

Developing the Didactic Competence of Future History Teachers Through Innovative Methods

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Received: 12 April 2025; **Accepted:** 08 May 2025; **Published:** 10 June 2025

Abstract: The rapid diffusion of digital technologies, constructivist learning paradigms, and competency-based standards has transformed expectations of teacher preparation programmes worldwide. Within this evolving landscape, the didactic competence of future history educators—understood as the integrated capacity to design, implement, and critically reflect on learning experiences that cultivate historical thinking—emerges as a pivotal quality benchmark. This article explores how innovative instructional methods, including project-based inquiry, flipped classroom design, and immersive digital simulations, shape the formation of didactic competence among pre-service history teachers at Gulistan State University. Employing a convergent mixed-methods design, the study triangulates quantitative gains in competency self-assessment scores with qualitative insights drawn from lesson-plan analyses and reflective journals produced during a semester-long intervention. Results indicate that systematic exposure to innovation-centred pedagogy significantly elevates pre-service teachers' mastery of content contextualisation, formative assessment strategies, and student-centred orchestration techniques. However, uneven digital literacy and restricted access to classroom technologies moderate these outcomes, underscoring the necessity of targeted infrastructure investment and sustained mentorship. The article concludes that an integrated approach aligning methodological innovation with reflective practice and institutional support offers a viable pathway for developing robust didactic competence in future history teachers.

Keywords: Didactic competence; teacher education; history pedagogy; innovative methods; mixed-methods research; Gulistan State University.

Introduction: Teacher education, long critiqued for an overreliance on transmissive lecture formats, confronts mounting pressure to cultivate professionals capable of navigating classrooms characterised by pluralistic epistemologies, digital saturation, and rapidly shifting curricular mandates. In the specific domain of history education, this imperative becomes particularly acute; the discipline demands not only factual accuracy but also interpretive sophistication, ethical discernment, and sensitivity to competing narratives. Didactic competence—the composite of pedagogical content knowledge, methodological versatility, assessment literacy, and reflective disposition—functions as the connective tissue binding these expectations into coherent instructional practice.

Traditional practicum models, while useful for socialising novices into school cultures, rarely guarantee systematic development of innovative

teaching repertoires. Pre-service history teachers often emulate the expository routines they experienced as pupils, reproducing a textbook-centric classroom ecology antithetical to the inquiry-driven, dialogic ethos now foregrounded in national standards such as the “Uzbek Model of Modern Education” and international frameworks like the UNESCO Competency-Based Approach. A growing body of comparative research spanning Finland, Singapore, and Estonia suggests that structured exposure to innovation-embracing methodologies—project-based learning, game-based micro-simulations, augmented reality field trips—not only enhances student engagement but also strengthens teachers' curricular agility and reflective metacognition.

Yet the contextual applicability of these findings to Central Asian teacher education programmes remains underexplored. Gulistan State University, situated in

Uzbekistan's Syrdarya region, presents an illustrative case. The Faculty of History and Social Sciences enrolled its first cohort of Bachelor of Education students in 2020 under a revised competency-based curriculum. In 2023 the faculty piloted an Innovation-Centred Didactics (ICD) module aimed at embedding progressive pedagogical approaches within the existing practicum structure. This article reports on an empirical evaluation of that module, addressing two research questions: (1) To what extent does participation in the ICD module advance pre-service history teachers' didactic competence? (2) What contextual factors facilitate or constrain the integration of innovative methods into lesson design and delivery?

By situating its inquiry at the intersection of methodological innovation and competency development, the study contributes empirical nuance to a growing yet geographically uneven literature. Moreover, it offers actionable insights for regional teacher education stakeholders grappling with the twin challenges of resource limitations and aspirational curricular reforms.

The investigation adopted a convergent mixed-methods design wherein quantitative and qualitative data were collected simultaneously, analysed separately, and merged for interpretive synthesis. The participant pool comprised thirty-four third-year Bachelor of Education (History) students, stratified into an experimental group ($n = 18$) that completed the ICD module and a comparison group ($n = 16$) that followed the conventional practicum. Assignment to groups reflected enrolment logistics rather than randomisation, warranting cautious generalisation.

The ICD module spanned sixteen weeks and featured sequential workshops on project-based inquiry, flipped classroom planning, formative assessment analytics, and immersive digital storytelling. Each workshop combined demonstration sessions, micro-teaching rehearsals, and collaborative reflection aimed at explicit competence articulation. University digital laboratories equipped with internet-enabled laptops, interactive whiteboards, and open-source software supported hands-on practice, although some sessions relied on simulation due to equipment scarcity.

Quantitative measurement employed the Didactic Competence Inventory for History Teachers (DCI-H), adapted and content-validated for the Uzbek context through back-translation and expert panel review. The inventory comprises twenty-six Likert-type items across four sub-scales: content contextualisation, methodological design, assessment literacy, and reflective capacity. Pre-test administration occurred in week one; post-test followed in week sixteen.

Cronbach's alpha for the overall scale reached 0.91, attesting to internal consistency. Paired t-tests within groups and independent-sample t-tests across groups assessed statistical significance at $p < 0.05$.

