Thematic Analysis of KCSE Presentations

(2023–2026)

Braun & Clarke 6-Phase Reflexive Thematic Analysis

Korean Council of Science Editors (KCSE)
35 Presentations from Workshops & Conferences
Analysis Date: February 2026

Executive Summary

This report presents a systematic thematic analysis of 35 presentations delivered at workshops and conferences organized by the Korean Council of Science Editors (KCSE) between January 2023 and January 2026. Using Braun and Clarke's (2006) six-phase reflexive thematic analysis framework, we identified six overarching themes that capture the evolving discourse on AI in scholarly publishing within the Korean academic community.

The 35 presentations (numbered No. 1 through No. 40, with five unpublished) span a critical period during which generative AI—particularly ChatGPT—emerged as a transformative force in academic research and publishing. The analysis reveals a community grappling with rapid technological change while striving to maintain research integrity, editorial quality, and ethical standards.

Six Major Themes Identified:

Theme 1: AI as a Practical Tool for Manuscript Writing and Editing (17 presentations)

Theme 2: Publication Ethics, Authorship, and Transparency in the AI Era (14 presentations)

Theme 3: AI-Assisted Peer Review and Editorial Decision-Making (10 presentations)

Theme 4: Data Integrity, Statistical Analysis, and Reproducibility (7 presentations)

Theme 5: Visual Communication and Research Dissemination (5 presentations)

Theme 6: Paradigm Shift: AI's Broader Impact on Science and the Publishing Ecosystem (6 presentations)

Phase 1: Familiarizing with the Data

The corpus comprises 35 presentation summaries from KCSE events spanning three years (January 2023–January 2026). After repeated close reading, the following initial observations emerged:

Corpus Characteristics

The presentations come from diverse presenters including university professors (medicine, liberal arts, information science), KISTI researchers, publishing professionals, journal editors, and industry practitioners. The majority are situated within medical/health sciences publishing, reflecting the KCSE membership base, though the topics address scholarly communication broadly.

Temporal Evolution

A clear temporal arc is visible. Early 2023 presentations (No. 1–3) focus on the novelty of ChatGPT, exploring basic detectability and capabilities with a tone of cautious curiosity. By mid-2023 to early 2024 (No. 4–15), the discourse matures into structured discussions of authorship, ethics, copyright, and practical applications. The 2025–2026 presentations (No. 24–40) show a community that has moved past ‘whether’ to use AI and now debates ‘how’ to use it properly, with sophisticated discussions of vibe coding, AI-powered pipelines, and agentic AI.

Dominant Tone

The prevailing tone is cautiously optimistic—AI is consistently framed as a ‘powerful assistant’ or ‘tool’ rather than a replacement for human expertise. Virtually all presenters emphasize that final responsibility rests with human authors and editors. A notable undercurrent of anxiety about the pace of change, particularly from domestic (Korean) journal editors who feel under-resourced compared to large commercial publishers, is also evident.

Phase 2: Generating Initial Codes

Through systematic line-by-line analysis of the 35 presentations, 48 initial codes were generated. The codes are organized below by thematic cluster, listed in descending order of frequency within each cluster.

Cluster A: AI as a Practical Workflow Tool (10 codes)

#	Initial Code	Description	Freq.
1	AI as writing/editing assistant	AI used for grammar, proofreading, translation, style correction across manuscript lifecycle	23/35
2	Prompt engineering importance	Quality of AI output depends on precision of user prompts; structured prompt formulas (Persona, Context, Task, Format, Exemplar, Tone)	15/35
3	AI tool ecosystem diversity	Proliferation of specialized tools (ChatGPT, Claude, Gemini, Copilot, Perplexity) for different research stages	11/35
4	Translation and language polishing	AI for multilingual translation, English proofreading, and language quality improvement for non-native speakers	11/35
5	AI for data analysis automation	Using AI to automate statistical analysis, data processing, and computational tasks in research	6/35
6	AI for abstract/title generation	Using AI to draft abstracts, generate titles, and structure manuscript sections	6/35
7	Reference correction and verification	AI-assisted checking, formatting, and correction of bibliographic references and citation accuracy	5/35
8	AI platform comparison	Systematic comparison of AI tools' strengths, weaknesses, and optimal use cases across platforms	6/35
9	Table/figure correction with AI	AI-assisted table formatting, data consistency checks, and figure quality improvement	4/35
10	XML/JATS production automation	AI for automating journal XML generation, metadata extraction, and production workflows	3/35

