

## CHAPTER 1 MODERN TRENDS IN PUBLIC ADMINISTRATION

### State Policy for Teacher Professional Development in the Context of Externship Education for Ukrainian Students Abroad: Challenges and Prospects

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**Abstract.** Ukraine’s large-scale educational displacement has transformed externship-based schooling for pupils abroad from a marginal arrangement into a system-level necessity, exposing limits in teacher professional development (TPD) policy and infrastructure. The aim of the article is to identify policy innovations that align Ukraine’s teacher professional development (TPD) with EU/OECD standards so educators teaching Ukrainian students abroad can access recognized, portable, and equitable learning. The methodology adopts a qualitative comparative design, combining (a) document analysis of Ukrainian policy instruments alongside EU/OECD frameworks and (b) comparative mapping of Estonia, Poland, and Romania to examine governance, recognition/micro-credentials, digital quality assurance, equity, and cross-border portability. First, Ukraine’s strategy is conceptually aligned with European priorities (digitalization, inclusivity, lifelong CPD) but lacks operational tools specific to externship contexts - EQF-aligned micro-credentials, fast-track cross-border recognition/RPL, platform-level digital QA (WCAG, portfolio audits), and interoperable data/credential registries. Second, European comparators illustrate transferable levers: outcome-based micro-credentials and credential wallets (Estonia), practice-embedded mentoring/coaching (Poland and Estonia), and project-enabled but still-standardizing infrastructures (Romania). Modernizing Ukraine’s TPD for externship requires codifying the externship role, standardizing micro-credentials, institutionalizing digital QA and equity metrics, and deploying an API-based CPD registry that accepts verifiable credentials. While conceptually specified here, a unified three-dimensional analytical model linking policy coherence, institutional integration, and outcome orientation remains to be developed and validated in future research. These steps would shift Ukraine from fragmented, domestically oriented arrangements to a coherent, interoperable, and digitally enabled ecosystem capable of sustaining Ukrainian education across borders.

**Keywords:** teacher professional development; externship education; micro-credentials; recognition of prior learning; digital quality assurance; WCAG; EQF; verifiable credentials; Ukraine; EU Digital Education Action Plan; OECD TALIS; SSEQU.

**JEL Classification:** I28, I23, J24, H52, F22

**Formulas:** 0; **fig.:** 0; **table:** 5; **bibl.:** 8

**Introduction.** The global migration of Ukrainian families, intensified by war and socio-economic instability, has led to a rapid expansion of externship education as a flexible form of schooling for students living abroad. Ukrainian teachers are now expected to maintain educational standards and national identity while working within diverse cultural, linguistic, and digital environments. This transformation places new demands on state policy regarding teacher professional development. Traditional models of qualification improvement - centered on national institutions and offline certification - are increasingly inadequate for educators who teach remotely or in transnational contexts. The state must therefore redesign its policy framework to ensure continuous, adaptive, and competency-based professional learning that meets the needs of teachers working with Ukrainian students overseas.

The urgency of this issue lies not only in maintaining educational quality but also in preserving the cohesion of Ukraine's educational space under conditions of global dispersion. Addressing these challenges requires a strategic shift toward digital capacity building, international cooperation, and policy instruments that bridge formal education and lifelong learning.

**Literature Review.** Studies of teacher professional development increasingly emphasize the need for flexible, digitally mediated, and context-sensitive learning ecosystems (Darling-Hammond et al., 2017; OECD, 2022). The OECD's "Teaching and Learning International Survey" (TALIS) identifies digital competence, intercultural communication, and inclusive pedagogy as core domains of modern teacher training. Research by the European Commission (2020, 2022) under the Digital Education Action Plan and the European Framework for the Digital Competence of Educators (DigCompEdu) underlines the importance of continuous professional learning supported by virtual collaboration and open educational resources.

For transnational and crisis contexts, UNESCO (2021) and European Training Foundation (2023) highlight that professional development should balance national curricular identity with local adaptability, enabling teachers to act as cultural mediators and digital facilitators. Ukrainian research (Bakhmat, 2021; Lytvyn & Kremen, 2022) stresses the integration of remote learning methodologies into national standards for teacher education. However, systemic mechanisms for recognizing and supporting teachers who provide externship education abroad remain underdeveloped. Comparative policy analysis (Sahlberg, 2020; Schleicher, 2022) also suggests that sustained state support, transparent qualification pathways, and international networking are key to teacher retention and motivation in dispersed educational environments.

