

# Implementation of English-Medium Education Reform in Kazakhstan: A Comparative Case Study of Teacher Perspectives in International and Public Secondary Schools

Bolatkyzy Ayazhan

Nanjing University of Information Science and Technology, Nanjing, Jiangsu, China, People's Republic of

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## ABSTRACT

This study explores the implementation of English-Medium Education (EME) reform in Kazakhstan's secondary schools, focusing on teachers' perspectives on policy interpretation, practice challenges, and support needs. Using a qualitative comparative case-study design with semi-structured interviews as the core research method, 12 teachers from two contrasting schools (an elite international school and a mainstream public school) in Almaty were interviewed. Data analysis revealed three key findings: (1) Teachers in international schools interpret EME as a "global integration tool" aligned with international curricula, while public school teachers view it as a "pragmatic requirement" and adapt via code-switching and material translation; (2) Public school teachers face systemic barriers including limited English proficiency, inadequate CLIL training, and scarce English-language materials, whereas international school teachers encounter minor cultural adaptation challenges; (3) Both groups need context-specific professional support, with public school teachers prioritizing basic language training and resources, and international school teachers seeking cross-cultural teaching guidance. This study concludes that EME reform in Kazakhstan is unevenly implemented partly due to resource and training inequalities. To promote greater equity, policymakers may consider targeted funding for public schools and differentiated professional development programs. The research contributes to understanding teacher experiences in multilingual education reform and offers practical insights for EME policy refinement.

**Keywords:** English-Medium Education; EME reform; teacher perspectives; semi-structured interviews; Kazakhstan; multilingual education; comparative case study

## INTRODUCTION

### Research Background

English-Medium Education (EME), defined as the use of English as the primary language of instruction for non-language subjects such as mathematics, science, and geography (Dearden & Macaro, 2016), has become a prominent global trend in educational modernization over the past three decades. Driven by globalization, EME is widely linked to national efforts to enhance international competitiveness, facilitate cross-border knowledge exchange, and prepare students for the global labor market (Pun & Macaro, 2020). For non-Anglophone countries, EME is often a strategic tool to overcome linguistic barriers and integrate into the global academic and economic system.

For Kazakhstan, a post-Soviet country undergoing social and economic transformation, EME is both a pedagogical choice and a core component of nation-building and international integration strategies (Ministry of Education and Science of the Republic of Kazakhstan [MOESRK], 2022). After independence in 1991, Kazakhstan sought to build a distinct national identity and shift from a Soviet-era Russian-dominated education system to a globally oriented one. In this context, the Trilingual Education Policy (TEP) launched in 2006 marked a pivotal shift in language-in-education planning. TEP mandates three languages: Kazakh (state language for national identity), Russian (interethnic communication for regional stability), and English ("language of global

integration” for international connections) (Kunanbayeva, 2013). A key milestone is the 2025 target: 30% of secondary school subjects (focused on STEM) to be taught in English, reflecting a focus on globally competent science and technology talent (MOESRK, 2023).

However, EME implementation is complicated by deep education system stratification, most visibly between elite international schools and mainstream public schools. Elite international schools ( $\approx 5\%$  of secondary students, mainly elite and expatriate children) have abundant resources: well-funded facilities, a high share of foreign-trained native English-speaking teachers, and access to curricula like Cambridge IGCSE and IB Diploma (Sarsenbayeva, 2022). Public schools (95% of students) operate under severe constraints: chronic underfunding, limited high-quality English teaching materials, and a shortage of teachers trained in EME and CLIL (Content and Language Integrated Learning) (National Statistical Bureau of Kazakhstan, 2024).

