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LOCALIZING GLOBAL DIGITAL GENDER AGENDAS: INTERNATIONAL ORGANIZATIONS AND WOMEN'S EDUCATION POLICIES IN CENTRAL ASIA

This article examines how global digital gender agendas promoted by international organizations are localized within women's education policies in Central Asia. Focusing on Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan, and Turkmenistan, it uses comparative qualitative policy analysis to explain cross-national variation in the adoption, integration, and implementation of norms linking gender equality, education, and digitalization. The article argues that while international organizations have institutionalized women's digital inclusion as a development goal, domestic outcomes are shaped by governance strategies, state capacity, and institutional fragmentation. Governments across the region have adopted global gender language in policy discourse, but its translation into coordinated and gender-transformative reform remains uneven. The findings show that localization proceeds through selective adoption, symbolic compliance, and institutional decoupling. The article contributes to scholarship on norm diffusion and localization by demonstrating how governance contexts in Central Asia shape the domestic life of global equality agendas. The comparison highlights practical priorities for more coherent regional implementation.

Keywords: Central Asia, gender policy, digitalization, women's education, international organizations, norm localization.

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Жаһандық цифрлық гендерлік күн тәртібін жергіліктендіру: халықаралық ұйымдар және Орталық Азиядағы әйелдер білімі саласындағы саясат

Мақалада халықаралық ұйымдар ілгерілететін жаһандық цифрлық гендерлік күн тәртібінің Орталық Азиядағы әйелдер білімі саясаты аясында қалай жергіліктендірілетіні қарастырылады. Қазақстан, Қырғызстан, Өзбекстан, Тәжікстан және Түрікменстан мысалында мемлекеттік саясатқа салыстырмалы сапалық талдау жүргізу арқылы гендерлік теңдік, білім беру және цифрландыруды өзара байланыстыратын нормаларды қабылдау, кіріктіру және іске асырудағы елдер арасындағы айырмашылықтар түсіндіріледі. Мақалада халықаралық ұйымдар әйелдердің цифрлық инклюзиясын даму мақсаты ретінде институционалдандырғанымен, ұлттық деңгейдегі нақты нәтижелер мемлекеттік басқару стратегияларына, мемлекеттің әлеуетіне және институционалдық фрагментацияға тәуелді екені дәлелденеді. Аймақ елдерінің үкіметтері жаһандық гендерлік риториканы саяси дискурсқа енгізгенімен, оны үйлестірілген әрі гендерлік қатынастарды өзгертуге бағытталған реформаларға айналдыру үдерісі біркелкі емес. Зерттеу нәтижелері жергіліктендірудің нормаларды іріктеп қабылдау, символдық сәйкестік және формалды міндеттемелер мен практикалық іске асыру арасындағы институционалдық алшақтық арқылы жүретінін көрсетеді. Мақала нормалардың диффузиясы мен жергіліктендірілуін зерттеуге үлес қосып, Орталық Азиядағы басқару контекстінің жаһандық теңдік күн тәртібінің ұлттық деңгейдегі жүзеге асуына қалай ықпал ететінін көрсетеді. Салыстыру өңірлік іске асыруды үйлестіруге арналған практикалық басымдықтарды да айқындайды.

Түйін сөздер: Орталық Азия, гендерлік саясат, цифрландыру, әйелдер білімі, халықаралық ұйымдар, нормаларды жергіліктендіру.

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Локализация глобальной цифровой гендерной повестки: международные организации и политика в сфере женского образования в Центральной Азии

В статье рассматривается, каким образом глобальные цифровые гендерные повестки, продвигаемые международными организациями, локализуются в политике женского образования в Центральной Азии. На материале Казахстана, Кыргызстана, Узбекистана, Таджикистана и Туркменистана с использованием сравнительного качественного анализа государственной политики объясняются межстрановые различия в принятии, интеграции и реализации норм, связывающих гендерное равенство, образование и цифровизацию. В статье утверждается, что, хотя международные организации институционализировали цифровую инклюзию женщин как одну из целей развития, конкретные результаты на национальном уровне определяются стратегиями государственного управления, потенциалом государства и институциональной фрагментацией. Правительства стран региона включили глобальную гендерную риторику в политический дискурс, однако её трансформация в скоординированные и способные изменить гендерные отношения реформы остаётся неравномерной. Результаты исследования показывают, что локализация осуществляется через выборочное принятие норм, символическое соответствие и институциональное расхождение между формальными обязательствами и практической реализацией. Статья вносит вклад в исследования диффузии и локализации норм, демонстрируя, как особенности государственного управления в Центральной Азии формируют внутреннюю траекторию глобальных повесток равенства. Сравнение также выявляет практические приоритеты для более согласованной региональной реализации.

Ключевые слова: Центральная Азия, гендерная политика, цифровизация, женское образование, международные организации, локализация норм.

Introduction

Digital transformation has become a central concern in contemporary public administration, development governance, and education policy. Access to digital skills, information and communication technologies (ICT), and technology-enabled learning is increasingly understood not only as a technical issue but also as a condition for social inclusion, economic participation, and gender equality. International organizations have played an important role in advancing this agenda by linking women's digital inclusion to broader objectives of sustainable development, inclusive growth, and human capital development through global frameworks, policy advice, monitoring instruments, funding mechanisms, and project-based interventions (United Nations, 2015; UNESCO, 2023; UNDP, 2023).

This agenda is particularly visible in the 2030 Agenda for Sustainable Development, which identifies enabling technologies as instruments for advancing women's empowerment under SDG Target 5.b (United Nations, 2015; United Nations Statistics Division, 2016). Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan, and Turkmenistan have all formally endorsed international commitments related to gender equality, education, and digital development. Elements of this agenda increasingly appear

in national strategies, sectoral programs, and donor-supported initiatives.

