



DeafSign Survey 2024–2025: Unlocking Educational Opportunities in Sign Languages in Europe

Empirical Findings and Policy Recommendations for Deaf Learners with Refugee and Immigration Backgrounds

Christian Rathmann, Péter Zalán Herbszt-Romanek, Lorraine Leeson, Radka Nováková

Abstract

This report presents findings from a large mixed-methods study on sign language education for deaf learners with refugee or immigrant backgrounds across Europe. The *DeafSign 2024–2025 Survey* collected both quantitative (n = 82) and qualitative (n = 183) data from over thirty countries to examine legal frameworks, institutional accessibility, teaching resources, and the role of community leadership in Deaf education. Results show major differences across European regions. In Northern and Western Europe, sign language education is partly supported by public institutions. In contrast, Central, Southern, and Eastern Europe rely heavily on NGOs and short-term project funding. Fewer than one-third of respondents reported clear legal protections for deaf learners with refugee or immigrant backgrounds, and only 18% said that education in this area receives stable funding. Qualitative insights point to systemic barriers—such as weak policy recognition, inconsistent curricula, and limited training capacity—but also highlight strong Deaf-led innovation and use of digital tools. Using both inductive and deductive analyses, the study identifies six key policy priorities:

1. Strengthening legal and policy frameworks
2. Improving institutional and informational accessibility
3. Recognising diversity and intersectionality
4. Developing Common European Frame of Reference (CEFR)-aligned educational resources
5. Promoting Deaf-led participation and leadership
6. Expanding digital literacy and tool development

The report concludes by proposing a European Framework for Deaf Educational Equity, grounded in linguistic rights, sustainable funding, and meaningful Deaf co-leadership.

Keywords: deaf learners with refugee and immigration backgrounds; sign-language education; inclusion; multilingualism; policy; Common European Frame of Reference (CEFR); Deaf-led governance

1. Introduction

Educational access for deaf people continues to mirror the wider struggle for linguistic justice in Europe. Despite long-standing commitments to multilingualism and inclusion on the part of the Council of Europe, deaf learners with refugee and immigration backgrounds remain structurally marginalised. Their participation in education is constrained by overlapping barriers — limited legal recognition, public information that is inaccessible to deaf signing people, a shortage of qualified educators, unstable or ad-hoc coordination between migration and education authorities, and a widespread dependence on NGOs and/or Deaf-led organisations to plug the gaps.

Many deaf newcomers arrive in Europe with partial or distinct sign language repertoires and limited experience of formal education. For them, acquiring the national sign language of the host country is a prerequisite for integration, education, employment, and civic participation. Yet, unlike the established infrastructure for spoken-language education for migrants, sign-language learning opportunities are sporadic, project-based, and seldom supported by national policy.

At the European level, various instruments affirm linguistic accessibility as a right, and there is a clearly articulated commitment to linguistic diversity. Nonetheless, these frameworks rarely encompass deaf learners with refugee and immigration backgrounds, whose status oscillates between “disability” and “linguistic minority.” The absence of coherent policy leads to inconsistent obligations and fragmented provision across states.

The *DeafSign* initiative, hosted by the European Centre for Modern Languages (ECML), was conceived to address this gap by documenting existing practices and formulating empirically grounded recommendations. The *DeafSign 2024–2025 Survey* represents the first coordinated European effort to combine quantitative mapping with qualitative exploration of the educational situation of deaf learners with refugee and immigration backgrounds.

This report pursues three interrelated aims:

1. To map the legal, institutional, and resource frameworks shaping access to sign-language education for deaf learners with refugee and immigration backgrounds;
2. To capture professional and community perspectives on the barriers and enablers of inclusion; and
3. To translate empirical findings into coherent European-level recommendations aligned with Common European Framework of Reference (Council of Europe, 2001, 2020; Leeson et al., 2016), European Centre for Modern Languages work, and other linguistic frameworks.

This study provides an understanding of how linguistic, social, and institutional factors interact in shaping equitable education for deaf learners with refugee and immigration backgrounds.

2. Research Design and Methodology

2.1 Overview of the Research Approach

The *DeafSign 2024–2025 Survey* employed a convergent mixed-methods design to investigate both the structural and experiential dimensions of sign language education for deaf learners with refugee and immigration backgrounds.

Quantitative data, with supporting qualitative information, were collected in parallel and integrated at the analysis stage.

The questionnaire contained 27 items divided into two complementary parts:

- Q3–Q14: closed questions concerning legal frameworks, accessibility, resources, and professional capacity;
- Q15–Q27: open questions inviting narrative reflections on barriers, good practices, and future needs.

The survey was distributed in written English and accompanied by video explanations in International Sign to ensure accessibility for respondents across diverse linguistic backgrounds.

2.2 Sampling and Participant Profile

Between October 2024 and April 2025, the survey received 124 responses from more than thirty European countries. After data validation, 82 responses were retained for quantitative analysis and 183 substantive open-ended answers for qualitative analysis.

Stakeholder group	Share of participants
Deaf professionals and educators	36 %
Interpreters and sign-language teachers	29 %
NGO and Deaf-association representatives	24 %
Policymakers and administrators	11 %

This profile highlights the strong representation of Deaf professionals and front-line practitioners directly engaged in education and advocacy.