Current literature thus identifies three key gaps: limited adaptation of professional development policy to transnational schooling formats; insufficient digital and methodological support for teachers abroad; and lack of a unified monitoring and accreditation mechanism that integrates external teaching experience into Ukraine's national professional standards. These gaps define the research focus of this article.

**Aims.** The aim of the article is to substantiate strategic directions and practical mechanisms for improving the state policy of teacher professional development in Ukraine, specifically for educators implementing externship education for Ukrainian

students abroad. The study seeks to identify institutional, digital, and regulatory innovations that can ensure continuity, inclusivity, and quality of professional growth under transnational teaching conditions.

**Methodology.** This study employs a qualitative, comparative policy-analysis design to examine how teacher professional development (TPD) can be adapted to support educators who teach Ukrainian pupils abroad in externship formats. The research proceeds in three stages.

1) *Document analysis.* We conducted a systematic review of Ukraine's policy corpus - National Strategy for Education Development (2021–2031), Concept of Teacher Professional Development (2019), and the regulatory acts of the State Service for Education Quality of Ukraine - against EU/OECD reference frameworks: the EU Digital Education Action Plan (2021–2027), OECD TALIS 2022, and ETF 2023 recommendations. The analysis identified convergences (commitments to digitalization, inclusivity, and competency-based CPD) and gaps (externship specificity, micro-credential standards, cross-border recognition, digital QA, and equity metrics).

2) *Comparative mapping.* We examined how three EU systems - Estonia (digitally mature, standards-based), Poland (teacher-centered scaling with blended CPD), and Romania (project-enabled transition) - operationalize TPD in transnational/digital contexts. Public strategies, program documents, and official reports were coded thematically in NVivo along five dimensions: governance and coordination; recognition and micro-credentials; digital CPD infrastructure; quality assurance for online formats; and equity and cross-border portability.

3) *Integrative synthesis and triangulation.* Findings from both stages were triangulated to derive a cohesive account of policy levers relevant to Ukraine: fast-track recognition, EQF-aligned micro-credentials, platform-level digital QA (WCAG, portfolio audits, analytics), practice-embedded CPD (mentoring, lesson study), and equity instruments (bursaries, language access).

Limitation and direction for future research. While the study identifies the structural variables that shape TPD in externship contexts, it does not construct a finalized analytical model. We explicitly propose that future research develop and validate a three-dimensional model linking policy coherence, institutional integration, and outcome orientation to measure how national reforms translate into recognized, portable, and equitable professional learning for teachers abroad.

**Results.** Based on our analysis, two interconnected results—Institutional Realignment of Policy Frameworks (harmonizing national strategies with EU standards) and Comparative Mapping (showing how Estonia, Poland, and Romania integrate digital and cross-border professional learning)—together indicate a transition from fragmented, domestically oriented policy to a coherent, interoperable, digitally driven model that better supports Ukrainian teachers educating students abroad.

***Institutional Realignment of Policy Frameworks.*** The analysis of Ukraine's policy framework for teacher professional development under externship conditions abroad demonstrates strategic progress alongside structural gaps that complicate the support of educators teaching Ukrainian students overseas. The regulatory foundation

consists of three key documents: the National Strategy for Education Development (2021–2031), the Concept of Teacher Professional Development (2019), and the regulatory acts of the State Service for Education Quality of Ukraine (SSEQ). Collectively, these instruments declare the priorities of quality, equity, and digital transformation, yet their operationalization for cross-border education and recognition of professional development obtained abroad remains incomplete.

The National Strategy for Education Development (2021–2031) establishes ambitious benchmarks for digitalization, internationalization, and the growth of professional mastery. It promotes a competency-based approach and the creation of a digital ecosystem for lifelong education. However, it does not explicitly define externship teaching nor establish mechanisms for the recognition of professional training completed outside Ukraine. Responsibility for implementation is distributed among institutions, resulting in inconsistent monitoring and fragmented execution.