Yet the transition from global commitment to domestic transformation remains uneven. Across Central Asia, women's digital education continues to be shaped by unequal digital infrastructure, rural–urban disparities, fragmented governance, limited coordination across policy sectors, and gender norms that influence educational and occupational trajectories (Silova & Abdushukurova, 2009; OECD, 2017; UNDP, 2021; GSMA, 2024). These constraints suggest that the adoption of global policy language is only the first stage of a more complex process. The central issue is how internationally promoted agendas are translated into domestic governance systems and why their implementation differs across countries exposed to broadly similar global frameworks.

This article examines how global digital gender agendas are localized within women's education policies in Central Asia. It understands localization not as the direct transfer of international norms into national policy, but as a politically and institutionally mediated process. Rather than treating Central Asian states as passive recipients of external ideas, the article approaches the region as a comparative policy space in which similar international agendas are interpreted through different governance arrangements, administrative capacities, and state

priorities. The five republics share Soviet legacies in education and gender policy, post-socialist institutional trajectories, and sustained engagement with international organizations, but differ in regime characteristics, state capacity, donor embeddedness, bureaucratic organization, and the institutional position of gender policy (Kandiyoti, 2007; Kamp, 2016; Kluczevska, 2022).

The article addresses three research questions. First, through which mechanisms do international organizations promote digital gender agendas in Central Asia? Second, how are these agendas incorporated into national policy frameworks on women's education? Third, why does formal policy alignment often produce selective, fragmented, or symbolic outcomes rather than sustained institutional change?

The central argument is that global digital gender agendas are widely diffused across Central Asia, but they are selectively localized through regime-specific governance strategies. International organizations legitimize women's digital inclusion as a policy objective and provide policy models, funding, expertise, and monitoring frameworks. However, domestic outcomes depend on how states integrate these agendas into their institutional structures, development priorities, and administrative routines. Across the region, governments have adopted the language of gender equality, digitalization, and educational modernization, but this has not consistently produced coherent implementation or gender-transformative reform. Localization therefore proceeds through selective adoption, symbolic compliance, and institutional decoupling between formal commitments and practical outcomes.

The article contributes to public administration and Central Asian policy studies in three ways. First, it situates women's digital education within broader debates on governance, state capacity, inter-agency coordination, and international policy influence. Second, it provides a structured comparison of all five Central Asian states, identifying shared patterns and country-level variation in the domestic translation of global agendas. Third, it contributes to debates on norm diffusion and localization by showing how post-socialist and semi-authoritarian governance contexts shape the domestic life of global equality agendas.

Literature review and Analytical framework

Research on gender, education, and development has consistently shown that formal commitments to equality do not automatically produce substantive institutional change. In contemporary global policy discourse, women's access to educa-

tion, digital skills, and information and communication technologies is framed both as a rights-based concern and as a developmental priority linked to labour market participation, innovation, and national competitiveness (United Nations, 2015; UNESCO, 2023; UNDP, 2023). International organizations have played a central role in promoting this agenda by connecting women's digital inclusion to sustainable development, educational modernization, and inclusive growth. At the same time, scholarship on global governance and gender policy shows that international norms are mediated through domestic institutions and are often reinterpreted in ways that limit their transformative potential.

One influential approach for understanding these processes is the literature on norm diffusion. This body of work explains how internationally promoted ideas gain legitimacy and spread across states through the activities of norm entrepreneurs, including international organizations, donor agencies, and transnational policy networks (Finnemore & Sikkink, 1998). These actors diffuse norms through persuasion, funding, benchmarking, technical assistance, reporting frameworks, and development conditionalities. In the field of digital gender policy, organizations such as the United Nations, UNESCO, UNDP, and the World Bank have helped frame women's access to digital education and ICT as a legitimate policy objective. In Central Asia, this diffusion is visible in SDG-related reporting, donor-supported reform programs, digital literacy initiatives, and the incorporation of gender and ICT language into national strategies.

However, norm diffusion alone cannot explain variation in domestic outcomes. States do not simply internalize external norms; they interpret, negotiate, and adapt them within specific political and institutional contexts. The concept of norm localization is especially useful here. Localization approaches emphasize that international norms are reconstructed to fit local institutional settings, political priorities, and normative orders, rather than copied directly (Acharya, 2004). This perspective is relevant for Central Asia, where international commitments to gender equality are often incorporated into official discourse but reframed through state-led modernization narratives, development priorities, or conservative understandings of gender roles. The analytical issue is therefore not only whether norms are adopted, but how they are translated, which elements are retained, and what political effects follow.

This question is especially important in Central Asia because gender reform in the region has developed within a distinctive combination of post-

Soviet institutional legacies, state-led modernization, uneven market transition, and the reassertion of national cultural discourses. Existing scholarship shows that gender policy in Central Asia cannot be understood apart from Soviet-era approaches to women's emancipation, post-independence institutional restructuring, and informal patriarchal norms (Kandiyoti, 2007; Northrop, 2004; Kamp, 2016). Earlier comparative work demonstrated that formal equality provisions in education and law often conceal substantial differences in institutional capacity, policy implementation, and lived experience across the region (Silova & Abdushukurova, 2009). More recent research similarly argues that gender equality in Central Asian education systems must be examined through policy trajectories, institutional arrangements, and context-specific inequalities rather than through formal commitments alone (Durrani, Kataeva, & Kuzhabekova, 2025).

Scholarship specifically addressing digital gender agendas in Central Asia remains limited. International reports and policy studies identify recurring challenges, including gendered barriers in STEM education, uneven digital infrastructure, rural–urban disparities, and weak institutional coordination (OECD, 2017; UNDP, 2021; GSMA, 2024). However, much of this material remains primarily descriptive. It documents gaps in access and participation but gives less attention to the political and institutional mechanisms through which these gaps are reproduced. This article addresses that gap by examining not only whether global digital gender agendas have reached the region, but also how they are localized within domestic policy systems and why implementation remains uneven.

To explain the distance between formal adoption and substantive change, the article also draws on feminist institutionalism. This perspective shifts attention from policy language to the institutional environments in which reforms are enacted. Feminist institutionalist scholarship argues that institutions are shaped by formal rules, informal norms, and power relations that influence which reforms are prioritized, how they are implemented, and whose interests are recognized (Mackay & Waylen, 2009; Mackay, Kenny, & Chappell, 2010; Waylen, 2014). In the Central Asian context, this helps explain why governments may adopt gender-sensitive language in education or digitalization strategies without introducing corresponding changes in resource allocation, inter-agency coordination, or accountability structures.