Cluster B: Ethics, Authorship, and Transparency (11 codes)

#	Initial Code	Description	Freq.
11	Human final responsibility	Authors/editors bear ultimate accountability for all AI-generated outputs regardless of AI involvement	28/35
12	Hallucination risk	AI generating false information, fabricated references, inaccurate data, and confidently stated errors	22/35
13	Mandatory disclosure of AI use	Transparent reporting of AI tools used, versions, prompts, and scope of AI involvement in manuscripts	18/35
14	AI cannot be an author	AI does not meet authorship criteria (ICMJE, COPE) as it cannot bear accountability or provide final approval	16/35
15	Ethical framework development	Need for standardized AI-use guidelines across institutions, journals, and publishing organizations	10/35
16	Copyright and IP concerns	Legal status of AI-generated outputs, training data ownership, and intellectual property implications	7/35

17	Journal policy comparison	Comparing AI policies across major publishers (Elsevier, Springer Nature, BMJ, Science, Lancet) and Korean journals	6/35
18	AI-generated vs. AI-assisted distinction	Differentiating between content directly generated by AI and content merely assisted/polished by AI for disclosure purposes	3/35
19	Research misconduct/fabrication risk	AI enabling new forms of misconduct including data fabrication, image manipulation, and fake reference generation	5/35
20	Trust but verify principle	Universal requirement to validate all AI outputs through human expert review before publication	6/35
21	Fake reference generation	AI fabricating non-existent citations and bibliographic entries that appear plausible	4/35

Cluster C: AI in Peer Review and Editorial Gatekeeping (9 codes)

#	Initial Code	Description	Freq.
22	AI for peer review assistance	Using AI in desk screening, reviewer support, structured manuscript error checking, and integrity verification	12/35
23	Manuscript security/confidentiality	Risks of uploading manuscripts to AI platforms; data privacy settings and training data exclusion policies	14/35
24	Detection of AI-generated text	Tools and methods (AI detectors, linguistic analysis) to identify AI-written content in submissions	10/35
25	Reviewer shortage crisis	Declining review acceptance rates, insufficient review depth, and growing submission volumes pressuring editorial systems	4/35
26	AI vs. human review quality	Comparative analysis: AI offers speed/breadth/consistency while humans excel in depth/context/accuracy	5/35
27	Desk screening efficiency	AI for rapid initial screening to check scope alignment, guideline compliance, and formatting before peer review	3/35
28	AI security settings by platform	Detailed comparison of data handling policies across ChatGPT, Claude, Gemini regarding training data exclusion	4/35
29	Paper mill detection	AI-based identification of fraudulent submission patterns, paper mill activities, and organized research fraud	2/35
30	Reviewer 0 / AI pre-screening concept	AI serving as an initial automated reviewer ('Reviewer 0') before manuscripts reach human expert reviewers	2/35

Cluster D: Data Verification and Scientific Reproducibility (5 codes)

#	Initial Code	Description	Freq.
31	Data integrity verification	AI/vibe coding for reproducibility checks, data validation, and verifying statistical claims against raw data	8/35
32	AI for statistical interpretation	AI helping editors understand statistical concepts (t-values, p-values, confidence intervals, signal-to-noise ratios)	3/35
33	Vibe coding for editors	Non-coding editors using natural language instructions to have AI write code for data analysis and figure reproduction	2/35
34	Data sharing policies	Gap between data availability statement policies (62% of Korean journals) and actual data sharing (6% of papers)	3/35
35	Reporting guideline compliance	AI-assisted verification of adherence to CONSORT, STROBE, PRISMA, and other reporting standards	3/35

Cluster E: Visual Communication and Dissemination (5 codes)