2.3 Regional Distribution of Respondents

Region	n (validated)	% of total (n = 82)	Countries
Southern Europe	13	15.9 %	Italy, Spain, Portugal, Greece, Malta
Western Europe	18	22.0 %	France, Belgium, Netherlands, Germany, Austria
Northern Europe	7	8.5 %	Denmark, Finland, Iceland, Norway, Sweden
Central Europe	26	31.7 %	Poland, Czechia, Slovakia, Hungary, Slovenia, Croatia
Eastern Europe	18	22.0 %	Romania, Bulgaria, Estonia, Latvia, Lithuania, Ukraine
Total	82	100 %	30 + countries represented

Central Europe contributed the largest group of participants, reflecting the region’s active network of Deaf NGOs and educational institutions.

2.4 Ethical Considerations

The study complied with the EU General Data Protection Regulation (GDPR) and research ethics approval for the survey was secured from Trinity College Dublin. Participation was voluntary, and all data were anonymised. To ensure equitable participation, the survey was offered in written English and International Sign Language, and respondents with limited literacy could request clarification through Deaf facilitators.

The research followed principles of reciprocity and transparency: participants were informed that results would be disseminated through ECML platforms to support community benefit.

2.5 Analytical Procedures

Quantitative data were examined through descriptive statistics, highlighting regional variation in legal recognition, resource provision, and professional capacity.

Qualitative responses were subjected to two-phase content analysis:

1. An inductive phase, deriving categories directly from participant narratives; and
2. A deductive phase, aligning these categories with the six *DeafSign* recommendation domains.

3. Quantitative Analysis

3.1 Overview

The quantitative component of the *DeafSign 2024–2025 Survey* offers an empirical overview of the conditions that shape access to sign language education for deaf learners with refugee and immigration backgrounds.

Twelve core items (Q3–Q14) examined national laws and policies, accessibility, resources, funding structures, and the availability of qualified personnel.

Across all regions, the data reveal three overarching patterns: limited legal recognition, reliance on NGO-based provision, and acute funding and staffing shortages. These findings provide a structural baseline for interpreting the qualitative evidence that follows.

3.2 National Laws Supporting Migrants and Refugees in Education (Q3)

A majority of respondents (54%) indicated that their countries possess general legislation addressing the educational inclusion of migrants and refugees. However, these provisions seldom mention deaf learners or sign languages specifically, leaving linguistic accessibility subject to interpretation at the local level.

Region	% confirming laws	Dominant policy model	Observations
Northern Europe	75	Lifelong learning, equality-based	Inclusive but general
Western Europe	70	Integration and diversity policy	Comprehensive but not Deaf-specific
Central Europe	55	Education–labour linkage	Fragmented implementation
Southern Europe	40	Immigration-focused	Weak educational emphasis
Eastern Europe	35	Humanitarian and asylum-based	Minimal education coverage

While most European countries maintain legislation governing migrant integration, deaf learners remain invisible within these frameworks. Inclusion is often conceptualised in spoken-language terms, and accessibility for sign-language users is left to ad hoc interpretation. This omission contributes to a systemic gap between inclusive rhetoric and linguistic reality.

3.3 Legal Recognition of Deaf Learners with Refugee and Immigration Backgrounds (Q4)

Only 28% of respondents confirmed that deaf signers or sign-language education are explicitly referenced in law. In the majority of countries, sign-language access is either implied within disability provisions or entirely absent.

Region	% legal mention	Illustrative trend
Northern Europe	25	Partial coverage via disability law
Western Europe	15	Equality legislation, non-specific
Central Europe	10	Fragmentary references
Southern Europe	0	None
Eastern Europe	0	None

The limited scope of reference to legislation demonstrates a lack of governmental specificity with regard to diverse and multi-modal language use, which translates to limited awareness regarding linguistic accessibility on the part of agencies who implement policy. Thus, even in regions with well-developed equality policies, deaf learners with refugee and immigration backgrounds are rarely recognised as a distinct group requiring dedicated educational rights.

3.4 Availability of Educational Resources (Q5)

Across all respondents, 38% reported the availability of specific sign-language resources for deaf learners with refugee and immigration backgrounds. An additional 12% indicated partial provision, while 50 % confirmed a complete lack of such materials.

Region	% resource availability	Type of provision
Northern Europe	55	State-funded adult education
Western Europe	45	NGO-based courses
Central Europe	30	Short-term EU-funded projects
Southern Europe	35	Volunteer or community courses
Eastern Europe	15	Informal and unstructured

The uneven distribution of resources reveals deep structural inequities. Northern and Western Europe maintain moderately stable systems, but elsewhere, provision depends on temporary projects or volunteer initiatives. The absence of consistent funding prevents the establishment of coherent curricula or assessment frameworks.

3.5 Advocacy and Support Structures (Q6–Q7)

Deaf-led organisations emerged as the dominant agents of inclusion: 67% of respondents identified NGOs as the primary providers of educational and support services, compared with only 23% naming government agencies.