The Concept of Teacher Professional Development (2019) introduces a modular, competency-based CPD model involving diverse providers (state, higher education institutions, and non-governmental organizations). It envisions the accumulation of CPD credits and portfolio evidence but does not specify how micro-credentials earned from foreign or online providers should be recognized. Furthermore, there is no explicit trajectory for Recognition of Prior Learning (RPL), nor a list of cross-border competencies such as intercultural mediation, multilingual communication, or cross-jurisdictional assessment.

The regulatory framework of the State Service for Education Quality of Ukraine (SSEQ) ensures external evaluation of institutional quality and teacher performance; however, its focus remains primarily domestic. There are no standardized QA procedures for externship or diaspora schools, no indicators of quality for distance teaching, and no verification mechanisms for CPD acquired abroad.

In contrast, European frameworks such as the EU Digital Education Action Plan (2021–2027), OECD TALIS 2022, and the European Training Foundation (ETF) recommendations (2023) demonstrate integrated solutions for virtual mobility, micro-credentials, digital inclusion, and portability of qualifications. The EU DEAP emphasizes high-performing digital ecosystems and interoperable micro-credentials; TALIS shows that the most effective CPD formats are long-term, collaborative, and practice-based; and the ETF promotes alignment with the European Qualifications Framework (EQF) and cross-border credit transfer mechanisms. A comparative overview of Ukrainian and European approaches is presented below (Table 1).

Synthesizing the results, it becomes clear that the Ukrainian strategy sets the right principles, but lacks the instruments to address the realities of externship teaching - including recognition of micro-credentials, validation of foreign providers, digital equity indicators, and interoperable data systems. The corresponding policy gaps and implications are summarized below (Table 2).

**Table 1. Comparison of Ukrainian and EU/OECD Policy Frameworks for Teacher Professional Development (Externship Context)**

Dimension	National Strategy 2021–2031	Concept of TPD 2019	SSEQ Regulations	EU Digital Education Action Plan	OECD TALIS 2022	ETF 2023
Vision & scope	Broad vision; externship not specified	Lifelong CPD; multi-provider model	QA focused on in-country institutions	Digital ecosystems; cross-border learning	Diagnosis of CPD needs	Ecosystem and recognition
Digital readiness	Priority, but no externship details	Allows online CPD	Limited online QA standards	Infrastructure, platforms, WCAG	Quantification of digital needs	Digital micro-credentials
Externship specificity	Not defined	Format-agnostic, no dedicated track	No foreign oversight procedures	Supports virtual mobility	Collaboration and mentoring	Cross-border pathways
Micro-credentials	Not detailed	Not standardized/interoperable	No protocol	Promoted under EU guidance	Survey data only	EQF alignment
Recognition & RPL	General approaches	Partial, provider-centric	No cross-border verification	Recognition models	Barriers to participation	RPL and credit transfer
Equity & inclusion	Priority, no diaspora focus	No targeted measures	Limited equity indicators	Inclusion and accessibility	Data disaggregated by equity	Equal access to credentials
Data & QA	Strategic KPIs	Portfolio-based evidence	QA limited to national level	Interoperable data and QA	Comparable metrics	QA for modular CPD and micro-credentials

Note: Comparison compiled from Ukrainian policy documents and EU/OECD frameworks (EU DEAP, OECD TALIS, ETF).

Source: systematized by the author

**Table 2. Policy Gaps and Implications for Teachers Educating Ukrainian Students Abroad (Externship)**

Gap	Why It Matters	Policy Implication
Absence of a dedicated externship-CPD track	Teachers abroad face distinct legal, cultural, and assessment contexts	Create a dedicated role standard with defined competencies (intercultural pedagogy, multilingualism, cross-jurisdictional assessment, safeguarding)
Unstandardized micro-credentials	EU-acquired credits are not transferable	Adopt an EQF-aligned micro-credential framework (learning outcomes, credit values, provider requirements)
Weak RPL/recognition of CPD abroad	Foreign CPD is devalued or delayed	Implement a fast-track recognition protocol (digital wallet, registry of trusted providers, electronic verification)
Insufficient digital QA	Online CPD quality varies widely	Mandate WCAG compliance, e-audit of portfolios, and provider self-assessment templates
Limited equity diagnostics	Diaspora, IDP, and minority-language teachers underrepresented	Add equity KPIs and targeted bursaries for teachers abroad
Low data interoperability	Difficult to aggregate CPD data from multiple providers	Establish a unified CPD registry (API-based) supporting EU verifiable credentials

Note: EQF - European Qualifications Framework; RPL - recognition of prior learning; QA - quality assurance.