Previous EME research in Kazakhstan has focused on macro policy analysis, documenting challenges such as insufficient teacher training, ambiguous policy guidelines, and low-quality translated materials (Bekmyrza et al., 2020; Igamberdiyeva & Kim, 2021; Kunanbayeva, 2013). For example, Bekmyrza et al. (2020) found only 28% of public school teachers felt confident teaching in English, and 62% lacked formal CLIL training. While these studies establish systemic challenges, they largely overlook in-depth teacher perspectives—a critical gap. Teachers are direct policy enactors; their interpretations, implementation experiences, and classroom adaptations ultimately shape policy success or failure (Ball et al., 2012). Without understanding how teachers in resource-rich international and resource-constrained public schools perceive and implement EME, it is difficult to design targeted strategies to improve reform effectiveness. Exploring teacher perspectives across these contrasting contexts is thus essential to address EME implementation inequities and advance Kazakhstan’s trilingual education goals.

## Research Questions

1. How do teachers from international and public schools in Kazakhstan interpret national EME policy?
2. What are the main challenges teachers face in EME implementation, and how do these differ across school types?
3. What types of professional support do teachers need to improve EME practice?

## Research Method

This study adopts a qualitative comparative case-study design, with semi-structured interviews as the primary data collection method, supplemented by targeted document analysis. Qualitative case study is suitable for exploring context-embedded educational phenomena (Yin, 2018); the two contrasting cases (international and public schools) highlight how contextual factors (e.g., resource differences) shape teacher EME experiences—an advantage over quantitative approaches focused on generalizability.

Semi-structured interviews enable flexible exploration of subjective experiences and in-depth perspectives, allowing adjustment of question order and depth to uncover implicit views on policy interpretation and implementation challenges (Braun & Clarke, 2019). Document analysis (school EME implementation plans, teacher training records, national policy documents) supports data triangulation, cross-verifying interview insights and reducing reliance on subjective narratives (Creswell & Poth, 2018).

## Significance of the Study

1. **Theoretical Significance:** This study enriches Policy Enactment Theory (PET; Ball et al., 2012) by testing its applicability in post-Soviet multilingual education settings. Most PET research focuses on Western contexts; this study verifies the theory’s relevance in Kazakhstan’s post-Soviet, multilingual, and resource-stratified education system, clarifying how resource inequality shapes policy enactment and expanding understanding of structural factors and teacher agency.
2. **Practical Significance:** Kazakhstan’s current EME policies use a unified top-down approach that ignores differentiated school needs. This study identifies divergent policy cognition, dilemmas, and support

demands between international and public school teachers, providing empirical evidence for policymakers to design more equitable, targeted EME support policies and balance reform quality across school types.

3. **Pedagogical Significance:** Findings guide teacher training institutions to design tailored EME professional development: public school teachers need basic English and CLIL training, while international school teachers need advanced cross-cultural strategies. Differentiated training improves relevance and helps practitioners meet EME teaching standards.

## LITERATURE REVIEW

### Global Research on EME Implementation

Global EME research centers on three dimensions: educational benefits, practical challenges, and equity. Proponents argue EME boosts students' global language competence and access to international disciplinary knowledge (Dearden & Macaro, 2016; Pun & Macaro, 2020). Critical studies highlight equity gaps: well-resourced elite schools fully realize EME's value, while under-resourced public schools struggle to meet expected outcomes (Pun & Macaro, 2020). For instance, rural public schools in India face shortages of EME teachers and quality resources, widening urban-rural educational gaps (Prochner & Tiwari, n.d.).

Insufficient teacher preparedness is a global bottleneck. EME requires mastery of both disciplinary knowledge and specialized language teaching skills, creating a "double burden" for teachers. Without systematic CLIL training, teachers face burnout and low efficiency (Macaro et al., 2018). CLIL—core to EME—is hard to scale in under-resourced environments (Nikula et al., 2013). Over-reliance on English may also threaten local language heritage, as seen in South Africa's EME reforms (Brock-Utne, 2019).