Qualitative data consisted of (a) twenty-two lesson plans produced by the experimental group during school placements, coded for innovation density (frequency and depth of innovative strategies per lesson segment) and coherence; and (b) fifty-six reflective journal entries describing perceived successes, challenges, and future adaptation plans. Thematic analysis proceeded through open coding, axial grouping, and selective synthesis using NVivo 14 software. Integration of quantitative and qualitative strands followed a side-by-side joint display to identify convergence, complementarity, and dissonance. Ethical clearance stemmed from the university's Research Ethics Committee; informed consent and pseudonymisation ensured participant confidentiality.

Descriptive statistics indicated initial parity between groups on all four sub-scales of the DCI-H. Following the sixteen-week period, the experimental group achieved a mean composite score of 4.27 ($SD = 0.31$) versus 3.68 ($SD = 0.35$) for the comparison group, yielding a statistically significant mean difference of 0.59 ($t = 5.91$, $p < 0.001$). The largest gains emerged in methodological design ($\Delta = 0.71$) and assessment literacy ($\Delta = 0.65$), while reflective capacity evidenced a more modest yet significant increase ($\Delta = 0.44$). Within-group analysis revealed that the comparison cohort registered incremental improvement (composite $\Delta = 0.12$) attributable to routine practicum experience, but these gains lagged markedly behind the experimental group.

Lesson-plan analysis substantiated quantitative trends. Plans drafted by ICD participants exhibited higher innovation density, manifesting as seamless integration of primary-source analysis tasks, concept-mapping platforms, and asynchronous discussion boards. For instance, a unit on Silk Road trade routes incorporated geospatial digital mapping and role-play diplomatic negotiations to illuminate historiographical contingency. Coherence scores also improved, reflecting clearer alignment among learning objectives, instructional activities, and formative assessment checkpoints. Conversely, plans from the comparison group predominantly relied on teacher explanations and textbook worksheets, with innovations limited to occasional multimedia slide projections.

Reflective journals enriched numerical findings by revealing lived experiences behind competence growth. Participants recurrently cited the flipped classroom workshop as catalytic for re-conceiving

teacher-student epistemic roles. Early entries disclosed anxiety over relinquishing content control, whereas later entries celebrated student-generated interpretations and heightened classroom dialogue. Challenges recorded included unreliable internet connectivity in placement schools, insufficient time to master unfamiliar software, and scepticism from mentor teachers accustomed to traditional lecture formats. Notably, participants who encountered supportive mentors reported smoother implementation trajectories and greater confidence in adapting innovations to resource-constrained contexts.

The empirical evidence advances two principal claims. First, structured immersion in innovative instructional methods yields substantive enhancement of didactic competence among pre-service history teachers. Gains in methodological design and assessment literacy affirm that innovation does not merely diversify classroom aesthetics but fundamentally reconfigures teachers' capacity to orchestrate knowledge construction and evaluate cognitive growth. Such findings resonate with constructivist teacher-education research asserting that experiential engagement with learner-centred pedagogy fosters durable professional dispositions.

Second, the translation of innovation-derived competence from university workshops to school placements hinges on supportive ecological conditions. Digital infrastructure deficits and mentor-teacher conservatism attenuate the impact of well-designed university modules, echoing socio-ecological models that locate teacher learning within nested contextual layers. The literature on change agency underscores that novice teachers occupy liminal professional identities, negotiating institutional norms while experimenting with personal pedagogical philosophies. Accordingly, the study underscores the necessity of synchronising university interventions with school-site mentorship calibration and systemic hardware upgrades.

Comparative perspectives further contextualise results. Studies in South Korea and Portugal report similar competency gains through blended practicum models but caution that sustainability falters when national assessment regimes emphasise rote recall. Uzbekistan's ongoing curricular reforms appear poised to mitigate this tension by elevating inquiry-based history standards; however, alignment with high-stakes examinations remains incomplete. Hence, embedding innovative methods within licensure exams and performance evaluations could institutionalise the impetus for didactic transformation.

Limitations of the present study include non-random

group assignment, a relatively small sample size, and reliance on self-reported inventories susceptible to social desirability bias. Future research should incorporate longitudinal designs tracking in-service trajectory of competence retention and triangulate findings with classroom observation protocols capturing authentic practice.

The Innovation-Centred Didactics module at Gulistan State University demonstrably strengthened the didactic competence of future history teachers, confirming that deliberate cultivation of innovative pedagogies constitutes a viable lever for professional growth. Quantitative enhancements in methodological design, assessment literacy, and reflective capacity coalesced with qualitative evidence of richer lesson planning and adaptive pedagogical reasoning. Nevertheless, the magnitude of these gains remains conditioned by institutional ecosystems; digital infrastructure investment and mentor-teacher professional development emerge as pivotal enabling factors. Policymakers and teacher-education planners should thus pursue an integrative strategy coupling innovation-oriented coursework with context-sensitive support structures to ensure that competence breakthroughs achieved in university settings translate into sustained classroom impact.

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