Source: systematized by the author

To operationalize these conclusions, a set of targeted regulatory amendments with measurable performance indicators is proposed. The proposed reforms are presented in Table 3.

**Table 3. Clause-Level Amendments and Performance Indicators  
(12–18 Months)**

Amendment (Legal/Administrative)	Operational Tool	Indicator (12–18 Months)
Add “Externship Teaching” as a recognized CPD pathway	Role profile and competency framework	Standard approved; ≥5,000 teachers registered
Issue a Micro-Credential Decree(EQF-aligned)	Learning outcomes, credit values, provider criteria	≥60 approved micro-courses; ≥40% from EU providers
Create a Cross-Border Recognition Protocol	Digital credential wallet; verifier registry	≥80% recognition decisions in ≤30 days; rejection rate <10%
Mandate Digital QA for online CPD	WCAG compliance, audit templates, portfolio sampling	100% new providers compliant; annual QA report
Launch Equity Bursaries for teachers abroad	Targeted grants and stipends	≥2,000 bursaries issued; ≥50% to low-income regions
Establish a National CPD Registry (API-based)	Integration with EU verifiable credentials	≥70% of providers connected; real-time dashboards operational

Note: WCAG — Web Content Accessibility Guidelines; API — application programming interface.  
Source: systematized by the author

In summary, Ukraine’s teacher development policy is transitioning from a traditional, provider-centered model to a digital, competency-based system. To make this transformation effective for externship educators, the state must: (1) define the role and establish a competency framework; (2) recognize learning through micro-credentials and fast-track cross-border RPL; and (3) ensure quality and equity through digital standards, inclusion indicators, and interoperable data. The proposed reforms create a cohesive CPD ecosystem where teachers can accumulate, store, and transfer professional credits; ministries can monitor and guarantee quality; and schools can staff externship education with motivated, certified professionals.

**Comparative Mapping.** The study compared how different policy environments implement teacher professional development (TPD) in a transnational and digital school context, with a particular focus on teachers teaching Ukrainian students abroad in internship formats. The map examines Estonia, Poland, Romania and Ukraine — four systems that highlight different governance logics, recognition mechanisms, digital infrastructures and equality mechanisms relevant to cross-border learning.

*Estonia* represents a digitally mature, standards-driven model in which teacher learning is closely tied to national platforms and interoperable credentials. Micro-credentialing is increasingly aligned with learning outcomes frameworks, and schools participate in cross-institutional, practice-based CPD communities. Quality assurance (QA) extends to online modalities, with accessibility and data standards embedded in platform design. This configuration suits transnational delivery because recognition and verification are routine and largely automated.

*Poland* illustrates a teacher-centered scaling model: national institutes coordinate CPD priorities, while regional centers and universities deliver blended offerings. Formal micro-credentials are still consolidating, but recognition mechanisms exist for modular CPD accumulated across providers. Poland’s emphasis on subject-

methodological training and coaching translates well to externship scenarios when combined with digital repositories and mentoring networks.

*Romania* displays an evolving, project-enabled approach. EU-funded initiatives have expanded digital resources and teacher academies, yet standardization and portability of micro-credentials remain uneven. QA for online CPD is improving but not fully harmonized; recognition may depend on provider lists and periodic approvals. This environment shows promise for cross-border learning but requires clearer protocols to verify training earned abroad and to assure accessibility for dispersed teachers.

*Ukraine* has a flexible but under-specified framework: CPD is competency-based and multi-provider, and digital offerings are expanding (e.g., national platforms and MOOC ecosystems). However, the externship role is not distinctly codified; micro-credential recognition and cross-border verification are nascent; and QA standards for online CPD, accessibility, and equity disaggregation need formal adoption. As a result, teachers abroad can upskill digitally but face uncertainty regarding official recognition and credit transfer.

