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THE ROLE OF THE THEORY OF KNOWLEDGE AND EPISTEMOLOGICAL APPROACHES IN SHAPING A CULTURE OF SOCIAL MEDIA USE

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Abstract. The article substantiates the pedagogical role of the theory of knowledge and modern epistemological approaches in shaping a culture of social media use. An integrative analysis was carried out of Uzbekistan's regulatory and legal documents, the philosophical and pedagogical views of Uzbek scholars, and foreign research on classical and social epistemology, epistemic cognition, epistemic vigilance, source credibility, algorithmic mediation, and epistemic injustice. As a result, a model is proposed that combines the steps required for accepting a social media claim as knowledge: clarifying the purpose, verifying the source's authority, assessing evidence and justification, comparing with independent sources, understanding the algorithmic environment, seeking counterviews and limitations, and epistemic responsibility and reflection. The "MANTIQ" algorithm — author, original source, publication and context, comparison, proof, counterview — was systematized as a practical verification tool. Epistemic humility, confidence proportional to the evidence, fair assessment of testimony, and verification of AI output were defined as cross-cutting requirements of social media culture. The model ensures the student's transition from accepting popular content as knowledge to evidence-based, reflective, and ethical knowledge creation.

Keywords: theory of knowledge, epistemology, social media culture, justification, source credibility, epistemic vigilance, lateral reading, algorithmic bubble, epistemic injustice, epistemic humility.

Social media offers the user an enormous flow of information within seconds, but an abundance of information does not mean an abundance of knowledge. A short headline, an impactful image, a widely shared post, or an opinion stated with confidence cannot replace truth, evidence, and justification. Because recommendation algorithms repeat content that matches a user's previous clicks and viewing time, familiarity can look like credibility and popularity like scientific consensus. Therefore, before technical usage habits, a culture of social media use requires posing the epistemological question: "What do we accept as knowledge, and why?"

The Law of the Republic of Uzbekistan "On Education" links the development of learners' intellectual, scientific, and professional qualities with the content of education [1]. The "Digital Uzbekistan — 2030" strategy provides for the development of human capital and competencies alongside digital transformation [2]. The laws on personal data and cybersecurity require that, in the process of knowledge sharing, consent, confidentiality, secure access, and responsibility be taken into account alongside source and evidence [3; 4]. Thus, epistemic culture does not separate the pursuit of truth from ethical and legal responsibility.

In the submitted dissertation manuscript, the cognitive-informational component of a culture of social media use is linked with finding, verifying, and contextualizing a source, understanding

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algorithmic recommendations, and distinguishing scientific evidence from popular opinion [5]. The "MANTIQ" algorithm, which covers author, original source, publication date and context, comparison with independent sources, evidence, and counterview, turns this task into practice. This framework serves as a methodological foundation for linking epistemological concepts with everyday decisions on social media.

The aim of the article is to reveal the role of the theory of knowledge and epistemological approaches in shaping a culture of social media use, to develop a conceptual model for evaluating claims on social media, and to make it concrete through pedagogical tasks. To achieve this aim, the concepts of knowledge, belief, truth, justification, testimony, epistemic vigilance, epistemic injustice, algorithmic bubble, and reflective knowledge were compared; the chain source–evidence–comparison–context–limitation–conclusion was systematized as a practical model.

The theory of knowledge studies the source, structure, limits, and reliability of human knowledge. In the philosophical approaches edited by Q. Nazarov, cognition is interpreted as the active relationship between subject and object, as the unity of the sensory and rational stages, of practice, and of the criterion of truth [6]. N.A. Shermuhamedova emphasizes the interconnection of problem, evidence, hypothesis, theory, method, and reflection in scientific cognition [7]. These views show that a ready-made conclusion on social media should not be accepted passively but reconstructed through problem, evidence, method, and limitation.