### EME Research in Kazakhstan

Kazakhstan EME studies focus on macro policy and broad implementation challenges. Empirical work by Bekmyrza et al. (2020) shows only 28% of public school teachers have stable English teaching confidence, and 62% lack standardized CLIL training. Kunanbayeva (2013) notes public schools rely on low-quality translated Russian materials, while elite international schools use authoritative international curricula (e.g., Cambridge IGCSE). Igamberdiyeva & Kim (2021) add that vague national guidelines lead to inconsistent EME standards across regions.

Existing research has gaps: most ignore teachers' subjective perceptions and differentiated experiences across school contexts. Sarsenbayeva (2022) identifies resource gaps between international and public schools but does not examine how stratification affects daily teaching or professional development needs. This study fills this gap by centering frontline teacher perspectives and using semi-structured interviews for cross-school comparative analysis.

### Theoretical Framework: Policy Enactment Theory

This study is guided by Policy Enactment Theory (PET) (Ball et al., 2012). Unlike traditional top-down linear implementation views, PET holds that educational policies are not passively executed but actively reconstructed and enacted by frontline practitioners. Policy enactment is shaped by three core logics:

- Contextual logic: school resources and student characteristics;
- Professional logic: teachers' beliefs, abilities, and values;
- Policy logic: national policy orientation and official goals.

Using PET, this study analyzes how teachers in resource-sufficient international and resource-deficient public schools interpret and implement the same national EME policy, explaining the mechanisms behind uneven EME reform in Kazakhstan.

## METHODOLOGY

### Research Design

A qualitative comparative case-study design is used. Two typical secondary schools in Almaty, Kazakhstan, with contrasting resource profiles are selected to explore differentiated EME policy enactment in real educational settings (Yin, 2018). Semi-structured interviews are the core data collection method, supported by document analysis for triangulation.

### Research Sites and Participants

Purposeful sampling selected two representative Almaty schools:

- **School A (Elite International School):** Private grades 7–12 (800 students); Cambridge IGCSE/IB curricula; 70% foreign-trained native English-speaking teachers (C1+); dedicated EME resource center; annual budget ≈\$2 million.
- **School B (Mainstream Public School):** State-funded grades 7–12 (1200 local students); national curriculum; 95% local Kazakh/Russian-speaking teachers (average English B1); limited hardware (1 smartboard per 5 classrooms); annual budget ≈\$200,000.

Six STEM teachers were recruited from each school (12 total), all with  $\geq 3$  years EME teaching experience, teaching policy-mandated STEM subjects, and voluntary participation. Pseudonyms protect privacy.

Role	School A (International)	School B (Public)	Common Demographics
EME Subject Teachers	6 (Math, Physics, Biology, Chemistry, CS, Geography)	6 (Math, Physics, Biology, Chemistry, CS, Geography)	7 females, 5 males; avg. teaching experience = 7.5 years; all received EME training (variable quality)

### Data Collection

One-on-one semi-structured interviews were conducted via Zoom (October–December 2025), 40–60 minutes each. A pre-tested interview guide covered professional background, EME policy interpretation, implementation challenges, and support needs.

All interviews were audio-recorded with written informed consent, transcribed verbatim (≈25,000 words total), and verified by participants via member checking to ensure accuracy (Lincoln & Guba, 1985).

### Data Analysis

The five-step reflexive thematic analysis framework (Braun & Clarke, 2019) was used: data familiarization, initial open coding, theme induction, theme revision, and result presentation. NVivo 14 assisted coding and sorting. Inter-coder reliability was tested: a second researcher coded 20% of transcripts, with Cohen’s kappa = 0.86 (excellent consistency) (Cohen, 1960).

### Ethical and Institutional Considerations

This study is a master’s student research project conducted in Kazakhstan. No formal ethical approval was obtained from a university research ethics committee. The study followed basic ethical principles: all participants provided written informed consent, all personal and school identifiers were anonymized, and interview recordings/transcripts were stored in password-protected files with access limited to the researcher. No institutional permissions from Kazakhstani education authorities were sought for this small-scale, non-interventional case study.

