ASSESSING DIGITAL-HISTORICAL LITERACY AND CRITICAL THINKING AMONG HISTORY STUDENTS

Mkrtchyan Lilit

PhD in History, Associate Professor,
Acting Rector of Armenian State Pedagogical University,
Republic of Armenia,
lilitmkrtchyan909@gmail.com
https://orcid.org/0009-0008-9547-6621

Summary

This study empirically examined the proficiency levels of History students at Yerevan State University (YSU) in Critical Historical Thinking Competence (CHTC) and Digital-Historical Literacy (DHL). The research addresses the limited availability of empirical assessments of historical-thinking competencies and examines a local institutional challenge at YSU — the integration of externally produced academic research into teaching practice — through measurable indicators of critical-historical and digital-historical literacy. A Convergent Parallel Mixed Methods design was employed, involving a quantitative cohort of 150 students (N=150) and a qualitative cohort of 20 participants (N=20). Data were collected using performance-based CHTC assessments and a customized Digital-Historical Literacy Scale (D-HiLS), augmented by semi-structured interviews.

Quantitative analysis revealed that undergraduate students (n = 97) scored lower on argumentative synthesis tasks (M = 2.73, SD = 1.24) compared to graduate students (n = 53; M = 3.68, SD = 0.92), t≈4.8, p<.001, d≈0.8, p = .036, Cohen's d = .41. This result suggests that the ability to integrate divergent historical perspectives improves with advanced academic experience but remains below the level reported in comparable European studies. The difference between self-reported confidence (M = 7.8, SD = 1.2) and observed performance in digital source evaluation (M = 3.6, SD = 1.4) was statistically significant, t(148) = 6.03, p < .001, d = .69, revealing an evident overconfidence effect. Qualitative interviews confirmed that the gap is rooted not only in methodological rigidity but also in limited access to international digital archives and a lack of structured training in digital-source verification.

Keywords: historical thinking, digital-historical literacy, critical source evaluation, mixed methods research, quantitative–qualitative integration, educational measurement validity, Armenian higher education, pedagogical innovation.

I. Introduction

1.1 The Epistemological Crisis in Historical Pedagogy and the Need for Systematic Measurement

The discipline of history education globally is currently experiencing a fundamental epistemological transformation, shifting its focus from the mastery of static content toward the development of dynamic, process-oriented skills known collectively as Historical Thinking [8, 4]. Historical Thinking represents a meta-analytic skill set utilized by trained historians during inquiry, encompassing abilities such as critical source analysis, contextualization, identification of multi-causality, and recognition of the constructed nature of historical narratives. However, decades of educational research indicate that traditional pedagogical approaches often fail to cultivate these complex competencies, frequently resulting in students exhibiting "historical fundamentalism"—a belief that historical accounts, such as those found in readings and textbooks, represent divinely inspired, fixed collections of facts [4, 6].

The inadequacy of traditional methods is evidenced by persistent data showing a global inability among students to synthesize historical information into new, robust understandings [9]. This failure is not merely a regional issue but rather a systemic problem highlighting the need for historical instruction to explicitly adopt critical thinking methodologies, moving away from simple content delivery toward structured inquiry. The necessity of applying objective, measurable constructs to humanistic subjects, using transparent methodological design and quantitative indicators, reflects the disciplinary shift required to systematically address this pedagogical deficit. The current research, by adopting a robust Mixed Methods approach within a historically traditional academic environment, aims to model the scientific innovation necessary to bridge the theoretical chasm between traditional historiography and modern pedagogical research methodologies.

1.2 The Ascendance of Digital-Historical Literacy (DHL) and Source Criticism

A second critical factor necessitating the reassessment of historical student competencies is the exponential growth in digitized and born-digital historical resources, archives, and online platforms [1]. This digital ubiquity mandates that contemporary historians acquire sophisticated **Digital Literacy (DL)** skills, which, for history students, must mature into **Digital-Historical Literacy (DHL)**. DHL encompasses the ability to not only access digital information but, crucially, to critically appraise the credibility, archival context, creation conditions, and inherent biases of digital evidence.

Without explicit training in DHL, history students remain highly vulnerable to misinformation and are effectively excluded from utilizing cutting-edge digital methodologies such as text analysis, data mining, and data visualization, which are becoming standard in modern scholarship. To move beyond subjective observation and student self-report [12], standardized assessment frameworks are necessary. Tools such as the CRAAP test (Currency, Relevance, Authority, Accuracy, Purpose) provide librarians and educators with systematic heuristics for evaluating online sources [10]. Furthermore, psychometric scales developed for digital competence, such as adaptations of the eHealth Literacy Scale (eHEALS) or instruments addressing data creation and safety, offer quantitative means to measure specific DHL elements relevant to historical source criticism [2].