Region	% NGO-led	Typical configuration
Northern Europe	65	Shared NGO–government partnerships
Western Europe	70	Collaborative networks
Central Europe	75	Grassroots volunteer systems
Southern Europe	60	Emerging advocacy groups
Eastern Europe	90	Civil society as sole provider

Participant responses indicate that Deaf-led NGOs compensate for institutional shortcomings, providing essential educational and advocacy services despite minimal resources. While this reflects strong community resilience, it also highlights systemic dependence on unpaid activism and the absence of stable governmental or related institutional structures.

3.6 Community-Based Resources and Local Initiatives (Q8)

Approximately 41% of respondents reported the existence of community-generated learning materials, such as video dictionaries and online tutorials.

Region	% community initiatives	Illustrative examples
Northern Europe	60	National e-learning platforms
Western Europe	50	NGO–municipality collaborations
Central Europe	30	EU project spin-offs
Southern Europe	40	Grassroots volunteer networks
Eastern Europe	25	Small-scale video materials

Local and community-led innovation represents a critical but under-recognised component of Deaf education. Although such initiatives demonstrate creativity and autonomy, their non-standardised nature limits formal recognition and cross-border comparability.

3.7 Accessibility of Official Information (Q9–Q11)

Digital and institutional accessibility emerged as a significant weakness. Only 14% of respondents confirmed that government websites or public portals provide sign-language content, and this is most likely to be in the host sign language only.

Region	% accessible content	Current practice
Northern Europe	25	National accessibility policies implemented
Western Europe	20	Limited pilot initiatives
Central Europe	10	Sporadic NGO–state collaboration
Southern Europe	0	No sign-language access

Region	% accessible content	Current practice
Eastern Europe	0	No sign-language access

Most government communication remains monolingual and text-based. This digital exclusion restricts deaf learners with refugee and immigration backgrounds from independently accessing education or administrative information, including crucial information about their legal rights and obligations as a refugee or migrant.

3.8 Consultation and Representation (Q12)

Only 22% of respondents reported structured consultation between public authorities and Deaf-led organisations.

Region	% structured consultation	Mechanism
Northern Europe	45	Advisory councils and equality boards
Western Europe	30	Ad hoc consultations
Central Europe	15	Informal channels
Southern Europe	20	Limited engagement
Eastern Europe	0	No mechanisms

Consultation processes are inconsistently operationalised. Deaf-led organisations typically remain peripheral to decision-making, participating as informal advisors rather than as equal partners in policy development.

3.9 Funding for Educational and Training Programmes (Q13)

Sustainable funding was confirmed by only 18% of respondents. A further 10% reported occasional project funding, while the remaining 72% indicated no consistent financial support.

Region	% stable funding	Funding source
Northern Europe	40	State education budgets
Western Europe	25	EU or municipal projects
Central Europe	15	NGO partnerships
Southern Europe	20	Short-term ministry grants
Eastern Europe	0	None

Funding scarcity represents the most significant structural constraint. Without long-term public investment, inclusion efforts rely on temporary initiatives that cannot sustain consistent educational quality or planning.

3.10 Availability of Qualified Personnel (Q14)

Only 37% of respondents reported adequate availability of qualified educators and interpreters. Personnel shortages are most acute in Southern and Eastern Europe, where formal training remains limited.

Region	% adequate personnel	Profile
Northern Europe	60	Bilingual professionals with pedagogical credentials
Western Europe	45	Concentrated in urban centres
Central Europe	35	Interpreters acting as teachers
Southern Europe	25	Volunteers and part-timers
Eastern Europe	20	No certified professionals

Insufficient professional capacity is a universal obstacle. Even where inclusive policy frameworks exist, implementation falters due to a lack of trained educators equipped to handle multilingual and migration-related diversity.

3.11 European Snapshot

Domain	European average (% Yes)	Strongest regions	Weakest regions	Principal limitation
Legal & Policy Frameworks	41	Northern, Western	Eastern	Absence of Deaf-specific recognition
Resources & Advocacy	39	Northern, Western	Southern, Eastern	Dependence on NGOs
Accessibility	14	Northern	Southern, Eastern	Minimal sign-language provision
Funding & Personnel	28	Northern	Eastern	Short-term financing and training gaps

The European landscape of inclusion for deaf learners with refugee and immigration backgrounds remains fragmented and regionally unbalanced. Northern and Western Europe display partial institutionalisation of inclusive systems, whereas Central, Southern, and Eastern Europe rely predominantly on grassroots and NGO-led structures. This asymmetry underlines the necessity of a coordinated European strategy that aligns legal obligations, funding mechanisms, and professional capacity. What is striking is that this geographic pattern is not new: such regional asymmetries have been reported since the 1990s.

4. Qualitative Findings

4.1 Overview

The qualitative strand of the *DeafSign2024–2025 Survey* provides essential insight into how quantitative patterns are experienced and understood by practitioners, educators, and community members.

A total of 183 substantive open-ended responses were coded to produce a richly contextualised understanding of how inclusion functions, or indeed, fails, for deaf learners with refugee and immigration backgrounds.

Inductive analysis yielded eight overarching thematic areas:

1. Funding and sustainability,
2. Advocacy and Deaf-led governance,
3. CEFR-based curricula and resources,
4. Access to institutions and information,
5. Legal and policy frameworks,
6. Interpreting and International Sign communication,
7. Digital literacy and tools, and
8. Personnel and training.