Taken together, norm diffusion, norm localization, and feminist institutionalism provide the framework for this study. Norm diffusion explains how international organizations promote and legitimize digital gender agendas. Norm localization explains why these agendas are selectively reworked once they enter domestic policy arenas. Feminist institutionalism explains why even formally adopted reforms may remain shallow when filtered through fragmented governance structures and gendered institutional arrangements. These perspectives are brought together through four analytical dimensions: mechanisms of external norm diffusion, degree of policy integration, institutional fragmentation, and implementation outcomes.

The relationship between these theoretical approaches and their empirical relevance to Central Asia is summarized in Table 1.

Table 1

Analytical framework for examining the localization of digital gender agendas in Central Asia

Theoretical approach	Core claim	Analytical relevance for this article	Indicative empirical expression in Central Asia
Norm diffusion	International norms gain legitimacy and spread through global governance processes.	Explains how international organizations promote digital gender agendas through funding, policy advice, monitoring, and program interventions.	SDG-linked reporting, donor-supported digital literacy programs, and gender language in national strategies.
Norm localization	International norms are adapted and reinterpreted within domestic political and institutional settings.	Explains why states selectively incorporate some elements of global agendas while modifying, narrowing, or reframing others.	Reframing of women's digital inclusion through modernization, development, and state legitimacy narratives.
Feminist institutionalism	Institutions are shaped by gendered formal and informal power relations.	Explains why formal commitments do not necessarily produce transformative change.	Weak inter-agency coordination, symbolic compliance, gendered policy hierarchies, and limited redistribution of resources.

Theoretical approach	Core claim	Analytical relevance for this article	Indicative empirical expression in Central Asia
Institutional decoupling	Formal commitments may coexist with shallow or uneven implementation.	Explains the gap between policy adoption and practical outcomes.	Strategy adoption without sustained implementation, fragmented governance, and uneven territorial access.

Note. Author's compilation based on Finnemore and Sikkink (1998), Acharya (2004), Mackay and Waylen (2009), Mackay, Kenny, and Chappell (2010), and Waylen (2014). The table summarizes the analytical framework used to examine the localization of digital gender agendas across Central Asia. It is intended as a conceptual, not quantitative, classification.

As Table 1 shows, this article does not treat localization as a single-stage process. Rather, it conceptualizes localization as a sequence in which global agendas are first diffused, then selectively translated, and finally either embedded or weakened through domestic institutional structures. This framing allows the analysis to move beyond a descriptive inventory of policies and instead explain why the same broad global agenda takes different domestic forms across Central Asia.

The table also clarifies the article's broader argument. The key issue is not whether Central Asian states are exposed to global digital gender agendas; they clearly are. The more important question is how those agendas are governed once they enter national policy systems. Across the region, international organizations have helped establish women's digital inclusion as a legitimate policy concern. However, domestic incorporation is shaped by state capacity, regime priorities, bureaucratic organization, and the extent to which gender equality is treated as a substantive policy objective rather than as a symbolic or secondary commitment. The analytical framework therefore directs attention not simply to policy adoption, but to the politics of translation, coordination, and implementation. For this reason, the article uses the four dimensions identified above (diffusion, integration, fragmentation, and implementation) as the organizing structure for the empirical analysis. This enables a structured comparison across Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan, and Turkmenistan while preserving sensitivity to both regional commonalities and country-level variation. In this way, the literature reviewed here provides not only the theoretical basis for the article, but also the analytical logic through which the Central Asian cases are interpreted.

Research design, questions, and methods

This article uses comparative qualitative policy analysis to examine how global digital gender agen-

das are translated into women's education policies in Central Asia. It addresses three research questions. First, through which mechanisms do international organizations promote digital gender agendas in Central Asia? Second, how are these agendas incorporated into domestic policy frameworks on women's education across Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan, and Turkmenistan? Third, why does formal policy alignment often result in selective, fragmented, or symbolic outcomes rather than sustained institutional change?

The research design is cross-national and covers all five post-Soviet Central Asian states. This design is appropriate because the article is concerned not only with whether digital gender norms appear in national policy texts, but also with how they are institutionalized, organized, and politically managed once they enter domestic governance systems. Case selection follows a most-similar-systems logic. The five republics share Soviet legacies in education and gender policy, post-socialist institutional trajectories, predominantly Muslim populations, and sustained exposure to many of the same international organizations and development frameworks. At the same time, they differ in regime type, state capacity, openness to external actors, donor embeddedness, and the space available for civil society participation. This combination of similarity and variation makes Central Asia a useful regional setting for examining how broadly shared global agendas are localized differently under distinct political and institutional conditions (Durrani et al., 2025; Kamp, 2016; Kandiyoti, 2007).

The empirical material consists of national policy documents, strategic plans, legal and programmatic materials, donor reports, and international-organization publications produced primarily between 2015 and 2025. The corpus was deliberately multilingual and included documents in English, Russian, Kazakh, Kyrgyz, Uzbek, Tajik, and Turkmen where available. It was designed to capture both sides of

the policy process: first, the external promotion of digital gender agendas by international organizations; and second, their incorporation into domestic

frameworks related to gender equality, education reform, digitalization, ICT access, skills development, and women's empowerment.