B.X. Xodjayev substantiates that the content of education is the integrity of knowledge, skills, attitudes, and experience of activity [8]. R. Ishmuhamedov and M. Yuldashev identify problem-based, collaborative, and reflective activity as an important condition of innovative education [9]. From this standpoint, epistemological culture is not merely memorizing a "list of reliable sites"; it is the student's ability to ask questions, demand evidence, accept a conclusion provisionally, reconsider their view in light of new information, and explain their own process of knowing.

In classical epistemology, knowledge is often discussed as the unity of truth, belief, and justification. Plato's dialogue "Theaetetus" shows the problems of linking knowledge with perception, true opinion, and account [10]. Gettier put forward examples proving that justified true belief alone is, in certain accidental cases, insufficient for knowledge [11]. In the social media context this distinction is important: a user may reach a correct conclusion for a wrong or accidental reason. The educator must assess not only the result but also the source and the path of justification that led to the conclusion.

Social epistemology studies how knowledge is formed not only in the individual mind but also through testimony, expertise, institutions, communities, and information systems. Goldman evaluates knowledge-producing social practices by their capacity to generate true belief [12]. A post on social media often reaches a student's mind through a chain of author, resharer, platform algorithm, commenters, and external sources. Therefore, alongside the question "who said it?", the question "through what institutional and technological path did this message become visible?" also belongs to epistemic verification.

Personal epistemology, or epistemic cognition, studies how a person understands knowledge, how they coordinate source and evidence, and how they make judgments under uncertainty. Hofer and Pintrich distinguish the dimensions of certainty of knowledge, simplicity of knowledge, source of knowledge, and justification for knowing [13]. Chinn, Buckland, and Samarapungavan propose a broad model that unites epistemic aims, ideal standards, reliable processes, and epistemic

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achievements [14]. A student should understand knowledge not as a "ready-made fact available on the internet" but as a conclusion grounded in evidence and method, with its limitations stated and open to revision.

Epistemic vigilance is the mechanism of checking information received through communication, without accepting it blindly, by assessing the source's competence, honesty, and intentions and the internal and external coherence of the message. Sperber and colleagues show that people make wide use of testimony while also evaluating source and content in order to protect themselves from false or manipulative information [15]. Fluent language, professional design, or a large audience on social media is not proof of a source's competence and impartiality. Vigilance does not make doubt a goal; it calibrates trust in proportion to the evidence.

Epistemic justice sheds light on whose testimony is heard in the exchange of knowledge and whose experience is given expression through concepts. Through the concepts of testimonial injustice and hermeneutical injustice, Fricker shows that the word of certain individuals or groups is unjustifiably undervalued because of stereotypes [16]. Popularity hierarchies, discriminatory language, or algorithmic visibility on social media can push some sources of knowledge to the margins. A student should not accept the "most visible opinion" as the "best-grounded opinion" and should learn to seek out less visible but relevant experience and evidence.

Algorithmic selection covertly organizes the epistemic environment. Nguyen distinguishes the epistemic bubble — the accidental omission of alternative sources — from the echo chamber, in which active distrust toward outside sources is formed [17]. Pariser popularized the idea that a personalized filter may keep a user within an information sphere that matches their own views [18]. In this case the problem is not only "false content" but which claims are not seen at all. Epistemological education requires the student to deliberately broaden their information diet and step outside the recommendation feed.

The credibility of a digital source is assessed on the basis of content, author, purpose, evidence, publication process, and consistency with other sources. Metzger shows that, in verifying credibility on the internet, users often rely on heuristic cues, while in-depth verification depends on motivation and skill [20]. Wineburg and McGrew found that professional fact-checkers use the lateral reading strategy: instead of staying long on a page, they leave the site and check its reputation and claims in external sources [19]. This strategy is the practical form of epistemic vigilance.

Misinformation may retain its initial effect even after it has been corrected. Lewandowsky and colleagues show that for a correction to be effective, a clear rebuttal of the error, an alternative explanation, and a credible source are needed [21]. Pennycook and Rand note that belief in some false messages may be linked not only to ideological bias but also to a lack of analytical attention [22]. Kozyreva and colleagues substantiate the need for simple cognitive tools for the digital environment — checking, managing attention, and consciously choosing personal settings [23]. Thus, education forms not a list of facts but a stable habit of verification.