4.2 Funding and Sustainability

Respondents from every region described precarious or intermittent funding as the most significant barrier to continuity. This challenge was particularly acute in Central Europe (30%) and Southern Europe (25%), where initiatives often depend on short-term EU or municipal grants. In Eastern Europe (20%) reported significant reliance on unpaid volunteers, whereas Northern (10%) and Western Europe (15%) enjoy somewhat greater financial stability through NGO–state partnerships.

“We had a promising project for deaf learners with refugee and immigration backgrounds, but once the funding period ended, everything stopped.”

“Courses are paid, but expenses are hardly covered; deaf learners get fewer hours and fewer entitlements.”

Funding volatility constitutes the central structural weakness in Deaf education across Europe. The responses to Q13 corroborate this, showing only 18% of respondents say they have stable public funding. Without consistent financial support, inclusion efforts remain dependent on temporary project cycles that prevent sustained pedagogical development.

4.3 Advocacy and Deaf-Led Governance

The role of Deaf-led organisations emerged as a second dominant theme. Respondents from across Europe described Deaf associations as indispensable intermediaries between government systems and Deaf communities, frequently operating without institutional backing.

“Deaf associations handle everything—from interpreting to school enrolment—but get no support.”

“We manage deaf learners with refugee and immigration backgrounds independently, with no help from authorities.”

These patterns were strongest in Eastern (35%) and Central Europe (25%), where state support structures are weak, while Northern and Western Europe (~30%) show more balanced collaboration.

Deaf-led NGOs constitute the operational backbone of inclusion but are structurally undervalued. Their expertise and labour sustain education and advocacy networks, yet the lack of formal recognition and funding renders their contributions precarious. Institutionalising Deaf-led participation as co-leadership—rather than consultation—represents a prerequisite for sustainability.

4.4 CEFR-Based Curricula and Teaching Resources

Respondents across all regions stressed the urgent need for structured and standardised teaching materials. Educators in Western Europe (30 %) and Northern Europe (25 %) noted inconsistencies in curricula; those in Central Europe (35 %), Southern Europe (25 %), and Eastern Europe (10 %) reported a near-complete absence of formal resources.

“We need proper curricula and assessment methods; currently everyone invents their own.”

“Only one school offers Sign Language classes for deaf learners with refugee and immigration backgrounds—and even there, no syllabus exists.”

The demand for CEFR-aligned sign-language curricula is overwhelming and uniform across regions. The absence of structured teaching materials undermines comparability, transferability, and professional legitimacy. This theme mirrors responses to Q5 and Q14, confirming the need for coordinated European curriculum development.

4.5 Access to Institutions and Information

More than half of respondents reported exclusion from official communication channels. Deaf learners with refugee and immigration backgrounds frequently rely on peer networks to access essential information. The inaccessibility gap is most pronounced in Eastern Europe

(30 %) and Southern Europe (25 %), moderate in Central Europe (20 %), and less severe in Western Europe (15 %) and Northern Europe (10 %).

“Government websites have no signed videos; Deaf organisations upload their own explanations.”

“Information about courses is available but only in written or spoken language.”

Institutional inaccessibility remains a pervasive barrier. Quantitative evidence (Q9–Q11) corroborates this, with only 14 % confirming accessible official information. Equal participation requires not only the legal obligation but also the routine provision of sign-language access across all public interfaces.

4.6 Legal and Policy Frameworks

Respondents frequently commented on the absence of explicit legal recognition for deaf learners with refugee and immigration backgrounds, even in countries with established equality legislation.

“Integration laws mention migrants but never deaf people.”

“Policies assume spoken-language access; sign language is invisible.”

The majority of comments came from Western (30 %) and Northern Europe (20 %), followed by Central (25 %), Southern (15 %), and Eastern Europe (10 %).

Legal invisibility perpetuates policy ambiguity. Without explicit recognition of sign-language users in migration and education policies and frameworks, institutional accountability remains diffuse. The qualitative evidence supports quantitative findings (Q3–Q4) that show that the absence of legislation or the silence of legislation with regards to sign is a foundational problem.

4.7 Interpreting and International Sign Language

Respondents in all regions raised concerns about inconsistent interpreter availability and the limited use of International Sign Language (IntSL). Central (25 %) and Western Europe (25 %) reported irregular interpreting provision; Northern Europe (20 %) showed high professional quality but minimal IntSL exposure; Southern and Eastern Europe (30 %) relied heavily on untrained intermediaries.

“An interpreter is called only when communication breaks down.”

“International Sign is used sometimes, but many deaf learners do not fully understand it.”

Interpreting services are thus reactive rather than systematic in this context. Training programmes rarely include modules on multilingual communication or needs that are specific to refugee contexts. This reflects several intersecting factors:

- the personnel shortages identified in Q14;
- the pressure of time on curricula in interpreter education programmes;
- the fact that many interpreting students are second language, second modality learners of a sign language;
- the limited number of deaf and heritage signers in the interpreting profession;
- the very small number of deaf and heritage signers who are engaged in interpreter education programmes.

All this demonstrates the need for specialised interpreter education.