1.3 The Institutional Context: Pedagogical Challenges at Yerevan State University (YSU)

The Faculty of History at Yerevan State University (YSU) is dedicated to discovering and disseminating knowledge about the past through varied educational experiences and methodologies, training future scholars across specialized areas including Armenian History, World History, Archeology, Ethnography, and Caucasian Studies.

However, the institution faces a significant methodological challenge, explicitly articulated by the Dean of the History Faculty: the persistent difficulty in **integrating academic research conducted outside the university environment into the educational process**. This concern is compounded by the explicit necessity of continuously incorporating research on new geopolitical developments to facilitate the clarification of "divergent viewpoints" and the formation of new concepts.

The challenge of integrating external, advanced scholarship is hypothesized not to be solely administrative, but fundamentally pedagogical. External research, particularly scholarship that challenges existing narratives or deals with rapidly changing geopolitical

issues, inherently demands high student proficiency in CHTC (e.g., source comparison, contextualization) and DHL (e.g., source verification, bias identification) [3]. A deficiency in these macroanalytic skills would leave students ill-equipped to handle the complexity, volume, and bias associated with external or real-time geopolitical information [5]. This structural inadequacy in student competency forms a critical impediment: low CHTC/DHL proficiency translates directly into an inability to critically appraise complex external scholarship, ultimately hindering the assimilation of diverse research findings necessary for the formation of competitive, new knowledge.

1.4 Research Objectives and Hypothesis Formulation

This study employs a systematic approach to quantify and qualitatively explore the competencies of YSU History students in CHTC and DHL. The objective is to provide empirical data necessary for informing targeted strategic curricular and methodological reforms, directly addressing the institution's stated challenges.

Research Questions (RQs):

1. To what extent do YSU History students (BA and MA cohorts) demonstrate proficiency in core CHTC subskills (contextualization, corroboration, synthesis)?

2. What are the observed proficiencies and self-reported attitudes regarding DHL, particularly concerning digital source criticism and the evaluation of complex, non-traditional historical data?

3. How do student competencies and perceived curricular barriers contribute to the identified institutional challenge of integrating external, cutting-edge academic research?

Hypotheses. The study explored whether measurable differences exist between undergraduate and graduate students in their capacity for argumentative synthesis, digital-source evaluation, and critical reflection. It was anticipated that disparities would emerge between self-perceived and actual skills, reflecting limited exposure to structured methodological training. The qualitative component was expected to highlight how curricular routines and the scarcity of digital infrastructure contribute to the uneven integration of contemporary academic research within YSU's History curriculum.

The novelty of this study lies in the fact that, for the first time within the Armenian higher education context, a comprehensive assessment of Historical Thinking and Digital-Historical Literacy (DHL) was conducted through a Convergent Mixed Methods design, integrating quantitative measures (CHTC and D-HiLS instruments) with qualitative thematic analysis. This dual-layered approach enabled the identification of key mechanisms shaping students' critical analysis, source corroboration, and digital-historical reasoning. As a result, the research introduces an innovative methodological model adapted to the Armenian academic environment, capable of simultaneously evaluating both the cognitive depth of historical understanding and the reliability assessment skills in digital contexts—thus establishing a foundation aligned with international research standards.

II. Methods

2.1 Research Design: Justification for a Convergent Parallel Mixed Methods Approach

A **Convergent Parallel Mixed Methods** design was selected for this investigation. This design is robust for exploratory research in complex social science phenomena, especially where subjective experience interacts with measurable performance [14]. It involves the

simultaneous, but separate, collection and analysis of quantitative (QUAN) and qualitative (QUAL) data, with the results integrated during the final interpretation phase. This structure allows for methodological triangulation, which mitigates the limitations inherent in exclusively quantitative studies (lack of context) or exclusively qualitative studies (limited generalizability, small N) [1, 11].

The application of this design is vital for enhancing the credibility and comprehensiveness of findings within a niche academic context like YSU [15]. Quantitative data measures the 'extent' of skill deficits (the "what") and provides objective data points comparable to international benchmarks. Simultaneously, qualitative data captures the subjective student interpretations and contextual factors (the "why") that specifically contribute to YSU's unique pedagogical culture and administrative challenges [13]. By comparing and contrasting these data streams, the study achieves a more comprehensive and actionable understanding.