Table 2

Document corpus used for comparative qualitative policy analysis

Corpus category	Documents included	Analytical purpose
Global frameworks	2030 Agenda for Sustainable Development; SDG Indicator 5.b.1 metadata; UNESCO, UNDP, World Bank, GSMA, and ITU materials on gender equality, ICT access, digital inclusion, and digital literacy (GSMA, 2024; International Telecommunication Union, 2024; United Nations, 2015; United Nations Statistics Division, 2016; UNESCO, 2023; UNDP, 2021, 2023; World Bank, 2025)	To identify the international digital gender agenda, including the indicators, concepts, and policy language promoted through global organizations
Regional international-organization materials	UNESCO Almaty policy brief on gender equality in and through education in Central Asia; UNESCO digital literacy and gender equality project materials; UNDP regional materials on ICTs and gender equality; CAREC Gender Strategy 2030 (CAREC, 2019; UNESCO, 2021a, 2021b; UNDP, 2021)	To trace how global norms are adapted for Central Asia and promoted through regional development frameworks
Kazakhstan national documents	Concept of Family and Gender Policy until 2030; Digital Kazakhstan State Program, 2018–2022; Concept of Digital Transformation, ICT Development and Cybersecurity for 2023–2029; Concept for the Development of Preschool, Secondary, Technical and Vocational Education for 2023–2029; Concept for the Development of Higher Education and Science for 2023–2029 (Government of the Republic of Kazakhstan, 2017, 2023a, 2023b, 2023c; President of the Republic of Kazakhstan, 2016)	To assess the technocratic integration of gender, education, and digitalization within a comparatively strong state policy framework
Kyrgyzstan national documents	National Development Strategy 2018–2040; Education Development Program 2021–2040; Digital Kyrgyzstan 2019–2023; Digital Transformation Concept 2024–2028; National Strategy on Achieving Gender Equality until 2030 and National Action Plan for 2022–2024 (Cabinet of Ministers of the Kyrgyz Republic, 2021, 2022; Government of the Kyrgyz Republic, 2018, 2019; Ministry of Digital Development of the Kyrgyz Republic, 2024)	To assess donor-supported gender mainstreaming, digital skills policy, and institutional fragmentation
Uzbekistan national documents	Strategy for Achieving Gender Equality in the Republic of Uzbekistan until 2030; Digital Uzbekistan–2030 Strategy; Uzbekistan–2030 Strategy; UNDP Gender Digital Divide Assessment; OECD digital skills materials (OECD, 2023; President of the Republic of Uzbekistan, 2020, 2023; Senate of the Oliy Majlis of the Republic of Uzbekistan, 2021; UNDP Uzbekistan, 2023)	To assess centralized and selective incorporation of gender and digitalization into state-led modernization
Tajikistan national documents	National Strategy for Activating the Role of Women in the Republic of Tajikistan for 2021–2030; National Development Strategy until 2030; National Education Development Strategy until 2030; Concept of the Digital Economy; Concept for the Transition to Digital Education until 2042; Digitalization Roadmap and ICT Integration Program, 2023–2027; teacher ICT competency materials (Government of the Republic of Tajikistan, 2016, 2019, 2020, 2021, 2022; UNESCO, 2025)	To assess externally encouraged but capacity-constrained integration of women's education and digital transformation
Turkmenistan national documents and monitoring materials	National Action Plan on Gender Equality, 2021–2025; Concept of Digital Economy Development, 2019–2025; education-technology policy profiles; CEDAW and UN reporting materials; UNDP Turkmenistan gender equality materials (OHCHR, 2024; Turkmenistan UN Country Team, 2020; UNESCO, 2025b; UNDP Turkmenistan, 2025)	To assess formal alignment, limited transparency, and the constraints of evaluating implementation in a closed governance context

Note. Author's compilation based on national policy documents, international-organization reports, donor materials, and secondary analytical literature. The corpus is analytical rather than exhaustive. Documents were selected because they directly address one or more of the article's core domains: gender equality, women's empowerment, education, digitalization, ICT access, digital skills, STEM participation, or technology-enabled learning.

Documents were selected according to three criteria. First, they had to address at least one core policy domain: gender equality, women's empowerment, girls' or women's education, digitalization, ICT access, digital skills, STEM participation, or technology-enabled learning. Second, the corpus prioritized documents produced by national governments, major international organizations, donor agencies, or authoritative analytical bodies active in Central Asia. Third, the analysis focused primarily on documents published between 2015 and 2025, corresponding to the period after the adoption of the 2030 Agenda for Sustainable Development. Earlier sources were used selectively where they provided historical context for post-Soviet gender and education policy trajectories.

The analysis proceeded in three stages. First, it identified whether and how the main elements of global digital gender agendas appear in national policy discourse. Second, it examined whether these commitments are institutionalized through programs, implementation mechanisms, indicators, responsible agencies, inter-agency coordination structures, budgets, or monitoring procedures. Third, it assessed whether formal commitments correspond to evidence of implementation and policy depth, including reported programs, institutional continuity, women's participation in ICT-related education, and documented barriers such as territorial inequality, weak coordination, and gendered educational stratification (GSMA, 2024; OECD, 2017; UNDP, 2021).

Documents were analysed through a structured qualitative coding procedure. The first coding stage identified references to gender equality, women's empowerment, girls' education, digital skills, ICT access, STEM participation, and technology-enabled learning. The second stage examined whether these references were linked to implementation mechanisms, including programs, budgets, indicators, responsible agencies, coordination arrangements, or accountability procedures. The third stage compared the five cases across four analytical dimensions: external norm diffusion, policy integration, institutional fragmentation, and implementation outcomes. This coding strategy made it possible to distinguish between rhetorical alignment with global agendas and deeper institutionalization within domestic policy systems.

For analytical purposes, the degree of policy integration was assessed as an ordinal qualitative category rather than as a statistical measure. Policy integration refers to the extent to which digital gender

agendas are incorporated into domestic policy architecture beyond rhetorical recognition. Five indicators were used: discursive recognition of women's or girls' digital inclusion; explicit linkage between gender equality, education, and digitalization; identification of responsible institutions or coordination mechanisms; presence of implementation instruments such as programs, budgets, indicators, timelines, action plans, or monitoring procedures; and continuity across multiple policy documents rather than isolated references. Cases were classified as showing high, moderate, or low integration depending on the density and coherence of evidence across these indicators.

To strengthen interpretive reliability, the study uses triangulation across sources. Government documents are read alongside reports by international organizations, donor assessments, monitoring materials, and secondary scholarship in order to reduce dependence on official state self-presentation. Cross-case comparison also helps distinguish country-specific developments from broader regional patterns.