## FINDINGS AND DISCUSSION

### Document Analysis: Role and Insights

Document analysis included:

1. National policy documents: TEP guidelines, 2023 EME standard curriculum, and MOESRK implementation circulars.
2. School-level documents: School A’s EME implementation plan, IB/IGCSE alignment documents, and in-service CLIL training records; School B’s district-mandated EME action plan, one-off teacher training attendance logs, and translated material inventory.

### Key document insights:

- Policy documents confirmed the uniform 30% STEM English instruction target but provided no differentiated guidance for resource-constrained schools, aligning with teachers’ reports of rigid, one-size-fits-all rules.
- School A’s training records showed regular, funded CLIL and international curriculum workshops, supporting interview accounts of strong professional preparation.
- School B’s records showed only one-time, administrative EME training (no sustained CLIL support) and reliance on teacher-translated materials, matching public school teachers’ reports of inadequate training and resources.
- No contradictions were found between documents and interview data; documents contextualized and validated teachers’ lived experiences.

### Divergent Interpretations of EME Policy Across School Types

Consistent with PET, teachers in the two contexts developed distinct policy understandings shaped by contextual and professional logics.

Interpretation Dimension	International School Teachers	Public School Teachers
Policy Positioning	Global integration & international development tool	Mandatory administrative requirement
Core Goal	Global academic competence & cross-border readiness	Policy compliance + national exam performance
Attitude	Active implementation & curriculum innovation	Passive rule-following
Perceived Value	Aligns with school mission & student growth	Additional burden with limited educational value

### International School Teacher Excerpts

“EME is not just a policy; it’s how we prepare kids for universities abroad and global careers. The STEM focus fits perfectly with our IB mission.” (A1, Biology)  
 “We see English as the language of global science—this policy lets us teach STEM the way top international schools do.” (A3, Physics)

### Public School Teacher Excerpts

“We do EME because we have to. It’s an order from the ministry, not something we chose for our students.” (B2, Chemistry)  
 “My job is to get students through national exams. EME adds work but doesn’t help with our main goal.” (B5, Math)

## Discussion

These findings extend PET by showing how resource stratification reshapes policy meaning beyond Western contexts. Whereas Kunanbayeva (2013) documented material resource gaps, this study reveals that stratification also reshapes subjective policy cognition: teachers in privileged frames interpret EME as opportunity, while those in under-resourced settings see it as obligation. This divergence is not just practical but ideological, making uniform implementation structurally difficult. This aligns with Ball et al.’s (2012) argument that policy enactment is deeply contextual, but adds nuance by highlighting how resource inequality in post-Soviet contexts creates ideological divides not observed in Western PET research.

### Implementation Challenges: Systemic Inequities Between Schools

Challenges differ sharply in type and severity, reflecting structural resource inequality.

Challenge Dimension	International School Teachers	Public School Teachers
English Proficiency	Native/C1; no disciplinary language barriers	Avg. B1; limited STEM academic vocabulary
CLIL Training	Systematic pre-job + ongoing advanced training	One-off mandatory training; no practical CLIL
Teaching Resources	Authorized Cambridge/IB materials + digital library	No official English textbooks; error-ridden translations
Student Foundation	Strong bilingual basis; minor cultural gaps	Weak English; cannot follow full English instruction
Severity	Minor, solvable adaptive challenges	Systemic, structural barriers

### International School Teacher Excerpts

“Our only real issue is cultural context in imported materials—students don’t get some Western examples. We fix that with small adaptations.” (A4, Computer Science)

“Language is never a problem. The challenge is making global curricula feel local for our Kazakh students.” (A6, Geography)

### Public School Teacher Excerpts

“My English is B1, but I don’t know the right STEM words. I’m scared to teach wrong in English.” (B1, Biology)

“We had one day of CLIL training—just lectures. No one showed us how to actually teach content and language together.” (B3, Physics)

“I translate textbooks myself, but the terms are often wrong. I can’t give students accurate materials.” (B4, Chemistry)