4.8 Digital Literacy and Tools

Digital innovation appeared in a smaller subset of responses, primarily in Northern (35 %) and Western Europe (25 %), where respondents mentioned online sign-language dictionaries, e-learning platforms, and video-based courses. Elsewhere, references to digital tools expressed aspiration rather than practice.

“Digital tools are the only way to reach learners outside the capital.”

“We would like to build video-based glossaries and apps.”

Digitalisation offers critical opportunities for outreach and equality but remains underdeveloped. While it can mitigate geographic and resource limitations, its success depends on investment in infrastructure, training, and open-access materials.

4.9 Personnel and Professional Training

Across all regions, the shortage of qualified educators and interpreters was highlighted as a major impediment. This shortage is most severe in Central Europe (30 %), Eastern Europe (25 %), and Southern Europe (20 %), while Western Europe (15 %) and Northern Europe (10 %) report more established training systems.

“There are motivated people, but no training for this specific group.”

“Interpreter education ignores refugee and migration issues.”

Professional training remains the bottleneck of inclusion. Existing interpreter and teacher-education programmes cannot adequately prepare practitioners to support Deaf learners

with refugee and immigration backgrounds. Building specialised competencies is vital for effective, culturally and linguistically responsive education.

4.10 Alignment with DeafSign Recommendations

DeafSign Recommendations	Frequency (mentions)	Dominant regions	Empirical emphasis
Legal and policy frameworks	9	Western > Central	Need for explicit recognition
Access to institutions and information	15	Eastern > Southern	Persistent inaccessibility
Recognition of diversity and intersectionality	3	Western > Northern	Under-discussed
CEFR-based resource development	60	Western > Northern	Strongest demand
Deaf-led involvement	30	Eastern > Central	NGOs as implementers
Digital literacy and tools	<5	Northern > Western	Innovation potential

Our deductive content analysis confirms the quantitative trends discussed above. The strongest needs lie in CEFR-based curricula, Deaf-led involvement, and institutional accessibility, while legal and intersectional dimensions remain underdeveloped. These alignments reinforce the need for comprehensive, multi-level reform.

5. Discussion: Structure, Operation, and Agency in Deaf Inclusion

5.1. Overview

Synthesising both the quantitative and qualitative findings from our survey reveals a multidimensional picture of how educational inclusion for deaf learners with refugee and immigration backgrounds operates across Europe. This section adopts a tripartite framework encompassing:

1. Structural frameworks– the legal, policy, and financial infrastructure underpinning inclusion;
2. Operational mechanisms– the concrete institutional and pedagogical processes that shape access; and
3. Agency-based dynamics– the leadership, innovation, and resilience of Deaf-led communities.

Together, these layers form an interdependent ecology of inclusion in which legal recognition, operational delivery, and community empowerment must function in tandem.

5.2. Structural Frameworks: Between Recognition and Neglect

The first dimension concerns formal legal and policy structures. Responses to Q3 and Q4 indicate that while 54% of countries have migration-related education laws, only 28% explicitly mention deaf learners or sign-language access. Qualitative responses confirm that most inclusion laws “mention migrants but never deaf people,” demonstrating a disconnect between inclusive principles and linguistic practice.

Key Finding	Empirical Source	Generalisation
Deaf learners rarely explicitly considered in integration laws	Q3–Q4	Structural invisibility of sign language users
Disability framing dominates	Qualitative data	Misclassification of linguistic rights as disability rights
Implementation inconsistent across ministries	Cross-regional evidence	Fragmented governance and accountability

The inclusion of deaf learners remains structurally fragile because legal recognition is partial and conceptually misaligned in comparison to provision for their non-deaf counterparts. Where deaf learners with refugee and immigration backgrounds are explicitly referenced, it is typically within a disability framework, obscuring and diluting the linguistic and cultural nature of their needs. Northern and Western Europe display partial recognition of these needs, while Central, Southern, and Eastern Europe lag behind due to administrative fragmentation and insufficient enforcement mechanisms.

5.3. Operational Mechanisms: Access, Resources, and Professional Capacity

At the operational level, inequalities manifest in the availability of resources, access to institutions, and professional training. Responses to Q5–Q14 show that fewer than 40% of respondents could identify any sign-language learning resources, and only 14% confirmed accessible information on official websites. Funding stability was reported by 18%, and personnel adequacy by 37%. These figures translate into qualitative evidence describing volunteer-dependent courses, self-produced materials, and ad hoc interpreting provision.

Regional differentiation:

- Northern and Western Europe: More structured systems supported by public funds;

- Central and Southern Europe: Dependent on short-term grants and NGO labour;
- Eastern Europe: Reliant on informal networks and sporadic international assistance.

Operational weaknesses stem not solely from financial limitations but from systemic disconnection between policy frameworks, resource planning, and professional training opportunities. Without coordinated design, efforts remain piecemeal, duplicating work and failing to scale. This structural–operational mismatch undermines efficiency and continuity, impacting directly, in this case, on deaf refugees and migrants.

5.4. Agency-Based Dynamics: Deaf Leadership and Community Resilience

Here, we refer to agency as the proactive role of Deaf-led organisations and individuals. Deaf NGOs were identified by 67% of respondents as the key implementers of education and advocacy for deaf learners with refugee and immigration backgrounds.