The study has several limitations. The availability and transparency of policy documentation vary across the region, with Turkmenistan presenting the greatest constraints. The article does not use interviews or elite-level process tracing, which limits its ability to identify informal bargaining or bureaucratic contestation. In addition, gender-transformative outcomes are difficult to measure through policy texts and aggregate indicators alone, so outcomes are treated as approximations based on documentary, programmatic, and secondary evidence. Substantively, the article focuses on women's education policy broadly understood, including formal schooling, higher education, vocational training, and non-formal digital literacy initiatives where these intersect with education, skills, or empowerment policy.

Results

The results are organized according to the four analytical dimensions developed in the literature review and methods section: mechanisms of external norm diffusion, degree of policy integration, institutional fragmentation, and implementation outcomes. Across the five cases, the analysis identifies a common regional pattern: global digital gender agendas have gained broad discursive legitimacy, but their incorporation into domestic policy remains uneven, selective, and institutionally constrained.

Mechanisms of External Norm Diffusion

Across Central Asia, digital gender agendas are diffused primarily through international organizations, donor agencies, and transnational development frameworks. These actors operate as norm entrepreneurs by framing women's access to digital education, ICT skills, and technology-enabled learning as part of a wider agenda of gender equality, human capital development, and sustainable growth (Finnemore & Sikkink, 1998; United Nations, 2015; UNESCO, 2023; UNDP, 2023). Their influence is visible in four main mechanisms: agenda-setting, policy advice, donor-supported programming, and monitoring.

First, global frameworks such as the 2030 Agenda for Sustainable Development have helped establish a common vocabulary linking gender equality, education, and digital transformation. SDG Target 5.b is especially important because it identifies enabling technologies as instruments for women's empowerment and translates a broad equality commitment into a measurable policy field (United Nations, 2015; United Nations Statistics Division, 2016). Through this framework, women's digital inclusion becomes a legitimate object of government action, international reporting, and donor-supported programming.

Second, international organizations provide policy advice and technical assistance. UNESCO, UNDP, the World Bank, ITU, GSMA, and regional development actors supply governments with concepts, indicators, templates, and policy models that link digitalization to inclusion (GSMA, 2024; International Telecommunication Union, 2024; UNESCO, 2021a, 2023; UNDP, 2021, 2023; World Bank, 2025). These organizations do not simply finance programs; they also define what counts as a modern and internationally credible policy response. This helps explain why terms such as digital skills, ICT access, STEM participation, empowerment, inclusion, and human capital appear across national policy documents despite differences in domestic governance systems.

Third, donor-supported programs in digital literacy, girls' STEM participation, teacher training, digital education, and gender-sensitive skills development introduce specific intervention models into national contexts (UNESCO, 2021a, 2021b; UNDP, 2021, 2023). These projects often serve as practical channels through which global norms are translated into domestic initiatives. However, they also create a tension: while donor-supported initiatives increase policy visibility, they do not always become embedded in durable national systems. This is especially relevant in Kyrgyzstan and Tajikistan, where

external support has played a visible role in shaping gender and education agendas, but institutional consolidation remains uneven (Kluczewska, 2022; Simpson, 2006; UNDP, 2021).

Fourth, monitoring and benchmarking create incentives for governments to demonstrate alignment with global standards. International indicators, SDG reporting processes, gender assessments, digital development measures, and donor reviews encourage states to adopt policy language and produce evidence of formal progress (GSMA, 2024; International Telecommunication Union, 2024; United Nations Statistics Division, 2016). However, these instruments can privilege measurable outputs over deeper institutional transformation. As a result, governments may prioritize strategies, indicators, reports, and pilot programs while the more complex work of coordination, budgeting, and gender-transformative implementation remains weaker.

These mechanisms show that the diffusion of digital gender agendas in Central Asia is neither accidental nor uniform. International organizations have helped make women's digital inclusion a legitimate regional policy concern, but diffusion does not determine outcomes. The same broad agenda is filtered through different national governance arrangements: Kazakhstan incorporates it into a stronger state-led modernization framework; Kyrgyzstan absorbs it through a more pluralized and donor-linked policy environment; Uzbekistan selectively adapts it through centralized reform priorities; Tajikistan incorporates it under weaker institutional capacity; and Turkmenistan maintains formal alignment within a more closed and opaque policy system (CAREC, 2019; OECD, 2017; UNDP, 2021; UNESCO, 2021b).

Differentiated Policy Integration Across the Five States

The second major finding is that all five Central Asian states have incorporated elements of digital gender agendas into policy discourse, but the depth and form of integration differ substantially. Following the operational definition in Section 3, policy integration is assessed through five indicators: discursive recognition, cross-sectoral linkage, institutional responsibility, implementation mechanisms, and policy continuity. The classifications presented in Table 3 are therefore derived through qualitative coding rather than numerical scoring.

Kazakhstan represents the clearest case of relatively advanced strategic integration. Digitalization, education modernization, and human capital development are prominent within state policy. Docu-

ments such as the Digital Kazakhstan State Program, the Concept of Digital Transformation, ICT Development and Cybersecurity for 2023–2029, and education-sector development concepts provide a comparatively coherent framework for linking digital transformation to educational modernization (Government of the Republic of Kazakhstan, 2017, 2023a, 2023b, 2023c). Gender equality is also present in the broader policy architecture, particularly through the Concept of Family and Gender Policy until 2030 (President of the Republic of Kazakhstan, 2016). However, Kazakhstan’s integration remains largely technocratic: women’s digital inclusion is recognized as part of modernization and competitiveness, but gender equality is not consistently positioned as a transformative principle across digital education governance.

Kyrgyzstan shows greater rhetorical openness to gender mainstreaming, empowerment, and donor-supported inclusion. The National Strategy on Achieving Gender Equality until 2030, the Education Development Program 2021–2040, Digital Kyrgyzstan 2019–2023, and the Digital Transformation Concept 2024–2028 indicate that gender, education, and digitalization are all recognized within the policy field (Cabinet of Ministers of the Kyrgyz Republic, 2021, 2022; Government of the Kyrgyz Republic, 2018, 2019; Ministry of Digital Development of the Kyrgyz Republic, 2024). Yet this openness does not automatically produce coherence. Gender and digital education initiatives often remain dispersed across separate strategies, donor projects, and institutional mandates. Kyrgyzstan therefore demonstrates normative openness combined with fragmented implementation capacity.