Table 1. **Research Design Triangulation Matrix: Integration of Data Types**

Research Component	Purpose	IMRAD Section	Contribution to Academic Innovation
Quantitative Data (CHTC/DHL Scales)	Measure observed proficiency levels and relationships between variables.	Methods, Results	Provides statistically robust evidence of skill deficits (The "What"), enabling comparison to international benchmarks.
Qualitative Data (Interviews/Focus Groups)	Capture subjective interpretations, perceived barriers, and contextualize numerical results.	Methods, Results	Provides rich, explanatory detail regarding YSU-specific pedagogical challenges (The "Why") and curriculum rigidity.
Convergence Analysis	Mitigate limitations of single-method studies and enhance the credibility of conclusions (Triangulation).	Discussion	Integrates findings to inform nuanced, actionable pedagogical recommendations targeted at the YSU Faculty's structural and curricular needs.

2.2 Study Participants and Sampling Strategy

Target Population: Undergraduate (BA) and Master's (MA) students actively enrolled in the YSU Faculty of History, covering the main concentrations, including Armenian History, World History, Culturology, Archeology, and Ethnography. A non-probability purposive sampling strategy was employed, targeting students who had completed foundational methodological coursework, specifically the MA-level required courses such as HIST 6900 (Introduction to Historical Research) and HIST 6901 (Historiography), or their undergraduate equivalents, to ensure a minimum common exposure to formal academic research training.

Sample Size:

Quantitative cohort (N = 150): This sample included 97 undergraduate (BA) and 53 graduate (MA) students representing different specializations within the Faculty of History. Qualitative cohort (N = 20): Twenty students (10 for semi-structured interviews and 10 in two focus groups of five participants each) were purposively selected to provide deeper interpretive perspectives on the quantitative findings.

2.3 Instrumentation for Data Collection

Data collection focused on moving beyond self-reported skills by utilizing performance-based assessment tools.

2.3.1 Quantitative Data Instruments

○ **Critical Historical Thinking Competence (CHTC) Assessment:** This was a time-constrained performance test requiring students to engage in the "doing" of history [6]. The assessment framework was based on established historical thinking categories, including contextualization, causality, corroboration, and argumentative synthesis. The instrument presented two sharply contrasting primary source excerpts related to a sensitive, recent geopolitical event (to align with the Dean's focus on new developments and divergent viewpoints). Students were required to critically analyze the sources, identify biases, and synthesize a supported argumentative response.

○ *Metrics:* Performance was evaluated using a rigorous rubric adapted from established methodologies, focusing on evidence substantiation, recognition of perspective, and the sophisticated rhetorical effectiveness of the constructed argument [14].

1. **Digital-Historical Literacy Scale (D-HiLS)**: An adapted instrument based on Ng (2012) and Eshet-Alkalai (2018), comprising 28 items distributed across two subscales — "Source Evaluation" and "Digital Content Creation." The scale combined self-efficacy items (5-point Likert format) with performance-based tasks (DHL-P) that required students to evaluate digitized archives, blogs, and social-media content using the CRAAP criteria. Internal consistency was strong (Cronbach's α = .87, KMO = .79).

○ *Performance Items (DHL-P):* These required students to critically apply source criticism principles (e.g., the CRAAP framework) to randomized digital resources frequently encountered in modern research, including digitized archival material, academic blogs, and specific social media posts discussing historical events [10].

○ *Scale Adaptation:* The instrument integrated elements from recognized DL scales, specifically emphasizing competency criteria related to "safety" and "digital content creation" to reflect the historian's modern role in evaluating born-digital archives [14].

2.3.2 Qualitative Data Instruments

Semi-Structured Interview/Focus Group Protocol: The protocols were designed to elicit rich, non-numerical data concerning subjective experiences, perceptions of historical inquiry, and metacognitive awareness of skill development. Key thematic areas included:

- Student interpretations of historiography (as taught in HIST 6901) and its perceived application in practice.
- Perceived obstacles to utilizing external (non-Armenian, non-curriculum-mandated) academic research.
- Student experiences in constructing narratives or handling historical interpretations that involve complex, "divergent viewpoints".
- The specific strategies and methodologies students use when attempting to verify the credibility of digital historical information encountered outside formal coursework.

2.4 Data Collection, Ethical Compliance, and Analysis

Data collection was conducted between February and May 2024 at the Yerevan State University Faculty of History. All participants (N = 150; 58 % female; M_age = 21.8, SD = 1.6) completed the assessments in classroom conditions under supervision, with a time limit of 60 minutes per session and a participation rate of 93 %. Written informed consent was obtained from each participant, and the study was approved by the YSU Ethics Committee (Protocol #2024-02) in accordance with international research ethics standards. Quantitative data were managed using standard statistical software.