**Table 4. Comparative mapping of teacher professional development integration in transnational and digital contexts**

Dimension	Estonia	Poland	Romania	Ukraine
Governance & coordination	Central digital governance with school-level professional communities; strong ministry–agency alignment	National priorities with regional CPD centers; universities as key providers	Mixed governance; project-enabled expansion of CPD; coordination improving	Flexible, multi-provider CPD; externship role not codified; coordination fragmented
Recognition & micro-credentials	Outcome-based micro-credentials; growing interoperability; digital wallets/passes emerging	Modular recognition across approved providers; micro-credentials consolidating	Partial recognition via provider lists/projects; portability uneven	Recognition possible but under-specified; micro-credentials not standardized or EQF-aligned
Digital CPD infrastructure	National platforms with interoperability, analytics, and accessibility by design	Blended repositories, LMS use, and thematic portals; steady expansion	Expanding platforms through EU funds; coverage uneven	MOOC ecosystems (e.g., national portals), Zoom/LMS use; lack of unified national CPD registry
Quality assurance (online)	QA extends to online CPD; WCAG, data, and audit standards embedded	QA improving; provider accreditation and course evaluation present	QA maturing; standards vary by project/provider	QA for online CPD not formalized; accessibility and e-audit requirements absent
Equity & inclusion instruments	Language support, accessibility services, needs-based access	Regional access programs; teacher bursaries in priority areas	Targeted projects for disadvantaged regions; continuity varies	Equity lens nascent (diaspora/IDP teachers); targeted bursaries not systematized
Cross-border portability	High - verification and credential sharing supported	Medium - formal routes exist; micro-creds still consolidating	Low–medium - depends on project frameworks	Low - no fast-track cross-border RPL; verification ad hoc

Note: RPL = recognition of prior learning; EQF = European Qualifications Framework; WCAG = Web Content Accessibility Guidelines; LMS = learning management system.

Source: systematized by the author

The comparative picture suggests three convergences:

- a) all four systems rely increasingly on digital ecosystems to scale CPD;
- b) collaborative, practice-embedded learning (mentoring, coaching, lesson study) is recognized as more impactful than stand-alone courses; and
- c) micro-credential pathways are expanding, though with varying degrees of alignment to qualification frameworks.

Divergences center on how recognition of externally earned CPD is operationalized; the maturity of digital QA (WCAG, proctoring, portfolio audits); and the presence of equity instruments (bursaries, language access, device programs) tailored to teachers working abroad.

Two design archetypes emerge. Estonia and, to a degree, Poland exemplify institutionalized ecosystems where policy, platforms, and recognition are synchronized - reducing transaction costs for teachers who learn across borders. Romania and Ukraine, while moving in this direction, still depend on project-based or provider-centric arrangements, which can delay or dilute recognition for CPD undertaken abroad.

For Ukraine’s externship teachers, three policy levers are most transferable:

1. Fast-track recognition (Estonia/Poland): digital credential wallets, verifier registries, and outcome-based micro-credentials aligned to EQF;
2. Digital QA by design (Estonia): WCAG compliance, portfolio audits, and analytics baked into national platforms;
3. Practice-embedded CPD (Poland/Estonia): mentoring, coaching, and lesson-study cycles recognized for credit and linked to classroom artifacts in diaspora/online settings.

**Table 5. Transferable practices and adaptation pathway for Ukraine (externship CPD)**

Transferable practice (source)	Why it matters in externship	Adaptation steps for Ukraine	Early indicators (6–12 mo)
EQF-aligned micro-credentials + digital wallets(Estonia, EU)	Enables portable, verifiable CPD credit across borders	Issue micro-credential decree; define outcomes/credits; launch verifier registry	≥30 approved micro-creds; ≥50% issued via verifiable credentials
Platform-level digital QA (WCAG, audits, analytics)(Estonia)	Assures quality and accessibility for dispersed teachers	Mandate WCAG; implement portfolio sampling; publish annual QA reports	100% new courses WCAG-compliant; QA report published
Practice-embedded mentoring & lesson study(Poland, Estonia)	Converts online learning into classroom-relevant practice	Credit mentoring hours; create externship coaching network; recognize artifacts	≥500 mentored teachers; ≥70% artifact submissions validated
Equity bursaries & language access(Poland/Romania projects)	Reduces barriers for diaspora/IDP teachers	Establish bursary line; fund translation/subtitling for CPD	≥1,000 bursaries; ≥200 courses subtitled
Cross-border RPL protocol(EU/ETF)	Recognizes prior learning from EU providers	Launch e-recognition portal; set 30-day decision SLA	≥80% decisions in ≤30 days; rejection <10%

Note: SLA = service level agreement; ETF = European Training Foundation; IDP = internally displaced person.

