The Role of Regions in Enabling the Formation of Learning

Communities- why regions matter. Sari Rautio Committee of the Regions

Across Europe, the twin pressures of technological disruption and demographic change are reshaping how people learn, work, and participate in civic life. Cities and regions sit at the junction where education systems meet labour markets, public services, and everyday community life. This makes the **regional level** the most practical scale for building **learning communities**—places where learners of all ages can access opportunities, where providers and employers coordinate, and where knowledge generated in universities and firms diffuses into daily practice.

European policy is converging on this place-based view. The Commission's STEM Education Strategic Plan (2025) calls for partnerships that link schools, VET, higher education, research, and employers, with micro-credentialed pathways that respond to regional skills demand. Alongside, 2030 Digital Compass (2021) sets population-level targets on digital skills and connectivity that cannot be met without regional orchestration; A European Strategy for Universities (2022) positions universities as civic, regional anchors; A New European Innovation Agenda (2022) promotes Regional Innovation Valleys and deep-tech talent; and Harnessing Talent in Europe's Regions (2023) tackles demographic decline by building regional skills infrastructures and talent attraction mechanisms. Regions are the obvious orchestrators because they control (or strongly influence) spatial planning, economic development, transport, health and social services, and many parts of the skills ecosystem that shape learning throughout the life-course.

Learning communities as regional ecosystems

Three long-standing European ideas converge at the regional scale:

The Learning City/Region. Learning benefits are social and economic, accruing to people,
firms, and public bodies; the "learning city" is therefore a place-based framework that links
providers with community needs across the life-course. Regions translate this into
neighborhood-level access, intergenerational participation, and stronger ties between
learning and wellbeing.

- 2. The Knowledge Triangle (KT). Synergy among education, research, and innovation is not incidental—it must be deliberately organized in spaces and processes that let pupils, VET learners, students, researchers, entrepreneurs, and officials co-create and test solutions. KT becomes tangible in regions through co-located facilities, shared staff, joint curricula, and challenge-driven project portfolios.
- 3. Innovation ecosystems. Effective regional ecosystems provide physical, social, and digital learning spaces—innovation gardens, living labs, challenge platforms—where learning and innovation reinforce each other. Regions are the scale at which such spaces can be integrated into land-use, procurement, and investment decisions.

These anchors situate **regions as orchestrators**: they convene the quadruple helix (public, private, academic, and civic actors), align incentives, and turn fragmented initiatives into a **portfolio** that advances competitiveness and inclusion.

Policy alignment: what the newest EU agenda implies for regions

- Digital Compass (2021). Targets such as 80% of adults with basic digital skills and 20 million ICT specialists by 2030 with greater gender balance require regional coalitions that connect schools, VET, universities, libraries, and employers; they also presuppose ubiquitous connectivity and device access, which are planned and financed locally. Regions can treat these targets as population-level learning KPIs, disaggregated by municipality and neighborhood.
- European Strategy for Universities (2022). Calls for universities that are deeply interlinked with society and regions, strengthening alliances with VET and employers, opening campuses to citizens, and scaling micro-credentials and flexible learning. Regions can formalize this civic role via regional university compacts, with shared staffing, joint programs, and performance metrics tied to local challenges.
- New European Innovation Agenda (2022). Emphasizes scaling deep-tech ecosystems and building Regional Innovation Valleys that aggregate demand, talent, and finance. Learning communities are the *feeder system* for these valleys: regional authorities can braid education, talent attraction, and entrepreneurship under one investment narrative.

- Harnessing Talent in Europe's Regions (2023). Offers a place-sensitive policy package for
 regions facing talent loss and demographic headwinds, including talent partnerships, skills
 infrastructures, and mobility schemes. Learning communities provide the platform—from
 early childhood to mid-career reskilling—through which these instruments deliver.
- STEM Education Strategic Plan (2025). Provides a delivery agenda for STEM pipelines, VET—
 HE interfaces, micro-credentials, and industry—education partnerships—all explicitly suited to regional orchestration. Regions can translate this into (i) place-specific skills pathways; (ii) demand-led partnerships with employers; and (iii) mission-based learning projects tied to energy, mobility, health, and circular-economy goals.