#	Initial Code	Description	Freq.
36	Visual abstract/GA creation	AI potential and limitations in producing graphical abstracts for research dissemination	5/35
37	Citation impact of visual content	Evidence that visual abstracts increase Twitter impressions (~8x), article visits, and Impact Factor improvements	2/35
38	SNS promotion and dissemination	AI-powered generation of platform-specific social media posts, infographics, and metadata-driven promotion	2/35
39	Multimedia abstract production	Creating video, audio, and interactive abstract formats to enhance research accessibility and engagement	2/35

40	AI limitations in medical illustration	Generative AI producing anatomically inaccurate images and failing to visualize medical statistical terms (HR, BMD)	2/35

Cluster F: Systemic and Paradigm-Level Change (8 codes)

#	Initial Code	Description	Freq.
41	Researcher paradigm shift	Evolution from writer to supervisor/director of AI outputs; changing role identity of researchers and editors	9/35
42	Domestic journal gap	Korean journals lagging behind international standards in AI adoption, guidelines (18%), and data sharing (6%)	6/35
43	AI literacy/education need	Urgent requirement for AI training including prompt engineering, understanding limitations, and ethical awareness	5/35
44	Agentic AI emergence	Rise of autonomous AI agents that set goals, plan steps, and execute tasks independently beyond simple prompts	3/35
45	Publisher AI infrastructure investment	Large publishers (Elsevier, Springer Nature) investing in AI systems (LeapSpace, Geppetto, Paperpal) creating competitive advantage	3/35
46	Evolution toward integrated AI pipelines	Anticipated era where research data and protocols input yields automated analysis, writing, review, and publishing	3/35
47	AI productivity metrics	Evidence that AI-using researchers produce 3.02x more papers, receive 4.84x more citations, and draft 50–70% faster	2/35
48	Collective scientific diversity concerns	AI increasing individual productivity while decreasing collective knowledge breadth (-4.63%) and interdisciplinary interaction (-22%)	1/35

Note: Codes are grouped by thematic cluster to foreshadow the theme development in Phase 3. Some codes contribute to multiple themes. Frequency indicates the number of presentations (out of 35) in which each code was identified.

Phase 3: Searching for Themes

The 48 initial codes were sorted into candidate thematic groupings based on conceptual similarity. The following thematic map emerged:

Candidate Theme A: AI as a Practical Workflow Tool

Codes clustered here include: AI as writing/editing assistant, prompt engineering importance, AI tool ecosystem diversity, translation and language polishing, reference correction capabilities, AI for data analysis automation, abstract/title generation, platform comparison, table/figure correction, and XML/JATS production automation. This is the largest cluster (10 codes), reflecting the community's primary concern with operational utility.

Candidate Theme B: Ethics, Authorship, and Transparency

This cluster draws together: human final responsibility, hallucination risk, mandatory disclosure, AI cannot be an author, ethical framework development, copyright and IP concerns, journal policy comparisons, AI-generated vs. AI-assisted distinction, research misconduct/fabrication risk, trust but verify principle, and fake reference generation. These 11 codes form a coherent ethical discourse.

Candidate Theme C: AI in Peer Review and Editorial Gatekeeping

Codes here include: AI for peer review assistance, manuscript security/confidentiality, detection of AI-generated text, reviewer shortage crisis, AI vs. human review quality, desk screening efficiency, AI security settings by platform, paper mill detection, and Reviewer 0/AI pre-screening concept. These 9 codes represent the gatekeeping dimension of editorial work.

Candidate Theme D: Data Verification and Scientific Reproducibility

This cluster encompasses: data integrity verification, AI for statistical interpretation, vibe coding for editors, data sharing policies, and reporting guideline compliance. These 5 codes address the scientific validity dimension.

Candidate Theme E: Visual Communication and Dissemination

Codes include: visual abstract/GA creation, citation impact of visual content, SNS promotion and dissemination, multimedia abstract production, and AI limitations in medical illustration. These 5 codes focus on research visibility.

Candidate Theme F: Systemic and Paradigm-Level Change

This group contains: researcher paradigm shift, domestic journal gap, AI literacy/education need, agentic AI emergence, publisher AI infrastructure investment, evolution toward integrated AI pipelines, AI productivity metrics, and collective scientific diversity concerns. These 8 codes capture the broader structural implications.

Phase 4: Reviewing Themes

Each candidate theme was tested against the coded data extracts and the full dataset to ensure internal coherence and external distinctiveness.