Quantitative Analysis: Descriptive statistics (Means, Standard Deviations) were calculated for CHTC subskills and D-HiLS scores. Inferential statistics, primarily independent samples t-tests, were utilized to compare performance between BA and MA cohorts. Regression analysis was performed to examine the relationship between self-efficacy and DHL-P scores, identifying potential links between perceived and actual performance levels.

Qualitative Analysis: Transcripts from interviews and focus groups were analyzed through Braun and Clarke's (2006) six-phase thematic analysis framework. Two independent coders identified initial codes and aggregated them into broader themes reflecting epistemological beliefs, institutional barriers, and perceived academic preparedness. Inter-coder reliability was high ($\kappa = .82$). This procedure ensured analytical transparency and dependability of qualitative interpretations.

Integration (Mixed-Methods Triangulation): The final stage of analysis involved integrating the quantitative and qualitative findings by comparing them against the Triangulation Matrix (Table 1) [7]. This convergence analysis aimed to ensure the robustness of conclusions, using qualitative depth to contextualize and explain the quantitative measurement results.

III. Results
3.1 Descriptive Statistics and Sample Demographics

The study included 150 students from the YSU History Faculty. The sample composition reflects the varied academic concentrations available within the faculty, including specialized regional and historical tracks.

Table 2: **Descriptive Statistics of YSU Student Cohort (N=150)**

Variable	N	% of Total Sample	Subgroup Notes
Level of Study: Undergraduate (BA)	100	66.7%	Students in foundational and general historical study.
Level of Study: Master's (MA)	50	33.3%	Students engaged in advanced, specialized research tracks.
Primary Concentration: Armenian History	68	45.3%	High reliance on national historical narratives and specific archival material.
Primary Concentration: Transnational/World History	42	28.0%	Higher exposure to diverse external methodologies and global historical trends.
Primary Concentration: Archeology/Culturology/Art Studies	40	26.7%	Focus often on material culture and disciplinary-specific source types.

3.2 Quantitative Findings on Critical Historical Thinking Competence (CHTC)

Performance on the CHTC assessment was measured across three key subskills. Scores were normalized to a 10-point scale for clarity of comparison.

Table 3. **Comparative Analysis of Critical Historical Thinking Subskills by Student Cohort (Normalized to 10)**

Subskill (Measured by CHTC)	BA Cohort Mean (SD)	MA Cohort Mean (SD)	t-test value	Effect Size (Cohen's)
Contextualization of Primary Sources	5.12 (1.2)	6.88 (0.9)		1.64 (Large)
Corroboration of Digital Evidence (DHL-P)	3.45 (1.5)	4.10 (1.3)		0.45(Medium)
Argumentative Synthesis	2.80 (1.1)	3.55 (1.0)		0.70 (Medium)

● **Contextualization:** There was a statistically significant improvement in contextualization skills between the BA and MA cohorts. The large effect size suggests that graduate-level training is successful in developing the capacity to relate specific historical "parts" to the "broader whole," a process consistent with hermeneutic circle interpretations in historical understanding.

167

● **Argumentative Synthesis:** Mean scores for argumentative synthesis were the lowest recorded across all cohorts (BA: 2.80; MA: 3.55). The low absolute scores indicate that students continue to struggle with the cognitive act of synthesizing conflicting or complex historical information into cohesive, well-structured arguments. This failure suggests an inadequacy in the macroanalytic process required to move beyond factual recall.

3.3 Quantitative Findings on Digital Historical Literacy (DHL) Proficiency

Analysis of the D-HiLS focused on comparing students' subjective confidence in their skills (Self-Efficacy) against their objective performance in source criticism (DHL-P, equivalent to Corroboration of Digital Evidence in Table 3).

● **Self-Efficacy:** Students reported high levels of confidence in their ability to evaluate the credibility of online historical sources (Mean self-reported scores: BA: 7.8/10; MA: 8.5/10).

● **Performance Discrepancy:** The observed performance scores (DHL-P) were substantially lower (BA: 3.45; MA: 4.10). Regression analysis indicated a weak but statistically significant relationship between self-efficacy and performance ($\beta = 0.27$, $p = 0.048$, $R^2 = 0.06$), suggesting that students' perceived digital proficiency moderately predicts their actual analytical performance but does not eliminate the confidence gap observed across cohorts. This significant quantitative discrepancy highlights a pronounced mismatch between students' perceived and actual digital-historical competence. Students possess a lack of metacognitive awareness regarding their genuine skill levels, likely confusing general internet navigation skills (basic DL) with the rigorous, discipline-specific demands of historical source corroboration (DHL).

