in which providers operate.

The diversity of pedagogical approaches employed by SOLIDAR+ members is illustrated in SOLIDAR+'s Library of Pedagogical Approaches in Non-Formal Education, which brings together concrete examples of approaches such as transformative learning, popular education, experiential learning and study circles.[49] The library offers a practical resource for exploring how principles of participation, critical reflection and learner agency can be translated into educational practice.

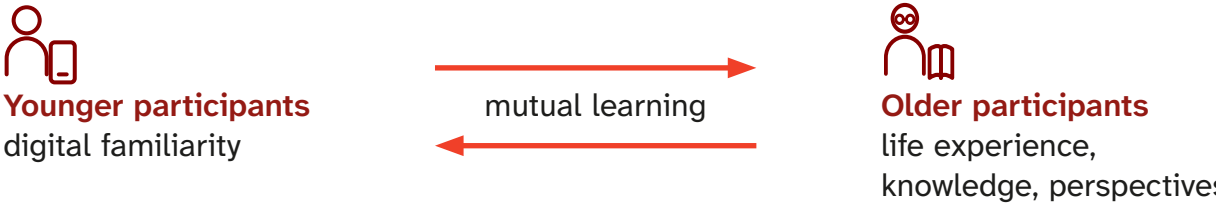
NFIL providers can also create opportunities for **intergenerational learning,** bringing together participants whose different experiences and

knowledge become resources for mutual learning. SOLIDAR+ members described activities in which younger participants contributed their familiarity with digital technologies, while older participants brought life experience, knowledge and different perspectives. Rather than a one-way transfer of digital skills, these exchanges fostered communication and mutual understanding across generations. They also highlighted how recognising older learners' knowledge and experience could strengthen their motivation and engagement, allowing them to contribute actively rather than positioning them solely as recipients of assistance. This reflects Lee and colleagues' understanding of learner-centred education as a reciprocal process, in which learners are recognised as active contributors to learning. By facilitating exchanges that are less common in age-structured formal educational settings, NFIL providers can thus support the development of digital competences alongside the dialogue, mutual understanding and learner agency relevant to citizenship competences.[50]

The contributions of NFIL providers discussed above depend, however, on the **organisational and institutional conditions** under which they operate. In a literature review examining the conditions that encourage adults, particularly those in vulnerable positions, to engage in learning, Broek and colleagues highlight the interdependence between system-level conditions, including funding, governance and partnerships, and the practices through which adult learning is supported.[51] Their subsequent empirical study identifies funding instability, limited political commitment and weaknesses in institutional cooperation as interconnected constraints experienced by organisations working with adults in vulnerable positions.[52] Similar concerns emerged in the SOLIDAR+ focus group.

These structural challenges have direct implications for the educational approaches discussed in this paper. Individualised guidance, trust-based relationships and responsiveness to learners' circumstances require **time, resources and continuity.** Yet, as SOLIDAR+ members highlighted, short-term funding and limited institutional support can undermine providers' capacity to sustain these conditions. The flexibility and proximity to learners that characterise NFIL provision therefore cannot be sustained through providers' efforts alone, but require adequate and stable funding, institutional support and political commitment.

Learning across generations



“ The flexibility and proximity to learners that characterise NFIL provision require adequate and stable funding, institutional support and political commitment. ”

3.3 Connections between learning environments: complementarity, cooperation and recognition

The development of citizenship and basic digital competences draws on **complementary experiences across formal, non-formal and informal learning.** As competences encompass knowledge, skills and attitudes, different learning contexts provide opportunities to acquire knowledge, practise skills, engage with others and apply what is learned in everyday life. In an article examining digital literacy across formal and informal learning contexts, Meyers and colleagues explain how digital literacy develops through socially situated practices across formal and informal environments, rather than through the acquisition of technical skills alone, pointing to its life-wide and lifelong character.[53] This relates to the importance of understanding different learning environments as interconnected parts of a wider **learning ecosystem**.[54] In a study comparing a community-based digital literacy initiative with a digital skills course in a vocational institution, the authors analyse how different learning settings can support complementary dimensions of digital literacy development.[55] In this case, the community initiative placed greater emphasis on social relationships, trust, familiarity and individualised support, while the vocational setting offered more structured opportunities to develop technical skills and access to greater technical and material resources. The authors also observed feelings of shame and fear among learners in the more formalised setting, highlighting how social dynamics can shape participation in digital learning. Similarly to Meyers and colleagues, they suggest that developing digital literacy requires attention to both its social and technical dimensions, which different learning environments may support in complementary ways.