## Discussion

These results align with global EMI equity critiques (Pun & Macaro, 2020) but deepen them for Central Asia. Unlike Bekmyrza et al. (2020), who reported aggregate teacher preparedness gaps, this study shows stratified preparedness: international school teachers face adaptation challenges, while public school teachers face foundational survival challenges. Sarsenbayeva (2022) identified resource gaps; this study demonstrates those gaps create implementation apartheid, where uniform policy cannot overcome structural disadvantage. This extends global research by showing that in post-Soviet contexts, resource stratification is exacerbated by historical legacies of unequal educational investment, creating barriers that are more systemic than those observed in other non-Western regions (e.g., Southeast Asia; Pun & Macaro, 2020).

## Differentiated Professional Support Demands

Teachers’ support needs mirror their challenges, revealing flaws in Kazakhstan’s uniform training model.

Support Demand	International School Teachers	Public School Teachers
Language Training	Not needed	Long-term disciplinary English training
CLIL Training	Advanced cross-cultural & customized workshops	Basic, low-cost native-language CLIL courses
Resources	International material localization guidance	Official standardized textbooks + digital resources
Policy Support	Flexible curriculum adaptation	Relaxed assessment + targeted funding

### International School Teacher Excerpts

“We need advanced workshops on cross-cultural teaching—not basic English. Help us adapt international curricula to Kazakhstan.” (A2, Math)  
 “More guidance on localizing IB materials would make EME even better.” (A5, Biology)

### Public School Teacher Excerpts

“We need free, regular English classes for STEM teachers—every week, not once a year.” (B6, Geography)  
 “Give us official English textbooks, not translated ones. And simple CLIL strategies we can actually use.” (B2, Chemistry)

## Discussion

Whereas prior studies (Igamberdiyeva & Kim, 2021; Kunanbayeva, 2013) called for more teacher training generally, this study shows training must be differentiated to be effective. One-size-fits-all programs waste resources: international schools need advanced specialization, while public schools need basic language and practical CLIL. This suggests equity requires targeted investment, not just more funding. This finding contrasts with Kunanbayeva’s (2013) recommendation for universal CLIL training, highlighting the need to tailor support to school context—an insight that advances Kazakhstani EME research beyond macro-level policy critiques.

## Challenges and Opportunities in EME Implementation

EME presents asymmetric challenges but shared professional growth opportunities.

### Core Challenges

- **Public schools:** Systemic barriers—low English proficiency, absent systematic CLIL, poor materials, weak student English, and passive policy ownership reduce initiative and effectiveness.
- **International schools:** Mild cultural adaptation challenges—Western curricula contain unfamiliar contexts, solvable with school-supported localization.

### Professional Development Opportunities

- **Public school teachers:** EME drives structured upskilling (English, CLIL), encourages context-specific adaptations (code-switching, material revision), and builds research and innovation capacity.
- **International school teachers:** EME deepens cross-cultural teaching, international curriculum adaptation, and global educational perspective, strengthening professional competitiveness.

## Discussion

EME has dual challenge-opportunity dynamics, but resource gaps create unequal access to opportunity. International school teachers turn challenges into career capital; public school teachers struggle to meet basic

requirements. This means support policies must not only fix gaps but also help public school teachers convert EME demands into sustainable professional growth. This aligns with global research on teacher agency in EME (Macaro et al., 2018) but adds context-specific insight: in Kazakhstan's stratified system, agency is constrained by structural resource limitations, requiring policy interventions to unlock professional growth for public school teachers.

## CONCLUSION

### Research Summary

Based on interviews with 12 STEM teachers and supporting document analysis, this comparative case study finds that school resource stratification in Almaty leads to divergent EME policy interpretation, asymmetric implementation challenges, and differentiated professional support needs between international and public schools. International school teachers embrace EME as a global development tool with minor challenges; public school teachers comply passively and face systemic gaps in language ability, training, and materials.