4.1 Internal Homogeneity Check

All six candidate themes demonstrated strong internal coherence. The data extracts within each theme share clear conceptual unity. For example, Theme B (Ethics) consistently revolves around the impossibility of AI authorship, the necessity of disclosure, and human responsibility—a tightly interwoven set of principles that appear together across multiple presentations.

4.2 External Heterogeneity Check

While some overlap exists (e.g., manuscript security appears in both the Ethics and Peer Review themes), the themes are sufficiently distinct in their focal concerns: Theme A addresses practical 'how-to,' Theme B addresses normative 'should/should-not,' Theme C addresses editorial process, Theme D addresses scientific validity, Theme E addresses communication, and Theme F addresses systemic change.

4.3 Adjustments Made

Initially, 'AI for statistical analysis' was a standalone candidate theme. Upon review, it was merged into Theme D (Data Integrity and Reproducibility) because the presentations on statistics (No. 22, 32) ultimately serve the same purpose as data verification—ensuring the soundness of published findings. Similarly, 'AI security and data privacy' was initially separate but was distributed across Themes B and C depending on context (ethics vs. review process).

4.4 Coverage Verification

All 35 presentations map to at least one theme, and most map to two or three, confirming comprehensive coverage:

Theme	Presentations (No.)
Theme 1: AI as Practical Tool	1, 2, 3, 6, 7, 8, 9, 10, 16, 20, 22, 26, 28, 29, 31, 35, 40
Theme 2: Ethics & Transparency	3, 4, 5, 10, 11, 13, 14, 16, 19, 23, 24, 25, 35, 38
Theme 3: AI-Assisted Peer Review	9, 10, 16, 21, 24, 26, 33, 37, 38, 40
Theme 4: Data & Reproducibility	10, 21, 22, 25, 26, 32, 33
Theme 5: Visual Communication	7, 15, 30, 34, (also aspects of 6)
Theme 6: Paradigm Shift	2, 11, 14, 28, 38, 39

Phase 5: Defining and Naming Themes

Theme 1: “AI as a practical tool” — AI as a Practical Tool for Manuscript Writing and Editing

Definition: This theme captures the extensive and growing use of AI tools across the manuscript lifecycle—from data analysis and draft writing to proofreading, reference formatting, and publication production—framed consistently as enhancing efficiency while requiring human oversight.

Scope: 17 of 35 presentations directly address practical AI applications, making this the most prevalent theme. It encompasses prompt engineering strategies, platform comparisons, and specific editorial tasks.

Key Messages

AI dramatically improves manuscript quality metrics. As No. 1 demonstrates, ChatGPT-assisted proofreading raised Grammarly scores from 53 to 95, a finding echoed across multiple presentations. The community increasingly recognizes a hierarchy of AI competence: language correction (excellent), abstract writing (very good), reference formatting (good but requires checking), XML generation (promising but immature), and logical/content review (unreliable).

Prompt engineering emerges as a critical literacy. The ‘Perfect Prompt Formula’ (Persona, Context, Task, Format, Exemplar, Tone) presented in No. 8 becomes a recurring framework. By 2025, presentations like No. 35 expand this to 12 sophisticated techniques including multi-expert debate, plan-and-solve, and Socratic questioning.

> *"The question is no longer whether to use AI but how to use it properly."* — No. 21 (AI-Based Peer Review)

Theme 2: “The ethical guardrails” — Publication Ethics, Authorship, and Transparency

Definition: This theme encompasses the normative framework the community constructs around AI use: who bears responsibility, what must be disclosed, and what constitutes misconduct in the AI era.

Scope: 14 presentations engage deeply with ethics, forming the second most prominent theme. It reflects the community’s effort to draw clear lines between acceptable and unacceptable AI use.

Key Messages

The single most consistent message across the entire corpus is that AI cannot be an author. Every presentation that addresses this issue reaches the same conclusion, grounded in ICMJE criteria: AI cannot provide final approval or bear accountability, and therefore fails the fundamental requirements for authorship. This consensus spans from the philosophical analysis of No. 4 through the policy comparisons of No. 25.