The study was based on the methodology of a conceptual and theoretical-integrative review. The source corpus included Uzbekistan's documents on education, digitalization, personal data, and cybersecurity; works by Uzbek scholars on philosophy and pedagogy; the submitted dissertation manuscript; foreign works on classical epistemology, social epistemology, epistemic cognition, epistemic vigilance, source credibility, disinformation, and algorithmic mediation; and the official

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frameworks of UNESCO, the OECD, and DigComp 3.0. Sources were selected by theoretical significance, scholarly standing, and the possibility of application to educational practice.

The analysis was carried out in four stages. In the first stage, the categories “knowledge,” “truth,” “belief,” “justification,” “testimony,” “expertise,” “uncertainty,” “algorithmic mediation,” “epistemic justice,” and “reflection” were identified. In the second stage, errors on social media — accepting popularity as truth, failing to verify the source, removing content from its context, selecting confirming evidence, bubbles and echo chambers, and over-trusting AI output — were linked with these categories. In the third stage, a matrix of problem, student action, pedagogical tool, and diagnostic evidence was constructed. In the fourth stage, the “MANTIQ” algorithm and epistemic reflection questions were integrated into a coherent model.

No experiment with new respondents was conducted in the study; the results are interpreted as a theoretical synthesis and a proposal for pedagogical design. The model does not guarantee the reliability of any particular platform and does not propose a single method of verification for all claims. In the next, empirical stage, the applicability of the model could be tested through a source-selection protocol, a claim–evidence map, a lateral reading trail, a comparison of conflicting sources, a reflective record, and a fact-checking task in a new situation.

As a result of the theoretical synthesis, the epistemological model of social media culture was expressed in seven interrelated directions: 1) epistemic purpose; 2) source and testimony; 3) evidence and justification; 4) comparison and context; 5) algorithmic mediation; 6) epistemic justice and responsibility; 7) reflection and calibration of confidence. Each direction is not limited to “finding the true conclusion”; the student shows how they arrived at the conclusion, why they chose a particular source, what they do not know, and under what circumstances they would change their view.

The first direction is epistemic purpose. Before using social media, the student answers the questions “What do I want to know?”, “What degree of precision is sufficient?”, and “For which decision is this conclusion needed?” Entertainment curiosity, quick orientation, scientific explanation, and safety-related decisions do not require the same evidence standard. When the epistemic purpose is clear, the student does not let the recommendation feed steer the search; they set in advance the key concept, the necessary type of source, the time limit, and the depth of verification.

The second direction is source and testimony. The student checks who the author is, their authority on the topic, their interests, the publication process, and accountability. Expertise is assessed not by title or number of followers but by the knowledge, method, and accountability relevant to the given claim. Social epistemology shows that reliance on testimony is unavoidable [12], while epistemic vigilance calibrates whom to trust and why [15]. The educator has students compare one claim across an anonymous post, a mass medium, an official document, and a scientific article, showing that source authority varies with the task.

The third direction is evidence and justification. The student distinguishes claim, evidence, and explanation; they check the evidence’s relevance to the claim, its sufficiency, its quality, and how far it rules out alternative explanations. For a statistical figure, the sample, measurement, time, and uncertainty are identified; for an image, the original source, date, place, and editing; for personal experience, the limits of generalization. If the “correct answer” was found by chance, the process of knowing has not yet been formed [11]. Therefore, assessment covers, besides the conclusion, the claim–evidence map and the verification protocol.

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The fourth direction is comparison and context. A short post can detach a complex phenomenon from its causes, conditions, and limitations. The student determines when, where, for whom, and for what purpose the message was created, returns to the original source, and compares at least two independent sources. Lateral reading requires verifying the organization and the claim in an external source, without relying excessively on page design or the "About us" section [19]. When a conflicting result is found, one does not immediately say "both are the same"; the differences in method, sample, concept, and strength of evidence are analyzed.