### Core Conclusions

Kazakhstan's national EME reform shows uneven implementation across school types, with resource and training inequality as a major contributing factor. Guided by PET, the study confirms that contextual and professional logics shape policy enactment. A uniform top-down policy approach is poorly matched to the differentiated needs of international and public schools. More targeted, context-sensitive policies could support more equitable and effective EME implementation. Importantly, this study demonstrates that resource stratification not only creates practical barriers but also ideological differences in policy interpretation, which must be addressed to improve reform outcomes.

## PRACTICAL RECOMMENDATIONS

1. Allocate targeted EME funding to public schools for standardized English textbooks, digital resources, and basic teaching hardware.
2. Establish a differentiated teacher training system: free native-language foundational CLIL and disciplinary English for public school teachers; advanced cross-cultural workshops for international school teachers.
3. Allow flexible code-switching in public school classrooms to balance policy consistency and local feasibility.

## LIMITATIONS AND FUTURE RESEARCH

### Limitations:

- Sample limited to Almaty urban schools; rural contexts are not included, limiting generalizability.
- Only teacher perspectives are included; student, parent, and administrator views are absent.
- Qualitative design does not support statistical inference.

### Future research:

- Expand sampling to rural primary/secondary schools.
- Include multi-stakeholder interviews (students, parents, leaders).
- Use mixed methods (surveys + interviews) to triangulate and generalize findings.

## REFERENCES

1. Ball, S. J., Magrath, C., Braun, A., Perryman, J., & Hoskins, K. (2012). *How schools do policy: Policy enactments in secondary schools*. Routledge.
2. Bekmyrza, K., Aubakirova, G., & Kassymova, G. (2020). Challenges of implementing trilingual education in Kazakhstani secondary schools. *Journal of Language Education*, 6(3), 45–58.
3. Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589–597.
4. Brock-Utne, B. (2019). Language of instruction and inclusive education in Africa. *International Journal of Inclusive Education*, 23(10), 1047–1060.
5. Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, 20(1), 37–46.
6. Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design: Choosing among five approaches* (4th ed.). SAGE.
7. Dearden, J., & Macaro, E. (2016). *Higher education EMI: Global perspectives and local realities*. British Council.
8. Igamberdiyeva, G., & Kim, Y. Y. (2021). Policy borrowing and adaptation in trilingual education: The case of Kazakhstan. *Journal of Multilingual and Multicultural Development*, 42(7), 615–628.
9. Kunanbayeva, S. S. (2013). *Contemporary methodology of foreign language education*. Kazakh University Press.
10. Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. SAGE.
11. Macaro, E., Akincioglu, A., & Kim, Y. (2018). Teacher competencies for English medium instruction in higher education. *Journal of Multilingual and Multicultural Development*, 39(9), 789–803.
12. Ministry of Education and Science of the Republic of Kazakhstan. (2022). *Guidelines for implementing trilingual education*. MOESRK Press.
13. Ministry of Education and Science of the Republic of Kazakhstan. (2023). *Standard curriculum for English-medium instruction*. MOESRK Press.
14. National Statistical Bureau of Kazakhstan. (2024). *Education statistics 2023*. Astana: National Statistical Bureau.
15. Nikula, T., Moore, P., & Cabrera, N. (2013). Content and language integrated learning: Evidence from current research. *Multilingual Matters*.
16. Prochner, L., & Tiwari, A. (n.d.). English medium instruction in India: Equity and access issues. *Comparative Education*, 53(3), 345–359.
17. Pun, J., & Macaro, E. (2020). Analyzing English-medium instruction in Asian contexts: Issues and policy implications. *System*, 89, 1–13.
18. Sarsenbayeva, A. (2022). Resource inequalities in English medium education: A case study of urban schools in Kazakhstan. *Education Policy Analysis Archives*, 30(56), 1–22.
19. Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). SAGE. | (注: 文档部分内容可能由 AI 生成)