Complementarity is therefore not simply a matter of combining flexible and structured teaching: **different learning environments can address different dimensions of competence development and different barriers learners encounter.**

The complementarity of different learning environments also points to opportunities for cooperation between NFIL providers and formal education institutions, allowing them to build on each other's strengths rather than treating learning experiences as separate. In their study on citizenship learning, Hoskins and colleagues suggest that schools can build on democratic learning in families and communities, including through peer-led activities and by involving parents engaged in community or political life.[56] Civil society organisations can contribute their educational approaches and knowledge of community experiences to formal settings. Similarly, Lee and colleagues highlight how non-formal education can provide **space to experiment with new pedagogical approaches and digital tools** in response to rapidly changing technologies and diverse learners' needs, with successful practices potentially informing formal education.[57]

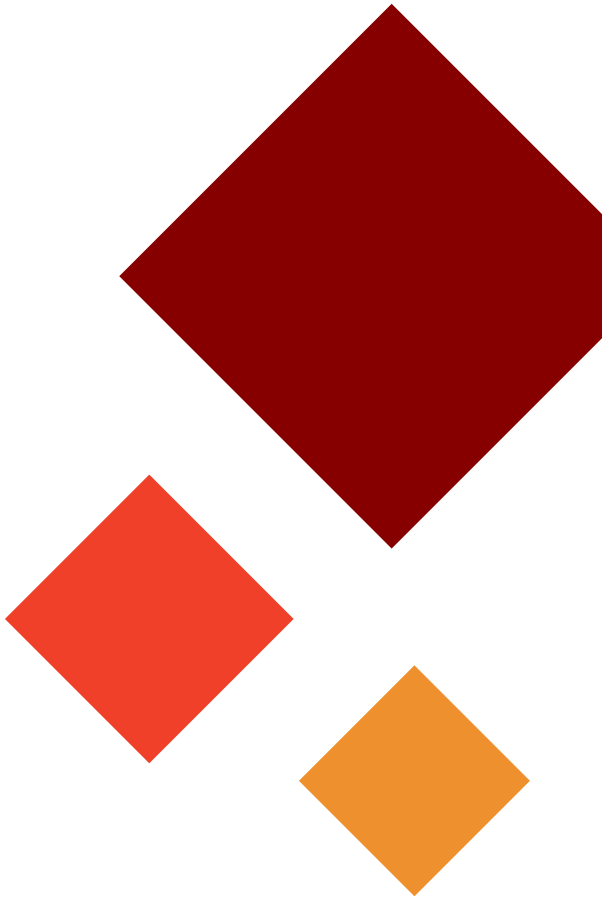
Realising this complementarity requires more than establishing partnerships: cooperation must allow educators and NFIL providers to understand and build on each other's contributions in practice. A study examining an Irish initiative bringing together secondary-school teachers and youth workers highlights the value of joint professional learning in developing mutual understanding and shared educational practices.[58] In the same studies, the authors note that connections between participants remained largely dependent on informal relationships, requiring further support to become sustainable. Similarly, SOLIDAR+ members stressed the importance of relationships with schools, community organisations and local actors in sustaining activities. Their experiences suggest that cooperation often relies on existing relationships and individual initiative, making it vulnerable to changes in staff,

resources or funding. Cooperation therefore cannot depend solely on the initiative of individual educators or organisations. Dedicated resources and institutional arrangements are needed to sustain collaboration and enable different learning environments to build on each other's contributions beyond individual projects.