The fifth direction is algorithmic mediation. The student understands that the feed is not a neutral library and that visibility is shaped by the platform's commercial purpose, user behavior, and network connections. On a single topic, the results of social media, a search engine, a scientific database, and an official site are compared; advertising, sponsorship, and organic material are distinguished. In an epistemic bubble, outside views may become invisible, and in an echo chamber, distrust of them may form [17]. The task requires the student to audit their own information environment and deliberately add alternative, high-quality sources.

The sixth direction is epistemic justice and responsibility. In discussion, the student evaluates evidence but does not turn the author's social standing, language, or popularity into an automatic criterion of trust. They ask whose experience is missing, whose voice the platform amplifies, and for whom harm or risk may arise. An approach against epistemic injustice does not declare all opinions equally true; while maintaining the evidence standard, it requires listening to testimony without stereotypes, identifying gaps in concepts, and protecting the confidentiality of a harmed participant [16].

The seventh direction is reflection and calibration of confidence. The student indicates their level of confidence in the conclusion as "low–medium–high" and writes down the reason for it, the existing limitation, and the new evidence that would change their view. Epistemic humility is not skepticism in the sense of "nothing can be known"; it is acknowledging the limits of one's knowledge, keeping confidence proportional to the evidence, and readiness to correct an error. The goal–monitoring–reflection cycle in Zimmerman's model turns this internal regulation into pedagogical practice [30].

Table 1

Epistemological directions of social media culture

Direction	Main epistemic risk	Student's practical action	Diagnostic evidence
Epistemic purpose	The feed setting the goal; vagueness of the question	Setting the knowledge question, the precision standard, and the type of source	Search plan and statement of purpose
Source and testimony	Mistaking popularity for expertise and fluency for honesty	Checking author, authority, interests, publication, and accountability	Source passport and trust note

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Direction	Main epistemic risk	Student's practical action	Diagnostic evidence
Evidence and justification	Mixing up claim, fact, and opinion; accidentally correct conclusion	Separating claim, evidence, and explanation; assessing evidence quality	Evidence map and verification protocol
Comparison and context	Detachment from the original source; selecting confirming evidence	Lateral reading, two independent sources, comparing method and limitation	Comparison table and annotated conclusion
Algorithmic mediation	Bubble, echo chamber, and hidden influence of advertising	Comparing results from social media, search, scientific databases, and official sources	Information environment audit
Epistemic justice	Stereotype, marginalization of voices, and harmful disclosure	Evaluating testimony against evidence, without stereotypes; seeking missing voices	Stakeholder map
Reflection	Overconfidence, failure to admit error, and blind reliance on AI	Writing down confidence level, limitation, and evidence that would change the view	Epistemic reflection and revision history

The directions in the table become a practical sequence in the "MANTIQ" algorithm (each letter stands for an Uzbek term): M (Muallif, "author") — verify the author and their authority; A (Asl manba, "original source") — return to the original source; N (Nashr, "publication") — determine the publication date, purpose, and context; T (Taqqoslash, "comparison") — compare with at least two independent sources; I (Isbot, "proof") — assess the quality of the attached proof and method; Q (Qarama-qarshi qarash, "counterview") — note the opposing view, uncertainty, and limitation. So that the algorithm does not become a mechanical checklist, the question "What is my level of confidence in my conclusion, and what would change it?" is added at the end.

The concept of information disorder helps distinguish different forms of false or misleading content by intent, truthfulness, and harm [24]. A student does not immediately interpret an error as ill intent, but understands that sharing incorrect information with good intentions can also cause harm. In a correction task, they identify the erroneous claim precisely, provide a reliable source, write an alternative explanation, and visibly edit the earlier post or conclusion. This practice places fidelity to truth above protecting one's reputation.

UNESCO's media and information literacy framework views finding, analyzing and evaluating information, creating it, and responsible participation as a single competence [25]. In DigComp 3.0, countering disinformation, artificial intelligence, digital rights, safety, and well-being are reinforced

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across all competences [26]. These frameworks extend the epistemological model beyond technical search skills: along with the conditions of truth, the student also analyzes the content's effect on its audience, its legal status, and its role in the information environment.