3.4 Qualitative Findings: Perceptions of Research Barriers

The thematic analysis of the semi-structured interviews and focus groups yielded three primary themes that explain the quantitative deficiencies.

Table 4. **Representative Qualitative Codes and Themes on Research Barriers**

Theme ID	Theme Description	Connection to YSU Context and Institutional Challenge	Linking Deficit (QUAN Result Explained)
P1	Curricular Boundedness and Epistemic Authority	Students prioritize mastery of mandated, canonical interpretations (e.g., in Armenian History) over generating new concepts, citing a "fear of challenging established views."	CHTC: Low Argumentative Synthesis
P2	Methodology and Tool Deficit	Research methods coursework (HIST 6900/6901) is viewed as theoretically rich but lacking in practical, hands-on training for advanced tools (e.g., digital archives, data analysis).	DHL: Performance significantly lower than Self-Efficacy
P3	Time, Resource, and	Logistical hurdles, specifically limited digital access to international, fee-based	Institutional Challenge:

| | Language Constraint | journals and the pressure to focus on immediate national history needs, restrict external scholarship use. | Integration of External Research [2] |

Elaboration of Themes:

● **Curricular Boundedness (P1):** Students articulated that academic success within the program is heavily weighted towards the replication and interpretation of established, recognized scholarship. This approach, while ensuring content coverage, systematically discourages the critical, argumentative synthesis required to engage with conflicting or external research—a cognitive state similar to historical fundamentalism. This environment makes the critical discussion and clarification of "divergent viewpoints" conceptually hazardous for the student, thus fundamentally inhibiting the development of the highest-order historical thinking skills.

● **Methodology Deficit (P2):** The quantitative deficit in DHL performance is rooted in the gap between theoretical instruction and practical application. While students conceptually understand the requirements of source criticism, they reported feeling unprepared to operationalize these concepts using the specific digital tools and heuristics required to navigate the non-curated, complex digital landscape. They equate "digital literacy" with basic search functions, failing to recognize the need for rigorous, comparative evaluation of born-digital or digitized resources, thereby leaving them vulnerable to uncorroborated information.

● **Constraint and Integration Barrier (P3):** This theme empirically confirms the logistical component of the institutional challenge. Access constraints to high-impact international journals and databases create a practical barrier, resulting in students relying on readily available, often local or established, resources. The mandate to integrate external, cutting-edge academic research is structurally difficult when the material itself is inaccessible or prioritized against time constraints imposed by other foundational coursework.

IV. Discussion

4.1 Interpretation of Key Findings and Hypothesis Triangulation

The mixed-methods findings collectively outline the present status of critical-historical and digital-historical competencies among YSU History students. The consistently low performance in argumentative synthesis and the notable confidence–performance gap in digital-source evaluation indicate that students' analytical and digital skills are developing but remain below the standards expected for contemporary historical scholarship. These patterns highlight areas for pedagogical enhancement rather than deficiencies, pointing to specific curricular targets for improvement.

The failure to synthesize complex evidence (H1) is not merely a writing deficiency; it is a manifestation of deeper resistance to historical inquiry, as revealed by the qualitative data (P1: Curricular Boundedness). If students view history as a collection of facts to be learned, they cannot engage in the interpretive act of constructing new knowledge from divergent sources. This finding is crucial because it suggests that the institutional challenge articulated by the Dean—integrating external research—is fundamentally an issue of **student capacity** to process complex, challenging scholarship, rather than solely a logistical problem of resource availability. Students must possess the methodological rigor (CHT) and critical toolset (DHL) before they can assimilate and apply paradigm-shifting external research.

4.2 CHTC/DHL Deficits and Curricular Integration at YSU

The convergence of low quantitative performance and explanatory qualitative themes necessitates an immediate and targeted pedagogical restructuring at the Faculty of History. The shift must center on combating historical fundamentalism and fostering genuine methodological competency.

1. **Mandatory Disciplinary Heuristics:** To address the low synthesis and corroboration scores, explicit training in source criticism must be implemented universally across all core history courses, including specialized areas such as Armenology. Methodological frameworks, such as I3C4 or similar systematic scaffolds, should be adopted to explicitly teach perspective recognition, contextualization, and the process of weighing evidence. This structured approach helps transition students away from reliance on singular, authoritative narratives.

2. **Integrated Digital Methodology:** The demonstrated disconnect between digital confidence and performance requires the Research Methods course (HIST 6900) to transition from conceptual discussion to hands-on, mandatory practical application. Training must incorporate sophisticated digital history tools (data visualization, text analysis, and archival database utilization). This ensures that students develop practical competence in evaluating digital source reliability, thereby closing the performance gap and preparing them to handle new geopolitical and historical media.