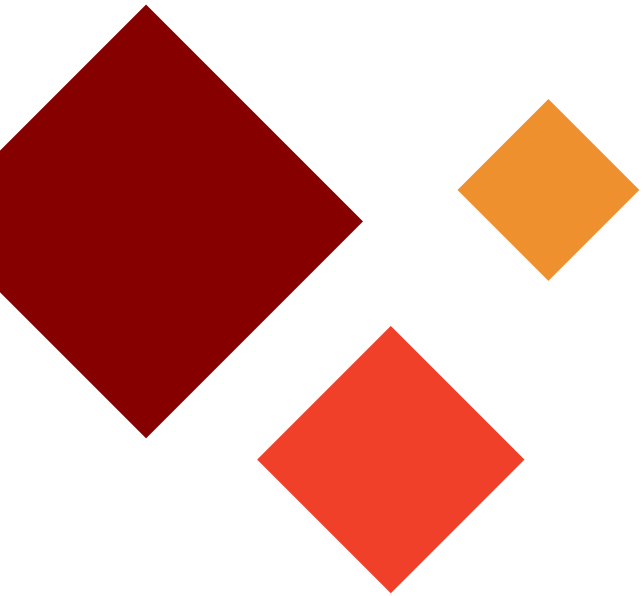
Cooperation between providers is not enough to connect learning across settings, because **learning that is not visible cannot be built on.** SOLIDAR+ members identified lack of **recognition** as a major concern: non-formal learning is still not widely seen as a valuable space for developing citizenship and digital competences, and some described a wider view that learning matters only when it connects to employment or formal qualifications. Smit and colleagues similarly highlight disparities in how formal and informal learning are valued and recognised, which can limit what competences developed outside formal institutions offer learners in terms of further opportunities.[59] SOLIDAR+, in its input paper on the Skills Portability Initiative, makes a related point: competences acquired through volunteering and community engagement often remain invisible or unevenly recognised across Member States, and qualification frameworks still focus mainly on formal qualifications rather than on skills acquired through non-formal and informal learning.[60]

Recognition should not, however, be equated with formal validation. The Council Recommendation on the validation of non-formal and informal learning and Cedefop's European guidelines distinguish identification, documentation, assessment and certification, which serve different purposes. Identifying and documenting learning, including through reflection and self-assessment, can help individuals recognise their own competences and build on earlier experience.[61] In a study examining the recognition of competences acquired through informal learning among third-sector professionals, Di Rienzo shows how narrative tutoring and competence portfolios helped third-sector professionals become more aware of competences acquired through informal learning.[62] Formal validation, by contrast, assesses learning outcomes against established standards and may lead to certification. Recognition should respond to learners' purposes and not make certification the expected outcome of every learning experience, which matters especially for citizenship learning, where the value of participation should not be reduced to certified outcomes.

How accessible recognition is also determines who benefits. Tac-TIC Emploi!, an adult learning initiative in Brussels, uses participatory assessment through reflection, dialogue with educators and practical



tasks to help learners identify and communicate their competences.[63] Procedures that depend on written documentation, digital submissions or standardised assessment can work against this, particularly for learners with limited digital competences, which links recognition to digital inclusion concerns. OBESSU, in its position paper on validation, calls for accessible, learner-centred methods that accept different forms of evidence and recognise competences developed through civic participation beyond their labour-market value.[64]



For recognition to support continuity between learning environments, institutional cooperation must translate into accessible pathways for learners. NFIL providers can support learners in identifying and documenting their competences and understanding available options, while receiving institutions and competent validation bodies are responsible for entry requirements, assessment and certification, as appropriate. Recognition mechanisms should enable learners to make their competences visible and build on previous experiences without reducing the value of learning to formal qualifications or labour-market outcomes. These processes also require guidance, resources and clearly defined responsibilities, so that the work does not fall on providers who already operate with limited resources. **Ultimately, for cooperation to support continuity in learning, learners need to be able to make their previous experiences visible and build on them in other settings.**

“ Learners need to be able to make their previous experiences visible and build on them in other settings. ”

4 Policy recommendations

The findings of this paper highlight the importance of learning environments that connect education to learners' lived experiences, foster meaningful participation and create opportunities to develop and apply citizenship and basic digital competences. They also underline the contribution of non-formal and informal learning (NFIL) providers and the institutional and financial conditions needed to sustain their work. To translate these findings into policy and practice, SOLIDAR+ calls on EU institutions, Member States and relevant education stakeholders to:

4.1 Secure and sustainable funding for non-formal and informal learning

The European Commission and Member States should recognise NFIL providers as key actors in implementing the EU Action Plan on Basic Skills, national lifelong learning strategies and relevant Digital Decade objectives. The next EU long-term budget (2028–2034) should secure ambitious funding for Erasmus+ and AgoraEU, with protected sectoral allocations within Erasmus+ to safeguard adult and non-formal education, while ensuring the continuation of the DEAR Programme as a dedicated funding stream for global citizenship education and civil society-led learning. Funding arrangements should ensure equitable access for smaller civil society organisations and provide predictable, long-term support, including multiannual operating grants, to sustain staff, learning spaces and community-based provision. Funding should also support outreach and measures addressing barriers faced by learners experiencing social, economic or digital exclusion.