Generative AI creates a distinct test for epistemic culture. An answer in a fluent and confident tone is not a guarantee of source, understanding, or truth; a model can produce coherent text even on unknown or contested questions. The UNESCO AI guidance prioritizes human agency, transparency, privacy, and pedagogical purpose [27]. A student views AI output not as ready-made knowledge but as a set of claims to be verified: they check important facts in a primary or official source, open citations and links, identify nonexistent sources, request counter-evidence, and keep responsibility for the final conclusion.

Epistemological pedagogy is also reflected in task design. Instead of "Find a post on the topic," the student traces the chain of spread of one claim, finds the original source, compares scientific and popular interpretations, assesses the strength of the evidence, and produces an annotated conclusion of 300–500 words. In pairs, one acts as "author" and the other as "epistemic reviewer," asking "How do we know?", "What evidence is missing?", and "Whose view is not visible?" The final product includes the initial opinion, the review, and the revised version.

In discussion, evidence-based disagreement is treated as an epistemic resource. The Community of Inquiry model substantiates the unity of cognitive, social, and teaching presence [29]. The educator does not accept all opinions as equally true, but does not tie a student's wrong answer to their personal worth. They clarify the claim, ask for evidence, offer a counterexample, show uncertainty, and allow the conclusion to be graded provisionally. In such an environment, changing one's mind is recognized not as defeat but as an epistemic achievement.

Assessment criteria cover source authority, return to the original source, evidence quality, independent comparison, context, counterview, confidence calibration, epistemic justice, authorship, and reflection. The number of posts or speed of response is not a criterion of knowledge. As minimum evidence, the following are taken: a source passport, a lateral reading trail, a claim–evidence map, a comparison table, an AI declaration, and a reflective revision. Even if a student's conclusion is wrong, if they identify and correct the error through a quality process, epistemic development is evident.

The OECD notes the need to view technology, data governance, pedagogical purpose, and human oversight together in the digital education ecosystem [28]. Selwyn stresses that educational technology should not be accepted as a neutral tool separate from social, political, and economic interests [31]. Therefore, at the institutional level, core scientific sources, an electronic library, a fact-checking protocol, a culture of open correction, rules of confidentiality and academic integrity, and epistemological literacy training for educators should be established.

The expected result of the proposed model is that the student relates to information on social media not with constant suspicion but with confidence proportional to the evidence. They distinguish popularity from truth, fluency from competence, personal experience from general evidence, and algorithmic recommendation from scientific selection; they can openly say what they do not know; they correct their conclusion in light of contradicting evidence; they assess another participant's testimony without stereotypes; and they share knowledge in an ethical and verifiable form. Then social media culture becomes not a habit of consumption but a practice of responsible knowing.

In shaping a culture of social media use, the theory of knowledge reveals the difference between information, opinion, and knowledge. Knowledge is not merely a conclusion that corresponds to truth,

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but an accountable relationship with source, evidence, justification, method, context, and limitation. In this process, social epistemology explains the role of the expert, testimony, institution, algorithm, and community; epistemic cognition explains the student's views of knowledge and uncertainty; and epistemic vigilance explains how to manage trust in proportion to the evidence.

The proposed seven-direction model unites epistemic purpose, source and testimony, evidence and justification, comparison and context, algorithmic mediation, epistemic justice, and reflection. The "MANTIQ" algorithm turns this theory into everyday verification practice. Its effectiveness is determined not by the student gathering more information but by their returning to the original source, comparing independent evidence, showing counterviews and limitations, justifying their level of confidence, and being able to correct their conclusion in light of new evidence.

In pedagogical practice, tasks of lateral reading, claim–evidence mapping, source passports, algorithmic environment audits, epistemic review, open correction, and verification of AI output should be applied systematically. Assessment relies not on post popularity or activity counts but on evidence of the knowing process and of epistemic responsibility. In future research, it is advisable to pilot the model across disciplines and evaluate it empirically through indicators of source-selection quality, justification, confidence calibration, handling of conflicting information, and transfer to new situations.

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