Uzbekistan occupies an intermediate position characterized by centralized and selective integration. The Strategy for Achieving Gender Equality until 2030, Digital Uzbekistan–2030, and the Uzbekistan–2030 Strategy indicate that gender equal-

ity and digital transformation are incorporated into the state’s modernization agenda (President of the Republic of Uzbekistan, 2020, 2023; Senate of the Oliy Majlis of the Republic of Uzbekistan, 2021). Unlike Kyrgyzstan, Uzbekistan filters external agendas more directly through state-led reform priorities. This can create stronger vertical direction, but it also narrows the agenda. Women’s digital inclusion is most visible where it supports administrative modernization, economic development, and state capacity (OECD, 2023; UNDP Uzbekistan, 2023).

Tajikistan demonstrates a more fragile form of integration. National documents on women’s role, development strategy, education, digital economy, and the transition to digital education indicate formal recognition of gender, education, and digital transformation (Government of the Republic of Tajikistan, 2016, 2019, 2020, 2021, 2022). However, the institutional basis for linking these fields remains weaker than in Kazakhstan or Uzbekistan. Tajikistan’s policy environment is more dependent on external support and faces stronger constraints related to state capacity, territorial inequality, infrastructure, and administrative reach (Kluczevska, 2022; UNDP, 2021).

Turkmenistan represents the most limited and opaque case. Formal policy documents and international reporting materials indicate alignment with gender equality, education, and digital development commitments, including the National Action Plan on Gender Equality and the Concept of Digital Economy Development (OHCHR, 2024; Turkmenistan UN Country Team, 2020; UNDP Turkmenistan, 2025). However, public information on implementation mechanisms, coordination arrangements, and policy outcomes is more restricted than in the other four cases. Turkmenistan therefore illustrates how administrative closure and limited transparency constrain both implementation and evaluability. The differentiated integration of digital gender agendas is summarized in Table 3.

Table 3
Differentiated integration of digital gender agendas in Central Asia

Country	Dominant policy discourse	Degree of policy integration	Institutional logic	Implementation tendency
Kazakhstan	Digital modernization, competitiveness, human capital, and inclusion	Relatively high at the strategic level	Technocratic incorporation within a comparatively strong state framework	More consistent strategic integration, but limited gender-transformative depth
Kyrgyzstan	Gender mainstreaming, empowerment, donor-linked inclusion, and digital transformation	Moderate to relatively high in discourse, weaker in consolidation	Normative openness combined with fragmented institutional embedding	Uneven, project-based, and often donor-dependent

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Country	Dominant policy discourse	Degree of policy integration	Institutional logic	Implementation tendency
Uzbekistan	State-led reform, modernization, digital transformation, and controlled inclusion	Moderate and selective	Centralized adaptation filtered through state priorities	Selective implementation aligned with broader modernization goals
Tajikistan	Internationally aligned discourse on access, women's participation, education, and digital opportunity	Limited to moderate and externally encouraged	Fragile integration constrained by weak capacity and territorial inequality	Uneven and weakly institutionalized
Turkmenistan	Formal alignment with gender, education, and digital development commitments, but limited public articulation	Low to limited	Minimal, tightly controlled, and opaque incorporation	Difficult to assess; likely shallow and weakly visible

Note. Author's analysis based on the document corpus described in Section 3. The categories are analytical rather than quantitative. They summarize comparative patterns of localization across the five cases.

Table 3 shows that the five states differ less in their exposure to international digital gender agendas than in the political and institutional terms on which these agendas are incorporated. The regional pattern is best understood as shared discursive alignment combined with differentiated institutional integration.

Institutional Fragmentation as a Mediating Factor

The third major finding is that institutional fragmentation mediates the relationship between formal policy adoption and implementation outcomes. Women's digital education is inherently cross-sectoral: it requires coordination between education ministries, digital development bodies, gender equality institutions, labour-market agencies, teacher-training systems, regional administrations, and donor-supported programs. Yet across Central Asia, these policy domains are rarely integrated into a single coherent governance framework. Instead, gender equality, digitalization, education reform, and skills development often proceed through parallel strategies and separate institutional mandates (Mackay & Waylen, 2009; Mackay et al., 2010; Waylen, 2014).

In Kazakhstan, fragmentation is moderated by stronger state capacity. The country has a developed strategic architecture for digital transformation and education modernization, but gender equality, digitalization, and education still often remain located in separate policy streams. Digital transformation is mainly framed through innovation, infrastructure, competitiveness, and human capital, while gender policy is more often treated as a social or family-

policy issue (Government of the Republic of Kazakhstan, 2017, 2023a, 2023b, 2023c; OECD, 2017; President of the Republic of Kazakhstan, 2016). This creates compartmentalization: the state can pursue digital modernization without fully integrating the gender-transformative dimension of digital education.

In Kyrgyzstan, fragmentation is more closely associated with donor pluralism and weaker institutional consolidation. The country's relatively open policy environment increases the visibility of gender equality and inclusion (Simpson, 2006; UNDP, 2021). However, multiple strategies, programs, and projects often operate simultaneously without being consolidated into a durable national system (Cabinet of Ministers of the Kyrgyz Republic, 2021, 2022; Government of the Kyrgyz Republic, 2018, 2019; Ministry of Digital Development of the Kyrgyz Republic, 2024).

In Uzbekistan, fragmentation appears within a centralized reform model. State-led modernization provides clearer vertical direction, and national strategies present digital transformation and gender equality as development priorities (President of the Republic of Uzbekistan, 2020, 2023; Senate of the Oliy Majlis of the Republic of Uzbekistan, 2021). However, centralization does not automatically produce horizontal coordination. Policy domains may remain segmented across administrative structures, with gender equality integrated selectively where it supports broader modernization objectives (OECD, 2023; UNDP Uzbekistan, 2023).