Transparency through mandatory disclosure emerges as the primary mechanism for responsible AI use. However, the corpus reveals meaningful nuance in what triggers disclosure: using AI solely for language polishing is generally exempt, while using AI-generated sentences verbatim requires disclosure (No. 6, No. 10).

A critical evolution is visible: early presentations (2023) focus on whether AI use constitutes plagiarism,

while later presentations (2025–2026) shift toward granular policy implementation—specific disclosure templates, security settings by platform, and distinctions between ‘AI-generated’ vs. ‘AI-assisted’ content (No. 19).

> *"AI is a tool that generates outputs under human command, not an independent creative subject."* — No. 5 (Copyright Issues)

Theme 3: “The AI gatekeeper” — AI-Assisted Peer Review and Editorial Decision-Making

Definition: This theme addresses the use of AI in the editorial process itself—from desk screening and reviewer recommendation to structured manuscript error checking and integrity verification.

Scope: 10 presentations engage substantially with AI in the review process, reflecting a community under pressure from reviewer shortages and rising submission volumes.

Key Messages

The reviewer shortage crisis is a key driver of AI adoption. Multiple presenters note that review invitation acceptance rates fall below 50%, and secured reviews often lack depth (No. 40). AI is positioned as a solution: editors can use it for rapid desk screening to identify manuscripts misaligned with journal scope, check compliance with submission guidelines, and flag potential integrity issues before manuscripts reach human reviewers.

A nuanced comparison of AI vs. human review emerges from No. 21: AI offers speed, breadth, and consistency, but human reviewers excel in depth, contextual understanding, and accuracy. The community converges on a complementary model where AI serves as ‘Reviewer 0’ (No. 37) providing initial screening, while human experts render final judgments.

Security remains a critical concern. The data security policies of major AI platforms are carefully compared (No. 16, No. 21), with Claude.ai and Gemini noted for not using inputs for training, while ChatGPT requires manual opt-out. The universal prohibition against uploading manuscripts to AI tools without confidentiality guarantees is repeatedly emphasized.

> *"AI-generated review reports are advisory; final publication decisions must be made by editors."* — No. 16 (AI in Review and Publishing)

Theme 4: “The verification engine” — Data Integrity, Statistical Analysis, and Reproducibility

Definition: This theme captures the emerging use of AI for ensuring the scientific soundness of published research—through data verification, statistical reanalysis, reporting guideline compliance, and reproducibility checks.

Scope: 7 presentations address this dimension, with increasing sophistication over time.

Key Messages

The concept of ‘vibe coding’ (No. 26, No. 40) represents a paradigm shift in editorial verification. Non-coding editors can now use natural language instructions to have AI analyze raw data, reproduce manuscript figures, and verify statistical claims. This democratizes data verification and makes the ‘black box’ nature of many published papers challengeable.

Data sharing policies are identified as a prerequisite for AI-enabled verification. No. 25 reveals a stark gap: while 62% of Korean journals have data availability statement policies, only 6% of papers actually provide data. Without accessible data, AI verification is impossible, making data sharing the ‘decisive factor’ for future AI-based scholarly ecosystems.

AI-assisted statistical interpretation (No. 22, No. 32) extends beyond computation to pedagogical functions, helping editors understand signal-to-noise ratios, p-values, and confidence intervals. The emphasis on understanding rather than just computing is notable.

> *"Reviewing manuscripts without research data limits scientific progress. Editors should use vibe-coding to directly verify reproducibility."* — No. 40 (Improving Expert Review Efficiency)

Theme 5: “Seeing is believing” — Visual Communication and Research Dissemination

Definition: This theme addresses strategies for enhancing research visibility through visual abstracts, multimedia content, and AI-powered social media promotion.

Scope: 5 presentations focus on visual communication, a smaller but distinct theme reflecting the growing importance of research dissemination beyond traditional text.

Key Messages

Visual abstracts are proven to dramatically increase research impact. No. 30 presents compelling data: Twitter posts with visual abstracts generate approximately 8 times more impressions and significantly more article visits than text-only posts. Journals adopting graphical abstracts show greater Impact Factor improvements (No. 30).

Current AI has significant limitations in medical illustration. Generative AI tools produce anatomically inaccurate images and cannot meaningfully visualize medical statistical terms (HR, BMD), making human expert illustrators essential for medical graphical abstracts (No. 30). This contrasts with the broader optimism about AI in other domains.