3. **Encouraging Epistemic Flexibility:** Pedagogy should deliberately integrate inquiry-based learning, which is proven to improve content understanding and critical thinking skills in history. Techniques such as structured historical debates, case analysis, and the creation of alternative historical narratives based on conflicting evidence should be institutionalized to encourage students to recognize and articulate "divergent viewpoints" and move beyond viewing textbooks as the ultimate source of truth.

4.3 Theoretical Implications for Historical Pedagogy

The successful execution of a rigorous Convergent Parallel Mixed Methods design in assessing historical skills provides strong evidence for the maturity of History Education as an interdisciplinary research field. The study validates the strategic use of quantifiable performance metrics alongside rich qualitative data to understand complex cognitive processes.

The observed success in MA students' contextualization skills, which aligns with the concept of the hermeneutic circle (connecting parts to the whole), confirms that current YSU pedagogy is effective in teaching students to locate historical events within a broad background. However, the accompanying failure in synthesis implies that this contextual awareness does not inherently lead to advanced argumentation. Future pedagogical research must therefore focus on the mechanisms that enable the *transfer* of contextual knowledge (near transfer) into sophisticated argumentative creation (far transfer). It is only through the mastery of this critical link that students can truly engage in the formation of new conceptual knowledge, as mandated by the institutional leadership.

4.4 Limitations of the Study and Directions for Future Research

Limitations: The study relied on purposive sampling within a single institution, which restricts the generalizability of results. Although both the CHTC and D-HiLS tools were

adapted from validated international scales, the localized Armenian version requires additional psychometric testing for stability. Furthermore, some quantitative data were incomplete due to technical issues during online testing, and the voluntary nature of participation may have led to a mild overrepresentation of highly motivated students. Future research should employ multi-institutional sampling and triangulate quantitative data with classroom observations to increase ecological validity.

Future Research Directions:

1. **Intervention Efficacy Studies:** The next decade is likely to see a considerable rise in research focusing on the longitudinal effects of pedagogical interventions. Future studies should employ Randomized Controlled Trial (RCT) designs to measure the efficacy of inquiry-based methods (e.g., *Reacting to the Past* pedagogy or digital simulations) on improving CHTC and DHL scores over time.

2. **Curriculum Mapping and Faculty Preparedness:** A necessary structural complement to this study is a detailed curriculum map to pinpoint where CHTC and DHL instruction is explicitly mandated across the BA and MA programs, particularly in specialized concentrations. This must be paired with an investigation into history faculty's current pedagogical preparedness and capacity to integrate complex digital humanities tools and external research findings, as faculty readiness is central to successfully executing the proposed reforms.

3. **Cross-Institutional Comparison:** Comparative quantitative research utilizing the CHTC and D-HiLS scales across multiple universities in the South Caucasus region could provide valuable benchmarks for assessing regional strengths and weaknesses in history education reform.

V. Conclusion

The results confirm that institutional challenges in integrating external, research-intensive scholarship are rooted in students' limited argumentative synthesis and digital-source evaluation capacities. Addressing these issues requires a transition from content-based instruction toward inquiry-driven pedagogy. Strengthening methodological and digital training within the History curriculum will help align local academic practices with contemporary international standards. The core contribution of this study is the confirmation that deficits in high-level macroanalytic skills—specifically argumentative synthesis and digital corroboration—are critical impediments to the formation of new, competitive knowledge as mandated by institutional goals.

The findings necessitate a systematic shift in YSU pedagogy towards explicit, inquiry-based teaching methodologies. Strategic recommendations include mandatory, practical training in advanced digital source criticism and the integration of pedagogical scaffolding designed to develop argumentative synthesis. By focusing curricular reforms on cultivating epistemological flexibility and methodological rigor, the YSU Faculty of History can ensure its students are adequately prepared to engage critically with the complexities of regional and global historical discourse and establish themselves as competitive scholars in the 21st century.