Qualitative accounts describe these organisations as both resilient and overburdened:

“We are doing the government’s work without the government’s support.”

Agency Outcome	Empirical Correlate	Comments
Deaf NGOs as primary service providers	67% (Q6–Q7)	Community resilience amid institutional gaps
Volunteer burnout and instability	Qualitative evidence	Need for sustainable financial frameworks
Success linked to formal collaboration	Northern & Western Europe	Institutional partnerships enhance impact

Agency and institutional accountability must coexist. In parts of Northern Europe, where Deaf-led organisations are formally recognised as policy partners, outcomes improve markedly. Elsewhere, their contributions remain undervalued, leading to burnout and fragility. Powersharing without the provision of resources is not possible, is out of kilter with human rights driven approaches to co-creation, and is unsustainable; thus, to secure Deaf community agency in this domain, structural legitimisation and shared decision-making power is a pre-requisite.

5.5. Funding as a Cross-Cutting Enabler

Funding emerged across all dimensions as the pivotal determinant of sustainability. Only 18% of respondents reported stable financial frameworks, while the majority described temporary or project-based support. Quantitative evidence (Q13) and qualitative narratives converge on the same conclusion: financial instability erodes institutional memory and undermines professional development.

Funding functions as both an operational mechanism and a symbolic commitment. Regions with sustained investment (especially Northern Europe) show measurable progress in teacher training, curriculum development, and community outreach. In contrast, regions dependent on short-term EU projects experience continual disruption once external funding ends. Symbolic policy recognition without financing results in “paper multilingualism”—formal rights that do not, cannot, translate into sustainable good practice.

5.6. Interdependence of Structure, Operation, and Agency

These three analytical levels—structure, operation, and agency—are not hierarchical but mutually reinforcing. Structural frameworks define the enabling environment; operational mechanisms deliver functionality; and community agency ensures relevance and accountability.

Dimension	Focus	Empirical Evidence	Required Shift
Structural	Legal and policy recognition	28% Deaf-specific mention	Integrate linguistic rights into legislation
Operational	Access, resources, and personnel	38% resource availability	Align funding and CEFR implementation
Agency	Deaf-led governance	67% NGO-based provision	Institutionalise co-leadership and shared responsibility

Effective inclusion depends on the synchronisation of these three domains. Structural recognition without operational resourcing leads to symbolic inclusion; operational programmes without policy backing lack longevity; and community agency without structural support risks exhaustion. A coherent system requires dynamic equilibrium across all dimensions.

5.7. Theoretical and Policy Implications

The *DeafSign* survey findings reaffirm that linguistic justice forms the foundation of educational equity. Policies that frame sign languages merely as tools to support accessibility fundamentally fail to recognise their full linguistic and cultural status. Within this perspective, sign language education for deaf learners with refugee and immigration backgrounds is not a “special provision” but rather an expression of linguistic rights under international human-rights law.

From a policy perspective, successful inclusion requires cross-sectoral governance involving ministries of education, social affairs, migration, and digital innovation. This reflects the broader European shift toward *whole-of-government* approaches that seek to bridge silos and promote horizontal coordination.

Educational equity for deaf learners with refugee and immigration backgrounds is achievable only when legal recognition, operational mechanisms, and Deaf-led agency are aligned under coherent, adequately funded governance. The evidence suggests that isolated reforms—however well-intentioned—cannot compensate for systemic fragmentation.

5.8 Conclusion

Our analysis underscores a decisive conclusion: inclusion succeeds where deaf people are co-authors of educational systems.

Deaf-led initiatives transform institutional deficits into innovation, but enduring success demands structural reinforcement through legislation, funding, and governmental (and associated agencies) accountability.

The *DeafSign 2024–2025* survey findings thus position Deaf education for learners with refugee and immigration backgrounds as both a human-rights imperative and a barometer of Europe’s commitment to multilingual inclusion.

6. Empirically Grounded Recommendations for Policy and Practice

6.1. Introduction

Our results highlight six empirically grounded priorities for the equitable education of deaf learners with refugee and immigration backgrounds. Each recommendation corresponds to one of the *DeafSign* categories and together, they constitute a practical framework for systemic reform—bridging policy intent, institutional design, and community participation.

6.2 Legal and Policy Frameworks: From Symbolic Recognition to Enforceable Rights

Only 28% of respondents confirmed any legal mention of deaf learners or sign-language education within national or regional policy. Respondents reference this absence: *“Integration laws mention migrants but never deaf people.”* To address this, policy makers and legislators must move towards inclusion of reference to deaf learners as linguistic minorities rather than via the lens of disability.

Policy Priorities:

- Integrate sign language education rights explicitly into migration, education, and equality legislation.
- Create binding implementation plans and measurable indicators (e.g., number of courses funded, learners reached).

- Align sign language inclusion with obligations under the *European Charter for Regional or Minority Languages* (Council of Europe, 1992) and the *UN Convention on the Rights of Persons with Disabilities* (CRPD) (United Nations, 2006).

Symbolic recognition without enforceable provisions perpetuates inequality. When deaf learners with refugee and immigration backgrounds are legally acknowledged as sign language users, and not as persons with disabilities, there is an opportunity for us to move from aspiration to obligation with regard to meaningful inclusion.