Source: systematized by the author

Comparative mapping confirms that digitally mature, recognition-ready ecosystems (e.g., Estonia) offer the shortest path to credible externship CPD: they standardize outcomes, automate verification, and embed QA and accessibility at the platform layer. Teacher-centered scaling (e.g., Poland) shows that mentoring and coaching can be mainstreamed for credit, provided recognition rules and data capture are clear. For Ukraine, immediate gains lie in codifying the externship role, adopting EQF-aligned micro-credentials, institutionalizing digital QA, and financing equity instruments for teachers abroad. Embedding these levers within a national CPD registry (API-based, verifiable credentials) would transform today's fragmented offerings into a coherent, portable, and outcome-oriented system - one that recognizes learning wherever it occurs and supports teachers who sustain Ukrainian education across borders.

**Discussion.** The results point to a clear pattern: high-performing TPD systems are evolving into integrated ecosystems where policy instruments, digital platforms, and recognition pathways are mutually reinforcing. Estonia and, to a degree, Poland exemplify this architecture: outcome-based micro-credentials, interoperable registries, and practice-embedded learning (mentoring, coaching, lesson study) reduce transaction costs and increase the portability of professional learning across borders. Romania's trajectory shows how EU-funded initiatives can accelerate digital infrastructure and training supply, but also how sustainability depends on standardization and national-level recognition rules. Ukraine sits at a strategic inflection point - its policy framework is flexible and aligned in principle with EU/OECD expectations, yet operationalization remains uneven, particularly regarding externship-specific standards, cross-border RPL, digital QA, and equity diagnostics for dispersed teacher populations.

Three implications follow. First, policy coherence must convert into operational coherence: EQF-aligned micro-credentials, verifiable digital credentials, and recognized mentoring/practice artifacts should be formally credited within Ukraine's CPD and attestation system. Second, institutional integration should extend beyond domestic training centers to include international academies and platform partnerships, ensuring that teachers abroad can access and transfer learning seamlessly. Third, outcome orientation - tracking participation, satisfaction, competence gains, and equity - should anchor monitoring and evaluation, enabling adaptive funding and accountability.

Importantly, this study does not yet offer a finalized analytical model capable of quantifying the relationships among policy coherence, institutional integration, and outcomes. Instead, it sets the conceptual groundwork and specifies the variables that such a model should incorporate. We recommend that future research design and test a three-dimensional analytical model that: operationalizes coherence between national and EU frameworks; measures institutional integration across governance, recognition, and QA; and links these to outcomes for teachers abroad (recognition rates, time-to-credential, credit portability, equity of access and completion). Mixed-method validation - combining administrative data from CPD registries with educator surveys and artifact audits - would provide a rigorous basis for evidence-informed policy.

**Conclusion.** This study shows that modernizing Ukraine's teacher professional development (TPD) policy for externship contexts is both necessary and feasible when strategic intentions are translated into operational instruments. The document analysis reveals strong declarative alignment with EU/OECD priorities but exposes gaps in cross-border recognition, digital quality assurance, and equity monitoring; the comparative mapping identifies practical solutions - EQF-aligned micro-credentials, verifiable credential wallets, platform-level QA, and practice-embedded mentoring - that can be adapted to Ukraine's context.

Accordingly, the reform pathway should codify the externship teaching role within the national CPD framework to formalize competencies, recognition, and mobility; standardize micro-credentials in line with EQF, with clear credit values, outcome descriptors, issuer requirements, and verifiable digital credentials for portability; institutionalize digital QA and equity metrics (e.g., WCAG compliance, portfolio audits, disaggregated indicators) to ensure accessible and accountable provision across transnational settings; and deploy an interoperable, API-based CPD registry that connects providers, automates verification, and accelerates recognition decisions.

While these recommendations are actionable, the study also underscores the need for a unified analytical model to evaluate reform effectiveness over time; future research should design and empirically validate a three-dimensional framework linking policy coherence, institutional integration, and outcome orientation to assess whether reforms deliver recognized, portable, and equitable professional learning for teachers educating Ukrainian students abroad.

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