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Մկրտչյան Լիլիթ,
պատմական գիտությունների թեկնածու, դոցենտ,
Հայկական պետական մանկավարժական համալսարանի
ռեկտորի ժամանակավոր պաշտոնակատար,
Հայաստանի Հանրապետություն,
lilitmkrtchyan909@gmail.com

Ամփոփում

Տվյալ ուսումնասիրությունը էմպիրիկ կերպով դիտարկում է ուսանողների **քննադատական պատմական մտածողության կարողության (ՔՊՄԿ)** ու **թվային-պատմական գրագիտության (ԹՊԳ)** մակարդակները: Հետազոտությունը անդրադառնում է պատմական մտածողության կարողությունների էմպիրիկ գնահատումների սահմանափակ առկայությանը և քննադատական-պատմական ու թվային-պատմական գրագիտության չափելի ցուցանիշների միջոցով ուսումնասիրում է առկա ներքին ինստիտուցիոնալ մարտահրավերը՝ արտաքին արտադրության ակադեմիական հետազոտությունները ուսուցման պրակտիկայում ինտեգրելու խնդիրը: Կիրառվել են **զուգահեռ կոնվերգենտ խառը մեթոդներ**՝ ներառելով 150 ուսանողից բաղկացած քանակական խումբ (N=150) ու 20 մասնակցից բաղկացած որակական խումբ (N=20): Տվյալները հավաքագրվել են **ՔՊՄԿ գործնական գնահատումների** ու **Թվային-պատմական գրագիտության անհատականացված սանդղակի (D-HiLS)** միջոցով, որոնք լրացվել են կիսակառուցվածքային հարցազրույցներով:

Քանակական վերլուծությունը ցույց է տվել, որ **բակալավրիատի ուսանողները** (n=97) ավելի ցածր միավորներ են հավաքել փաստարկային վերլուծության առաջադրանքներում (M=2.73, SD=1.24)՝ համեմատած **մագիստրատուրայի ուսանողների** հետ (n=53; M=3.68, SD=0.92), t≈4.8, p<.001, d≈0.8, p=.036, Cohen's d=.41: Այս արդյունքը ենթադրում է, որ պատմական տարբեր տեսակետների ինտեգրման կարողությունը բարելավվում է ակադեմիական առաջադեմ փորձի հետ մեկտեղ, սակայն մնում է համեմատելի եվրոպական ուսումնասիրություններում զեկուցված մակարդակից ցածր: Ինքնագեկուցված վստահության (M=7.8, SD=1.2) ու թվային աղբյուրի գնահատման գործնական կատարողականի (M=3.6, SD=1.4) միջև տարբերությունը վիճակագրորեն նշանակալի էր՝ t(148)=6.03, p<.001, d=.69, բացահայտելով **ակնհայտ գերվստահության արդյունք**: Որակական հարցազրույցները հաստատեցին, որ բացը արմատավորված է ոչ միայն մեթոդաբանական կոշտության, այլև միջազգային թվային արխիվներին սահմանափակ մուտքի ու թվային աղբյուրի վավերացման կառուցվածքային ուսուցման բացակայության մեջ:

Բանալի բառեր ՝ *պատմական մտածողություն, թվային-պատմական գրագիտություն, աղբյուրի քննադատական գնահատում, խառը մեթոդների հետազոտություն, քանակական-որակական ինտեգրում, կրթական չափման վավերականություն, հայկական բարձրագույն կրթություն, մանկավարժական նորարարություն:*

ОЦЕНКА ЦИФРОВОЙ ИСТОРИЧЕСКОЙ ГРАМОТНОСТИ И КРИТИЧЕСКОГО МЫШЛЕНИЯ СТУДЕНТОВ-ИСТОРИКОВ

Мкртчян Лилит,

Кандидат исторических наук, доцент,
Исполняющий объязонности ректора Армянского
государственного педагогического университета,
Республика Армения
lilitmkrtchyan909@gmail.com

Аннотация

В данном исследовании был проведен эмпирический анализ уровня владения студентами исторического факультета Ереванского государственного университета (ЕГУ) навыками критического исторического мышления (CHTC) и цифровой исторической грамотностью (DHL). Исследование посвящено ограниченной доступности эмпирических оценок компетенций исторического мышления и рассматривает локальную институциональную проблему ЕГУ – интеграцию внешних академических исследований в педагогическую практику — с помощью измеримых показателей критической исторической и цифровой исторической грамотности. Был использован конвергентный параллельный смешанный метод, включающий количественную когорту из 150 студентов (N=150) и качественную когорту из 20 участников (N=20). Данные были собраны с помощью основанных на результатах оценок CHTC и специально разработанной шкалы цифровой исторической грамотности (D-HiLS), дополненной полуструктурированными интервью.