The emergence of AI-powered promotion tools (No. 34) signals a new frontier: automated generation of platform-specific SNS posts, infographic design briefs, and metadata extraction to help editors bridge the gap between specialized academic content and public communication.

> *"Seeing is Believing: high-quality visual materials are key indicators determining researcher credibility and paper impact."* — No. 30 (Graphical Abstracts)

Theme 6: “The fifth paradigm” — AI’s Broader Impact on Science and the Publishing Ecosystem

Definition: This theme captures the macro-level discourse about how AI is fundamentally reshaping the nature of scientific research, the role of researchers, and the structure of the publishing industry.

Scope: 6 presentations engage with systemic change, providing the broadest perspective on AI’s implications.

Key Messages

The concept of a ‘fifth research paradigm’ (No. 23, No. 39) frames AI not as an incremental tool but as a fundamental shift in how science is conducted—from empirical through theoretical, computational, and

big data paradigms to AI-driven ‘intelligentization.’ No. 39 provides striking evidence: AI-using researchers produce 3.02 times more papers and receive 4.84 times more citations.

However, a critical counter-narrative emerges about ‘collective contraction’ (No. 39): while individual productivity soars, collective knowledge breadth decreases by 4.63% and interdisciplinary interactions drop by 22%. AI gravitates research toward data-rich, well-defined problems, potentially creating a monoculture of inquiry driven by data availability rather than scientific curiosity.

For Korean domestic journals, the threat of market monopolization by large commercial publishers with superior AI infrastructure is a recurring concern (No. 40, No. 26). The KCSE community recognizes that small academic societies cannot compete individually and calls for collaborative responses.

> *"It is crucial to control AI to align with human values, and considering the impact this technology will bring, it is important for everyone to participate starting now."* — No. 14 (Future of Research Publication Ethics)

Phase 6: Report — Findings and Discussion

Research Question 1: Which Topics Were Most Frequently Addressed?

The thematic analysis reveals a clear hierarchy of concern within the KCSE community:

Theme	Count	Interpretation
AI as Practical Tool	17/35	Operational utility is the primary concern; editors need practical guidance
Ethics & Transparency	14/35	Normative boundaries are the second priority, reflecting urgency of policy
AI-Assisted Peer Review	10/35	Review crisis drives AI adoption in editorial gatekeeping
Data & Reproducibility	7/35	Emerging focus on scientific validity and verification
Visual Communication	5/35	Niche but growing importance of research dissemination
Paradigm Shift	6/35	Systemic implications addressed by senior/prominent presenters

The dominance of practical tool usage reflects a community in active adoption mode. The strong second-place showing of ethics indicates that this adoption is not uncritical—the community is simultaneously building guardrails as it accelerates.

Research Question 2: What Are the Core/Common Messages Within Each Theme?

Across all six themes, five cross-cutting messages emerge as near-universal consensus:

1. AI is a tool, not a replacement: Every presentation without exception frames AI as an assistant, never as an autonomous agent that can replace human judgment. The metaphors used are revealing—'statistical package,' 'orchestra,' 'best assistant'—always subordinate to human direction.

2. Human responsibility is non-negotiable: The most emphatic message across the corpus (28/35 presentations) is that humans bear final responsibility for all AI-generated content. This applies to authors, editors, and reviewers alike.

3. Transparency through disclosure is essential: Mandatory disclosure of AI use has become the community's primary mechanism for maintaining trust, though the threshold for what requires disclosure continues to be refined.

4. Verification must follow AI output: The 'trust but verify' principle is universal. AI excels at first drafts, initial screening, and pattern detection, but every output requires human expert validation before publication.

5. Education and adaptation are urgent: The community recognizes that AI literacy—including prompt engineering, understanding of AI limitations, and ethical awareness—must become core competencies for researchers and editors.

Research Question 3: Are There Contradictions Between Presenters?