4.2 Invest in inclusive and participatory educational approaches

Member States and national and local education authorities should ensure that funding schemes cover the preparation time, individualised guidance and outreach required for inclusive, learner-centred education, alongside the delivery of learning activities. They should invest in pre-service and in-service educator training on participatory facilitation, critical dialogue, collective decision-making and inclusive pedagogies. Funding and programme requirements should preserve providers' flexibility to adapt learning methods and content to learners' circumstances and ensure that learners can meaningfully influence educational activities. Support should also cover accessible learning materials, digital equipment and other measures needed to overcome barriers to participation.

4.3 Promote an integrated approach to citizenship and basic digital competence development

The European Commission and Member States should strengthen the integration of digital citizenship education (DCE) into citizenship and basic digital competence policies and programmes, recognising their interdependence. This requires moving beyond approaches that treat digital competences primarily as technical skills, while ensuring that citizenship

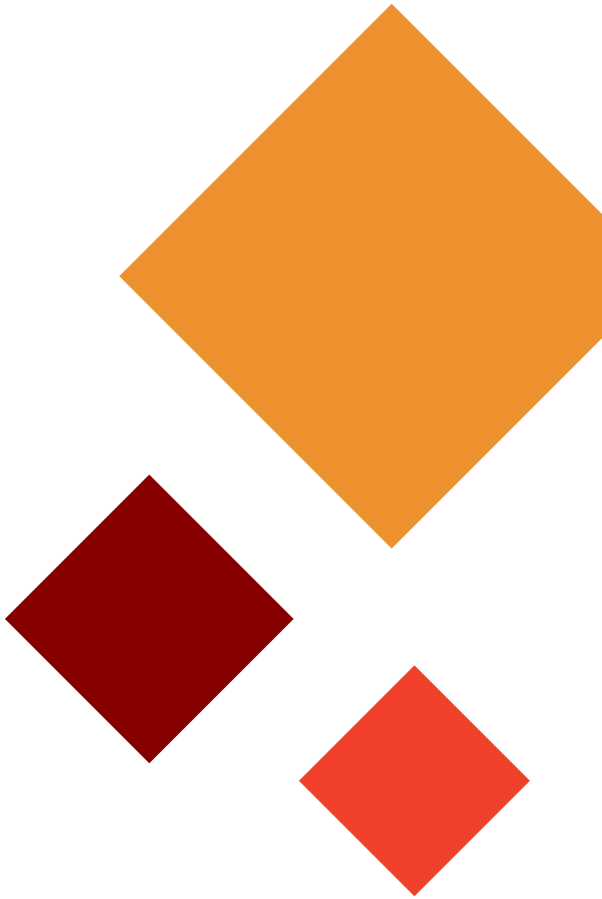
education addresses democratic participation and the exercise of rights in digital environments. Member States should support NFIL providers in connecting practical digital learning with critical reflection on its social and democratic implications, through dedicated funding, pedagogical resources and pre-service and in-service educator training.

4.4 Strengthen cooperation between formal and non-formal learning environments

Member States should support sustained cooperation between formal education institutions, NFIL providers and community organisations to facilitate continued learning across different settings and the exchange of pedagogical practices. National and regional authorities should provide institutional and financial support for joint planning, coordination and referral pathways. Cooperation should be assessed according to the opportunities it creates for learners and educators, rather than the number of partnerships established. The next Erasmus+ programme should strengthen cross-sector cooperation and ensure accessible participation for smaller NFIL providers.

4.5 Improve the recognition and validation of competences acquired through non-formal and informal learning

The European Commission and Member States must strengthen accessible and inclusive pathways for recognising competences developed through NFIL. Recognition and validation arrangements should reflect the diversity of learning experiences, avoid bureaucratic obstacles for small providers, and offer flexible, low-barrier options for learners to demonstrate their competences. Formal education institutions and validation bodies should cooperate with NFIL providers to help learners demonstrate their competences and access further education and training. Validation should remain voluntary and responsive to learners' objectives, without reducing the value of NFIL to formal certification.



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SOLIDAR organises its work for lifelong and lifewide learning for democratic participation through SOLIDAR+. The purpose of SOLIDAR+ is to advance our common policy and advocacy work while addressing internal learning needs in what we consider a learning hub for the network. Through our member and partner organisations, SOLIDAR+ engages communities in EU decision-making processes, empowers people through lifelong learning, and voices their concerns to the EU institutions by carrying out active lobbying, projects of collective action, policy monitoring, research and awareness-raising.

> **“ Citizenship and basic digital competences are essential for people to exercise their rights, participate in democratic life and navigate an increasingly digital society critically and independently. ”**

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