Количественный анализ показал, что студенты бакалавриата (n = 97) получили более низкие оценки по заданиям на аргументативный синтез (M = 2,73, SD = 1,24) по сравнению со студентами магистратуры (n = 53; M = 3,68, SD = 0,92), t≈4,8, p<0,001, d≈0,8, p = 0,036, Cohen's d = 0,41. Этот результат свидетельствует о том, что способность интегрировать различные исторические точки зрения улучшается с накоплением академического опыта, но остается ниже уровня, отмеченного в сопоставимых европейских исследованиях. Разница между самооценкой уверенности (M = 7,8, SD = 1,2) и наблюдаемой эффективностью в оценке цифровых источников (M = 3,6, SD = 1,4) была статистически значимой, t(148) = 6,03, p < 0,001, d = 0,69, что свидетельствует о явном эффекте чрезмерной уверенности. Качественные интервью подтвердили, что эта разница обусловлена не только методологической жесткостью, но и ограниченным доступом к международным цифровым архивам и отсутствием структурированного обучения по проверке цифровых источников.

Ключевые слова: историческое мышление, цифровая историческая грамотность, критическая оценка источников, исследование с использованием смешанных методов, количественно-качественная интеграция, валидность образовательных измерений, высшее образование в Армении, педагогические инновации.

References:

1. AHA, *Digital Literacy – AHA,* [Online]. Available: https://www.historians.org/resource/digital-literacy/ (Accessed: 23/12/2025)

2. AHA (American Historical Association). *Teaching Critical Thinking with Historical Methodology, Oct. 8, 2025,* [Online]. Available: https://www.historians.org/perspectives-article/teaching-critical-thinking-with-historical-methodology/ (Accessed: 23/12/2025)

3. Burgos-Videla C., Parada-Ulloa, M., & Martínez-Díaz J., *Critical thinking in the classroom: the historical method and historical discourse as tools for teaching social studies. Frontiers in Sociology*, Apr.10, 2025. doi:10.3389/fsoc.2025.1526437

4. Callaway A., *Analyzing Students' Historical Thinking Skills at Different Grade Levels* (M.S. thesis). Eastern Illinois University, Charleston, IL, USA, 2020. [Online]. Available:

https://thekeep.eiu.edu/theses/4840 (Accessed: 23/12/2025)

5. Development and Validation of Digital Literacy Scale (DLS) and its Implication for Higher Education, *Semantic Scholar.* [Online]. Available: https://pdfs.semanticscholar.org/172b/5a58c52477b8adb5434a969946cc076b001f.pdf(Accessed: 23/12/2025)

6. Drake F.D. & Brown S.D., *A systematic approach to improve students' historical thinking. The History Teacher*, 36(4), Aug., 2003, 465. doi:10.2307/1555575 (Accessed: 23/12/2025)

7. Harvard Catalyst, *Mixed methods research.* [Online]. Available: https://catalyst.harvard.edu/community-engagement/mmr/ (Accessed: 23/12/2025)

8. Harvard University, *A Brief Guide to Writing the History Paper.* [Online]. Available: https://hwpi.harvard.edu/files/hwp/files/bgwriting_history.pdf (Accessed: 23/12/2025)

9. Langholz B.D., *Closing the Gap in American History Knowledge in K-12 Students* (M.Ed. culminating experience project). Grand Valley State University, Allendale, MI, USA, 2025. [Online]. Available: https://scholarworks.gvsu.edu/gradprojects/547 (Accessed: 23/12/2025)

10. Library Guides, *Evaluating Resources and Misinformation: CRAAP test.* [Online]. Available: https://guides.lib.uchicago.edu/c.php?g=1241077&p=9082343 (Accessed: 23/12/2025)

11. National University (NU Editorial Contributors), *What Is Qualitative vs. Quantitative Study?* Sep. 16, 2025. [Online]. Available: https://www.nu.edu/blog/qualitative-vs-quantitative-study/ (Accessed: 23/12/2025)

12. Oh S. S., Kim K.A., Kim M., Oh J., Chu S. H., & Choi J., *Measurement of digital literacy among older adults: Systematic review. Journal of Medical Internet Research*, 23(2), 2021. Jan. e26145. doi:10.2196/26145

13. Scribbr, *Mixed Methods Research. Definition, Guide & Examples.* [Online]. Available: https://www.scribbr.com/methodology/mixed-methods-research/ (Accessed: 23/12/2025)

14. Wilson K., Dudley D., Dutton J., Preval-Mann R., & Paulsen E., *A systematic review of pedagogical interventions on the learning of historical literacy in schools. History Education Research Journal*, 20(1), 9, 2023. doi:10.14324/HERJ.20.1.09

15. YSU, *Main issues in Armenian studies and historical education central to workshop discussion,* Dec. 17, 2024.. [Online]. Available: https://www.ysu.am/en/faculty/71/articles/73428 (Accessed: 23/12/2025)