6.3 Access to Institutions and Information: Mainstreaming Linguistic Accessibility

While digital accessibility is a key consideration at European Union level (European Commission, 2019, 2021), digital and institutional accessibility scored lowest across all indicators: only 14% of respondents confirmed sign language content on official websites in their country. Respondents repeatedly described how Deaf organisations produce translations to compensate for inaccessible public information. To combat this, sign language content must become a standard requirement for administrative and educational communication.

Policy Priorities:

- Mandate sign language video content for all education, migration, and integration portals.
- Ensure interpretation and video communication at every administrative stage, from orientation to certification.
- Introduce accessibility training for public servants and educators.

Thus, linguistic accessibility must be reframed as a constitutional principle of equal participation rather than seen as a supplementary service. Embedding sign language access into digital and institutional design constitutes the foundation of genuine inclusion.

6.4 Recognition of Diversity and Intersectionality: Rethinking the “Deaf Learner”

Only three responses explicitly used the term *intersectionality*, yet forty responses reflected intersectional realities: gender, ethnicity, language repertoire, and trauma experiences. Educational systems continue to treat deaf learners as a homogeneous group, erasing diversity in linguistic and migration backgrounds. To combat this, we propose that what is required is a range of differentiated pathways that acknowledge deaf peoples’ multiple linguistic and social identities.

Policy Priorities:

- Develop modular sign language curricula accommodating varied proficiency levels and language histories.
- Include intersectional pedagogy in teacher training, combining cultural, linguistic, and social awareness.
- Recognise and accredit transnational signing repertoires rather than enforcing monolingual norms.

Acknowledging intersectionality moves beyond deficit-based models of Deaf education. It validates the complex realities of Deaf learners with refugee and immigration backgrounds and ensures that pedagogy aligns with lived diversity.

6.5 CEFR-Based Resource Development: Building Coherent Pedagogical Systems

The most frequently expressed need, referenced in 60 mentions, concerned CEFR-based sign language curricula and standardised teaching materials. Respondents emphasised that the absence of such frameworks obstructs both comparability and progression. Progressing this would entail pan-European work towards standardisation of curricula under the auspices of the ECML.

Policy Priorities:

- Co-develop CEFR-aligned curricula and assessment tools under ECML leadership.
- Facilitate transnational cooperation among sign-language experts to ensure comparability.
- Provide open-access digital resources to overcome geographic disparities.

The CEFR offers a shared pedagogical language that can anchor sign language education within the European educational space. Mainstreaming this further with regards to sign languages would harmonise learning outcomes and strengthen professional identity among sign language teachers and assessors.

6.6 Deaf-Led Involvement: From Consultation to Co-Leadership

Two-thirds (67%) of respondents identified Deaf NGOs as the main implementers of educational and advocacy activities for deaf learners with refugee and immigration backgrounds, yet only 22% reported any formal consultation process. What is required here is the requirement for state bodies to ensure Deaf co-leadership in policy formulation, implementation, and evaluation.

Policy Priorities:

- Embed Deaf professionals as equal partners in all decision-making bodies.

- Allocate stable funding for Deaf organisations comparable to mainstream educational institutions.
- Recognise Deaf NGOs as accredited training and research partners.

Deaf leadership is both a moral imperative and a pragmatic necessity (UN CRPD, Article 4). Policies are most effective when designed and implemented with those directly affected. Institutionalising Deaf-led co-governance transforms inclusion from a top-down intervention into a collaborative process.

6.7 Digital Literacy and Tools: Scaling Inclusion through Innovation

Although only 14% of respondents confirmed access to online sign language platforms, respondents highlighted strong interest in digital innovation as a means of bridging geographic and economic gaps. To build on this, there is a need to explore how sign-language technology and digital pedagogy can be integrated into mainstream educational policy.

Policy Priorities:

- Develop open-access digital repositories for sign language learning materials.
- Support AI-driven sign language translation and recognition tools in collaboration with Deaf researchers (but note the need to be guided by essential ethical considerations) (De Meulder et al., 2024; Way et al., 2024).
- Provide teacher training in digital pedagogy tailored to visual-gestural communication.

Digitalisation is not merely a technical improvement, but it also offers a mechanism for delivery of linguistic justice. Ensuring equal digital presence for sign languages promotes visibility, connectivity, and the potential for learning continuity for deaf learners with refugee and immigration backgrounds.

6.8 Summary of Empirical Evidence and Strategic Leverage

Domain	Empirical Basis	Operational Mechanism	European Leverage	Policy
Legal & Policy Frameworks	Q3–Q4, 15 mentions	Legislative inclusion	ECRML, CRPD, EU Disability Strategy	
Access to Institutions & Information	Q9–Q11, 32 mentions	Mainstreamed accessibility	European Accessibility Act	
Diversity & Intersectionality	40 inferred responses	Differentiated pathways	ECML Teacher Education initiatives	
CEFR-Based Resources	Q5, Q14, 60 mentions	Pedagogical harmonisation	CEFR–Sign Languages alignment	
Deaf-Led Involvement	Q6–Q7, Q12, 45 mentions	Co-leadership models	National sign-language councils	

Domain	Empirical Basis	Operational Mechanism	European Leverage	Policy
Digital Literacy & Tools	Q9–Q11, 22 mentions	Technological empowerment	Digital Education Action Plan	

Empirical convergence across datasets confirms that language inclusion for deaf learners with refugee and immigration backgrounds requires a coordinated European framework which must combine legislative recognition, sustainable funding, curricular coherence, Deaf-led governance, and digital equity.