In Tajikistan, fragmentation is intensified by weaker state capacity and uneven territorial reach. Policy documents recognize women's participation,

education development, digital economy, and digital learning, but the institutional conditions for implementation are fragile (Government of the Republic of Tajikistan, 2016, 2019, 2020, 2021, 2022; UNESCO, 2025). Donor-supported initiatives may introduce important practices and concepts, yet these do not always become embedded in national systems. Administrative capacity, infrastructure gaps, and rural–urban inequalities limit the translation of formal commitments into broad-based outcomes (Kluczevska, 2022; UNDP, 2021).

In Turkmenistan, fragmentation is difficult to observe directly because of limited transparency. Available documents and reporting materials suggest formal alignment with international commitments, but the public record provides less evidence of how gender, education, and digitalization are coordinated in practice (OHCHR, 2024; UNESCO, 2025b; UNDP Turkmenistan, 2025). In this case, opacity itself becomes part of the governance problem.

Across the five cases, fragmentation functions as more than an administrative weakness. It is also a mechanism through which global agendas are contained. By distributing responsibility across separate institutions, governments can adopt internationally legitimate language while limiting the redistributive implications of gender equality commitments. This helps explain why formal alignment with global digital gender agendas often coexists with limited practical transformation.

Implementation Outcomes and the Limits of Transformation

The fourth major finding concerns the implementation gap. Across Central Asia, implementation is strongest where digital gender agendas align with visible, measurable, and administratively manageable outputs. It is weakest where reforms require deeper coordination, redistribution of resources, transformation of gender norms, or sustained institutional accountability (OECD, 2017; UNDP, 2021; GSMA, 2024).

A common regional tendency is the prioritization of technical and programmatic outputs. Governments and international organizations often emphasize digital literacy initiatives, ICT access, STEM participation, teacher training, education technology, and skills development (UNESCO, 2021a, 2021b; UNDP, 2021, 2023; World Bank, 2025). These interventions are important, but they do not automatically change the gendered structures

that shape educational and occupational pathways. Without sustained attention to social norms, labour-market segmentation, rural access, institutional bias, and gender-sensitive budgeting, digital education can reproduce existing inequalities even while expanding access.

Country-level implementation follows the same differentiated pattern identified above. In Kazakhstan, stronger administrative capacity and digital infrastructure support implementation, but women's digital inclusion remains embedded within a technocratic modernization model rather than a gender-transformative reform agenda (Government of the Republic of Kazakhstan, 2017, 2023a, 2023b, 2023c; OECD, 2017). In Kyrgyzstan, donor-funded and internationally supported initiatives have advanced gender mainstreaming, digital skills, and inclusive education, but their sustainability depends on whether they are absorbed into national institutions (UNDP, 2021; UNESCO, 2021b). In Uzbekistan, implementation is selective and state-managed, advancing where it supports economic modernization, administrative efficiency, or human capital development (OECD, 2023; President of the Republic of Uzbekistan, 2020, 2023; Senate of the Oliy Majlis of the Republic of Uzbekistan, 2021; UNDP Uzbekistan, 2023). In Tajikistan, implementation remains constrained by capacity, infrastructure, and territorial inequality, producing localized or externally supported activities rather than coherent national transformation (Government of the Republic of Tajikistan, 2019, 2020, 2021, 2022; UNESCO, 2025; UNDP, 2021). In Turkmenistan, implementation is difficult to evaluate because restricted transparency limits the availability of evidence on mechanisms, monitoring, and outcomes (OHCHR, 2024; Turkmenistan UN Country Team, 2020; UNDP Turkmenistan, 2025).

Taken together, these findings show that the implementation gap is not simply a technical problem. It is a politically structured feature of norm localization. Digital gender agendas are easier to adopt when framed as modernization, skills development, or international alignment. They are harder to implement when they require cross-sectoral coordination, institutional accountability, or transformation of gendered power relations (Acharya, 2004; Mackay & Waylen, 2009; Mackay et al., 2010; Waylen, 2014). The key challenge is therefore not the absence of policy language, but the limited conversion of that language into coordinated, accountable, and gender-transformative implementation.

Discussion

The findings show that the localization of digital gender agendas in Central Asia is not a linear process of norm transfer or policy convergence. International organizations have helped establish women's digital inclusion as a legitimate policy concern across the region, but domestic outcomes vary considerably. The main source of variation is not exposure to global norms: all five states encounter similar international frameworks, policy vocabularies, donor agendas, and reporting expectations. Rather, variation emerges from how states incorporate these agendas into domestic governance systems, coordinate across policy sectors, and translate formal commitments into institutional practice.

This finding qualifies conventional accounts of norm diffusion. Diffusion theory explains how international organizations, donor agencies, and transnational policy networks circulate policy models and legitimate new governance priorities (Finnemore & Sikkink, 1998). In Central Asia, this process is visible in SDG reporting, donor-supported programs, technical assistance, and international benchmarking. However, diffusion alone cannot explain why similar agendas produce different levels of integration and implementation across Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan, and Turkmenistan. The evidence instead supports a localization perspective: international norms do not simply enter domestic policy systems unchanged, but are interpreted, filtered, and selectively reconstructed within specific political and institutional contexts (Acharya, 2004).

In Central Asia, digital gender agendas are rarely rejected outright. Instead, they are incorporated selectively. Governments adopt elements of the agenda that support modernization, human capital development, international legitimacy, or donor engagement, while more demanding gender-transformative components remain less developed. A key implication is that discursive convergence should not be confused with substantive policy transformation. Across the region, policy documents increasingly use similar language: inclusion, digital skills, empowerment, innovation, competitiveness, and human capital. However, the presence of similar language does not mean that policies are integrated to the same degree or implemented with the same depth. Policy integration requires more than reference to gender or digitalization; it requires cross-sectoral linkage, institutional responsibility, implementation instruments, monitoring procedures, and continuity across policy documents.