What regions actually do: eight enabling roles

1) Orchestrate the Knowledge Triangle locally

Establish **joint governance** across universities, VET providers, schools, firms, and municipalities. Move from ad-hoc projects to **rolling, challenge-based portfolios** where education and research outputs are valorized in local firms and public services. Evidence from Espoo's ecosystem shows that purpose-built learning spaces (e.g., in Espoo several Aalto initiatives such as Aalto Design Factory) accelerate the shift from siloed teaching to **co-creation**.

Policy link: University Strategy (civic engagement), NEIA (knowledge valorisation, deep-tech talent). **Instrument:** a **Regional KT Compact** with annual targets for joint courses, shared appointments, challenge projects, placements, and SME-friendly IP/data clauses.

2) Make learning visible, portable, and continuous

Citizens need **clear, flexible pathways** across formal, non-formal, and informal learning. Regions should align providers on **micro-credential frameworks** recognized by employers and stackable into VET/HE awards. Tie credentials to **local missions**—e.g., building retrofits, e-mobility depots, nature restoration—so that learning leads to paid work or civic engagement.

Policy link: STEM Plan (micro-credentials), University Strategy (lifelong learning). **Instrument:** a **Regional Learning Pass** (digital wallet) integrated with employer HR systems.

3) Build the digital backbone for learning

Create a regional **learning data space** with participation rules; provide **open data** and **area digital twins** for challenge-based pedagogy; and ensure **connectivity and device access** in line with Digital Compass. Offer shared access to **HPC/modelling** through university or research infrastructures for schools, VET, and SMEs.

Policy link: Digital Compass (skills and infrastructure), NEIA (shared tech infrastructures). **Instrument:** a **Learning Data Commons** plus teacher/trainer upskilling in data-rich pedagogy.

4) Use procurement and public projects as learning engines

Require apprenticeships, student projects, and research partnerships in major contracts. Turn infrastructure, health, and climate projects into **learning-by-doing** platforms that also build SME capability.

Policy link: STEM Plan (industry–education partnerships), NEIA (demand aggregation). **Instrument: Outcome-based procurement clauses** that score bids for embedded learning, SME participation, and knowledge-sharing deliverables (open toolkits, modules).

5) Stand up Regional Innovation Valleys with an education core

When regions pursue NEIA's valleys, ensure an **education spine**: gateway VET programs, university micro-credentials, and bootcamps aligned with the valley's tech domains (power electronics, robotics, bio-based materials, AI for industry). This converts valley investments into **inclusive talent pipelines**.

Policy link: NEIA (Regional Innovation Valleys), Digital Compass (advanced skills). **Instrument:** a **Valley Skills Pact** co-signed by firms, universities, VET, and municipalities.

6) Attract and retain talent

Operationalize the **Harnessing Talent (2023)** toolbox: regional talent observatories, re-entry programs for returnees, spouse/settlement support, and fast tracks from micro-credentials to employment. Use **city diplomacy** and alumni networks to market regional learning/working offers.

ICA-CoP Bio-Edu 2025 Workshop presentation

Policy link: Harnessing Talent (place-sensitive measures).

Instrument: a **Regional Talent Partnership** with KPIs on retention, attraction, and mobility.

7) Invest in learning spaces—physical, social, and digital

Network innovation-learning hubs across libraries, VET campuses, research parks, and community

centers. Provide small grants for mission teams (students, teachers, technicians, citizens) using

open data/digital twins to solve local problems.

Evidence base: learning spaces accelerate motivation, autonomy, and teamwork; they shift

pedagogy from consumption to **co-production**.

8) Tell a coherent story and measure what matters

Publish a Learning Community Scorecard tracking participation across the life-course, transitions

from learning to employment, and co-benefits (health, civic participation). Disaggregate by

neighbourhood and demographic groups to target support and sustain political consent.