7. Conclusion: Towards a European Framework for Deaf Educational Equity

The *DeafSign 2024–2025 Survey* represents the first comprehensive, empirically grounded mapping of sign-language education for deaf learners with refugee and immigration backgrounds across Europe. The study integrates quantitative evidence of structural disparity with qualitative insights into lived experience, offering a holistic understanding of how inclusion is currently enacted, and where it fails.

Across thirty countries, the data demonstrate a persistent asymmetry between legal intent and practical implementation. While many nations possess general migration and education policies, deaf learners with refugee and immigration backgrounds are rarely explicitly referenced, leading to their invisibility at the thinking and planning stage, at the funding stage, and in delivery. Access to sign language education for deaf refugees and migrants thus remains largely contingent upon geography, NGO capacity, and temporary project funding rather than being a guaranteed right.

Nevertheless, our report also reveals powerful examples of resilience and innovation. Deaf-led organisations in particular emerge as catalysts of progress in the absence of state provision: they develop learning materials, train interpreters, and mediate between state institutions and Deaf communities. Their efforts also point towards how agency and structural support can interact productively: where cooperation is embedded as the conventionalised approach to engagement, inclusion becomes sustainable.

The evidence consolidates six strategic priorities essential for achieving European-level equity:

1. Legal and Policy Frameworks — Explicit statutory recognition of deaf signers as linguistic minorities and the inclusion of sign language education rights within migration and education law.
2. Access to Institutions and Information — Universal provision of sign language-accessible communication in all public services, supported by mandatory accessibility standards.

3. Recognition of Diversity and Intersectionality — Educational models that reflect the heterogeneity of deaf learners’ linguistic and migration backgrounds.
4. CEFR-Based Resource Development — Systematic creation of standardised, CEFR-aligned curricula co-designed by Deaf professionals.
5. Deaf-Led Involvement — Institutionalised co-leadership structures enabling Deaf organisations to shape policy and practice.
6. Digital Literacy and Tools — Investment in digital infrastructures, open-access platforms, and ethical sign language technology to foster long-term inclusion.

The results confirm that linguistic justice and Deaf-led participation are inseparable foundations of educational equity. When legal frameworks, operational mechanisms, and community agency are aligned and adequately resourced, the barriers that isolate deaf learners with refugee and immigration backgrounds can be systematically dismantled.

Sign language education must therefore be understood not as a specialised intervention but as a test case for Europe’s broader commitment to equality, diversity, and multilingualism. As one respondent eloquently observed:

“We teach deaf learners with refugee and immigration backgrounds sign language not just so they can communicate, but so they can belong.”

The *DeafSign* project thus transforms moral aspiration into policy mandate: the right to sign language education is a cornerstone of democratic inclusion. By adopting these empirically grounded recommendations, European institutions and member states can build a genuinely multilingual, Deaf-inclusive educational landscape where every learner—regardless of migration history—has equal access to knowledge, participation, and belonging.

References

- European Charter for Regional or Minority Languages, (1992). <http://conventions.coe.int/Treaty/en/Treaties/Html/148.htm>
- Council of Europe. (2001). *Common European Framework of Reference for Languages: Learning, teaching, assessment*. Cambridge University Press.
- Council of Europe. (2020). *Common European Framework of Reference for Languages: Learning, Teaching, Assessment. Companion Volume*. . Council of Europe.
- De Meulder, M., Van Landuyt, D., & Mardeen, R. (2024). Lessons in co-creation: the inconvenient truths of inclusive sign language technology development. *arXiv.2408.13171[cs.CL]*. <https://doi.org/https://doi.org/10.48550/arXiv.2408.13171>
- Directive (EU) 2019/882 of the European Parliament and of the Council of 17 April 2019 on the accessibility requirements for products and services, (2019). <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019L0882>
- Digital Education Access Plan 2021-2027, (2021). <https://education.ec.europa.eu/focus-topics/digital-education/actions>
- Leeson, L., van den Bogaerde, B., Rathmann, C., & Haug, T. (2016). *Sign Languages and the Common European Framework of Reference for Languages. Common Reference Level Descriptors*. European Centre for Modern Languages.
- United Nations. (2006). *Convention on the Rights of Persons with Disabilities*. New York: United Nations Retrieved from <http://www.un.org/esa/socdev/enable/rights/ahc8adart.htm>
- Sousa, F. V. de (2025). *Sign Language in the Era of Artificial Intelligence*. European Union of the Deaf. <https://eud.eu/wp-content/uploads/2025/09/Book-Sign-Language-in-the-Era-of-Artificial-Intelligence-1.pdf>
- Way, A., Leeson, L., & Shterionov, D. (Eds.). (2024). *Sign Language Machine Translation*. Springer Nature.