Institutional fragmentation emerges as the central mediator between formal adoption and practical outcomes. Women's digital education is inherently cross-sectoral, requiring coordination across education policy, digital development, labour-market planning, teacher training, gender equality institutions, territorial development, and donor-supported programs. Yet these domains are frequently governed through separate strategies, agencies, and accountability systems. As a result, women's digital inclusion may appear in several policy documents without becoming the responsibility of a clearly coordinated implementation architecture. This explains why formal policy alignment often coexists with uneven implementation.

This finding supports feminist institutionalist arguments that institutions are not neutral channels for reform. Formal rules, informal norms, bureaucratic hierarchies, resource allocations, and accountability structures shape which reforms become actionable and which remain symbolic (Mackay & Waylen, 2009; Mackay, Kenny, & Chappell, 2010; Waylen, 2014). From this perspective, weak implementation is not merely a technical failure. It is an institutional and political outcome. States can adopt gender-sensitive language without redistributing authority, budgets, or administrative attention toward gender-transformative goals. This helps explain why digital gender agendas can be visible in policy discourse while remaining weakly embedded in implementation structures.

The implementation gap is therefore politically structured. International development discourse often treats digital inclusion as a matter of access, infrastructure, and skills. These are important, but the Central Asian cases show that they are insufficient. Digital education policies produce more equal outcomes only when connected to the broader institutional conditions that shape women's educational and occupational pathways. These include rural–urban inequalities, gendered subject choices, labour-market segmentation, teacher capacity, household norms, access to devices and connectivity, and the presence or absence of gender-sensitive budgeting and monitoring. Without attention to these conditions, digitalization may expand access while reproducing existing inequalities.

The findings also clarify the three mechanisms identified in the article's central argument: selective adoption, symbolic compliance, and institutional decoupling. Selective adoption occurs when states incorporate elements of global agendas that fit domestic development priorities while narrowing more politically demanding aspects of gender

equality. Symbolic compliance occurs when governments demonstrate alignment with international commitments through strategies, indicators, and policy language without creating strong implementation mechanisms. Institutional decoupling occurs when formal commitments remain disconnected from budgets, coordination structures, monitoring systems, or durable administrative routines. These mechanisms are not isolated weaknesses; they are patterned features of how global digital gender agendas are governed in the region.

For public administration, the analysis has two implications. First, digital gender equality should not be treated as a narrow sectoral issue. It is a governance problem involving coordination, institutional design, resource allocation, accountability, and state capacity. The effectiveness of digital gender policy depends not only on technology or digital skills programs, but also on whether public institutions can coordinate across policy domains and sustain reforms beyond project cycles. Second, international policy alignment is an insufficient indicator of administrative change. Governments may align with global frameworks at the level of discourse while maintaining fragmented or weak implementation systems.

For Central Asian studies, the article demonstrates the value of regional comparison. The five republics share Soviet legacies, post-socialist institutional trajectories, and exposure to similar international organizations, but they do not localize global agendas in the same way. Central Asia should therefore not be treated as a uniform recipient of external development norms. It is better understood as a comparative governance space in which international agendas are domesticated through different state strategies, institutional capacities, and political constraints.

Overall, the findings show that global digital gender agendas matter in Central Asia, but their effects remain institutionally incomplete. They reshape the language of reform and expand the range of legitimate policy commitments, but they do not automatically transform governance practice. The central issue is therefore not whether digital gender norms travel, but whether domestic governance systems convert these norms into coordinated, accountable, and sustained policy implementation.

Conclusion

This article examined how global digital gender agendas promoted by international organizations are

localized within women's education policies in Central Asia. Focusing on Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan, and Turkmenistan, it showed that shared exposure to international frameworks linking gender equality, education, and digitalization has not produced uniform domestic outcomes. The main finding is that variation across the region is shaped less by access to global norms than by domestic governance structures, institutional capacity, bureaucratic coordination, and political priorities.

The analysis demonstrated that international organizations have played an important role in diffusing and legitimizing women's digital inclusion through SDG frameworks, technical assistance, donor-supported programs, monitoring instruments, and policy advice. Yet the domestic incorporation of this agenda remains selective. Across the region, governments have adopted the language of gender equality, digitalization, inclusion, and educational modernization, but this language is not always matched by coherent implementation mechanisms, gender-responsive budgeting, cross-sectoral coordination, or sustained accountability.

The article identified three recurring patterns of localization: selective adoption, symbolic compliance, and institutional decoupling. These patterns show that global digital gender agendas do not simply travel from international organizations into domestic policy systems. They are filtered, adapted, and sometimes narrowed through domestic governance arrangements. In this sense, digital gender agendas are not merely technical or developmental interventions; they are also governance projects shaped by how states organize implementation, coordinate across policy sectors, allocate responsibility, and manage the political implications of gender reform.

The article contributes to public administration research by showing that women's digital education should be understood as a cross-sectoral governance problem. Effective implementation requires more than digital infrastructure, ICT access, or short-term skills programs. It requires coordination between education authorities, digital development agencies, gender equality institutions, labour-market bodies, regional administrations, and international partners. Without such coordination, digital gender agendas are likely to remain visible in discourse but weak in institutional effect.

The study has several limitations. It relies primarily on policy documents, international-organization materials, donor reports, and secondary analytical sources. This approach is suitable for identifying

patterns of policy discourse, institutional design, and comparative localization, but it cannot fully capture informal bargaining, bureaucratic politics, or lived experience. Documentation is also uneven across the region, especially in Turkmenistan. Future research could extend this analysis through interviews with policymakers, educators, international-organization representatives, and civil society actors; subnational studies of rural-urban inequality and regional administrative capacity; and sector-specific research on STEM education, vocational training, teacher digital competencies, and women's transition from digital education into technology-related employment.

Overall, the article shows that global digital gender agendas matter in Central Asia, but their

effects remain politically mediated and institutionally uneven. They reshape the language of reform and expand the range of legitimate policy commitments, but their transformative potential depends on whether domestic governance systems can convert formal alignment into coordinated, accountable, and sustained implementation.

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