While the 35 presentations show remarkable consensus on core principles, several productive tensions

emerge:

Tension 1: Degree of Optimism vs. Caution

Presenters from technical/information science backgrounds (No. 2, KISTI) tend to emphasize AI's transformative potential and efficiency gains, while medical faculty and ethics committee members (No. 4, No. 14, No. 24) emphasize risks, limitations, and the need for restraint. This is not a direct contradiction but a meaningful difference in emphasis—a 'glass half full vs. half empty' dynamic.

Tension 2: AI in Peer Review — Aid or Threat?

No. 16 and No. 21 advocate for active AI use in review, arguing it is 'inevitable' and beneficial when properly managed. In contrast, No. 24 highlights serious risks including confidentiality breaches, prompt injection attacks, and accountability gaps. Elsevier's position (No. 24, No. 38) strictly prohibits uploading review materials to AI—even for language improvement—while other presenters suggest Claude.ai and Gemini are safe options with proper settings.

Tension 3: Disclosure Thresholds

No. 6 argues that AI used solely for data analysis need not be disclosed, while No. 23 and No. 25 advocate broader disclosure obligations. The BMJ's 'open' approach (allowing AI with transparent disclosure) contrasts with Science/Lancet's 'conservative' position (mandatory disclosure plus emphasis on human oversight). Korean presenters reflect this global ambiguity without fully resolving it.

Tension 4: AI-Generated Images

Springer Nature strictly prohibits AI-generated images in publications (No. 15, No. 24), while some presenters explore AI image generation tools like DALL-E, KREA, and Adobe Firefly as potentially useful for graphical abstracts and visual communication (No. 15, No. 30). This reflects an unresolved tension between innovation in visual communication and conservative publishing policies.

Research Question 4: How Are AI-Related Topics Interpreted, and What Is the Underlying Context?

The thematic analysis reveals several layers of meaning beneath the surface discourse:

Layer 1: From Novelty to Necessity (Temporal Shift)

The earliest presentations (January 2023) treat ChatGPT as a fascinating novelty to be tested. By late 2024, AI is described as 'inevitable' and 'unavoidable.' By 2025–2026, the language shifts to 'how to use properly' and 'the question is no longer whether.' This three-year arc represents a complete normalization of AI in scholarly publishing.

Layer 2: Anxiety About Domestic Competitiveness

A persistent undercurrent across presentations by Korean editors (No. 25, No. 26, No. 40) reveals anxiety about the gap between domestic and international publishing standards. Only 18% of Korean medical journals have generative AI guidelines; only 6% of papers actually share data. Presenters frame AI adoption not merely as a quality improvement but as an existential necessity for the survival and competitiveness of Korean scholarly journals.

Layer 3: Power Asymmetry and Market Concentration

Several presentations (No. 38, No. 39, No. 40) identify a deeper structural concern: large commercial publishers like Elsevier and Springer Nature are investing heavily in AI infrastructure (LeapSpace, Geppetto, Snapshot), potentially creating an AI-driven competitive moat that small academic societies and domestic journals cannot match. The call for collaborative response through organizations like KCSE reflects a collective survival strategy.

Layer 4: The Human–AI Identity Negotiation

Perhaps the most profound undercurrent is an ongoing negotiation about what remains uniquely human in scholarly communication. The corpus consistently reserves certain capacities for humans: creativity, ethical judgment, contextual understanding, accountability, and the ability to assess scientific significance. AI is positioned as handling the mechanical (grammar, formatting, initial screening) while humans retain the meaningful (interpretation, judgment, responsibility). This framing serves both a practical function (guiding appropriate AI use) and a psychological one (reassuring a community confronting rapid technological displacement).

Layer 5: The Collective Contraction Paradox

No. 39's finding that AI increases individual productivity while decreasing collective scientific diversity presents the most challenging interpretive dilemma in the corpus. It suggests that the very tool being embraced to enhance scholarly communication may simultaneously narrow the scope of human inquiry. This paradox is acknowledged but not resolved, representing the frontier of the community's reflection on AI.