Policy link: Digital Compass (population targets), Harnessing Talent (regional monitoring).

Instrument: quarterly **bench-learning** among municipalities; annual public dashboard.

Case insight: Espoo as a regional learning community

Espoo's long-running collaboration among the City, Aalto University, VTT, Omnia VET, and firms

exemplifies regional enablement. The ecosystem operationalized KT through co-located

learning/innovation spaces, challenge-based programs (Innovation Camps), and regional

information modelling/virtual environments that make planning and learning concrete. The

approach ties lifelong learning to real investments and projects—district-heat decarbonization,

smart mobility, circular construction—rather than treating learning as a parallel system.

Building on the EU frameworks above, Espoo and peer regions can:

Map Digital Compass targets to local population baselines;

Sign **University Compacts** for civic engagement and lifelong learning;

Design a Regional Innovation Valley with an education spine; and

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Launch a Talent Partnership to retain and attract learners and graduates.

What changes when regions lead

When regions act as ecosystem orchestrators:

- Learners encounter relevant, engaging pathways; adults see on-ramps back into learning tied to local opportunities—consistent with evidence that community-based and intergenerational learning improves health and wellbeing as well as employability.
- **Providers** align programs with real demand; staff gain incentives for community-engaged teaching and research; universities fulfill their civic mission under the 2022 Strategy.
- Employers and SMEs co-shape curricula and recruit from nearby pipelines; they access
 university labs and testbeds without prohibitive transaction costs, meeting NEIA's call for
 valorisation and scale-up.
- Public value increases: regional projects double as learning platforms; social inclusion and competitiveness advance together—the central promise of the STEM Plan and Digital Compass.

A regional playbook

- Adopt a Learning Community Charter (universities, VET, schools, employers, civic groups).
 State missions, equity goals, micro-credential recognition, and Digital Compass baselines/targets.
- 2. **Stand up a hub-and-spoke network of learning spaces** (libraries, campuses, labs, fab-spaces) with small grants for mission teams working on energy retrofits, e-mobility, AI for public services, and nature restoration.
- 3. **Launch a Regional Learning Pass** and integrate it into employer HR systems; recognize non-formal/community learning and align with university/VET credit where appropriate.
- 4. **Embed learning clauses in procurement** for major regional projects. Score bids for apprenticeships, student/teacher residencies, research partnerships, and open educational deliverables.

- 5. **Build the digital backbone:** open data, a learning data space, an area **digital twin**, and teacher/trainer upskilling for data-rich pedagogy; ensure device/connectivity access to meet Digital Compass equity goals.
- 6. **Create a Valley Skills Pact** for at least one **Regional Innovation Valley** domain; align curricula, micro-credentials, apprenticeships, and internships to firm demand.
- 7. **Operationalize a Talent Partnership** with observatory, attraction/retention services, and fast tracks from micro-credentials to jobs; report quarterly.
- 8. **Publish a scorecard** and hold quarterly **bench-learning** across municipalities and providers to iterate quickly; include citizen feedback loops.
- Active subsidiarity: In my role as member of the CoR and President of the biggest political group, I strongly support the principle of active subsidiarity. In fact, if 70% of EU legislation has an impact and needs to be implemented at local and regional level, it is essential that we as regions and cities have a say in EU policymaking. And this goes further. If social groups, researchers and businesses in our communities are affected by those policies and changes, we need to engage them in the process, learn from them and discuss the constraints and solutions together. That is why enabling learning communities is in our strategic interest.

Conclusion

Regions are where **lifelong learning becomes real life**. By

orchestrating the Knowledge Triangle,

investing in learning spaces and digital backbones,

aligning procurement and projects with education, and measuring outcomes,

regional leaders can transform fragmented efforts into genuine learning communities.

This is not a parallel agenda to competitiveness or to the green and digital transitions; it is the **delivery mechanism** for them - fully consistent with the EU's Digital Compass, University Strategy, New Innovation Agenda, Harnessing Talent initiative, and the STEM Strategic Plan.