Thematic Map: Visual Summary

The six themes form an interconnected system with the following relationships:

Relationship	Description
Theme 1 ↔ Theme 2	Practical tool use is bounded by ethical guardrails; every application discussion includes ethical caveats
Theme 1 ↔ Theme 3	Writing tools feed into review tools; AI assists both manuscript creation and evaluation
Theme 3 ↔ Theme 4	Review processes increasingly depend on data verification capabilities
Theme 2 ↔ Theme 3	Ethics of AI in review (confidentiality, bias) is a critical intersection
Theme 5 ↔ Theme 1	Visual abstracts are a specialized application of AI tools, constrained by current AI limitations
Theme 6 → All	The paradigm shift theme provides the overarching context within which all other themes operate

Conclusion

This thematic analysis of 35 KCSE presentations (2023–2026) reveals a scholarly community navigating one of the most significant technological disruptions in the history of academic publishing. The six themes identified—practical tools, ethical guardrails, AI-assisted review, data verification, visual communication, and paradigm shift—collectively paint a portrait of an ecosystem in rapid but thoughtful transformation.

The most striking finding is the community's near-universal consensus on core principles (AI as tool, human responsibility, mandatory disclosure) combined with productive tensions on implementation details (disclosure thresholds, review security, image policies). This suggests a mature, functioning discourse community that can disagree on specifics while maintaining shared values.

The temporal arc from novelty (2023) through normalization (2024) to strategic integration (2025–2026) demonstrates the speed at which academic communities can adapt to technological change when the stakes are clear. The underlying anxiety about domestic competitiveness and market concentration adds urgency to this adaptation.

Looking forward, the analysis suggests that the next phase of discourse will likely focus on: developing standardized AI literacy curricula for editors and researchers; building collaborative AI infrastructure for small-to-medium academic publishers; addressing the 'collective contraction' paradox; and establishing AI-specific data sharing requirements as the foundation of a new verification ecosystem.

— End of Report —

Appendix: Presentation-to-Theme Mapping

Complete mapping of all 35 presentations to the six identified themes:

No.	Presenter	Primary Theme	Secondary Theme(s)
1	Sun Hur (Hallym Univ.)	Theme 1	Theme 2
2	Soo-Hyun Yoo (KISTI)	Theme 1	Theme 6
3	Unknown	Theme 1	Theme 2
4	Jeong Won-seop (Gyeongnam Nat'l)	Theme 2	—
5	Legal Analysis	Theme 2	—
6	Sun Hur (Hallym Univ.)	Theme 1	Theme 2
7	Editor Workshop	Theme 1, 5	—
8	Yoonhee Hwang (Compecs)	Theme 1	—
9	Seungchan Yoo (Yonsei Univ.)	Theme 1	Theme 2, 3
10	Sun Hur (Hallym Univ.)	Theme 1	Theme 2, 3, 4
11	KISTI	Theme 6	Theme 2
13	Ethics/Policy Researcher	Theme 2	Theme 6
14	Yoon Cheol-hee (Seoul Nat'l)	Theme 2, 6	Theme 1
15	Visual Abstract Analyst	Theme 5	Theme 1
16	Sun Hur (Hallym Univ.)	Theme 3	Theme 1, 2
19	Digital Publishing Analyst	Theme 2	Theme 1
20	Junseo Lim (Asan Med. Ctr.)	Theme 1	Theme 4
21	AI Review Analyst	Theme 3	Theme 4
22	Sunyoung Kim (Konkuk Univ.)	Theme 4	Theme 1
23	Ethics Guideline Author	Theme 2	Theme 6
24	Ethics/Policy Analyst	Theme 2, 3	—
25	Data Policy Analyst	Theme 2, 4	—
26	Vibe Coding Analyst	Theme 3, 4	Theme 1
28	Yeonwook Kim (Geomok)	Theme 1, 6	Theme 2
29	Reference Correction	Theme 1	—
30	Jung-Joo Yoo (Soonchunhyang)	Theme 5	—
31	Seo Yoon-Joo (KCSE)	Theme 1	Theme 4
32	Geun-Chul Park (Docuhut)	Theme 4	Theme 1
33	Reporting Guidelines	Theme 4	Theme 1, 3
34	SNS Promoter Dev.	Theme 5	Theme 1
35	AI Manuscript Practices	Theme 1	Theme 2
37	Paperpal Preflight	Theme 3	—
38	Elsevier/Publishing Future	Theme 6	Theme 2, 3
39	AI for Science	Theme 6	—

40	KCSE AI Review	Theme 3	Theme 4, 6