**IAES International Journal of Artificial Intelligence (IJ-AI)**
Vol. 14, No. 6, December 2025, pp. 4484~4493
ISSN: 2252-8938, DOI: 10.11591/ijai.v14.i6.pp4484-4493 

# Enhancing academic conferences with AI: defining the role of the human AI editor

**Esteban Galan-Cubillo[1], Emilio Saez-Soro[2]**
[1]Department of Language Theory and Communication Sciences, Faculty of Philology, Translation and Communication, Universitat de València, Valencia, Spain
[2]Department of Communication Science, Faculty of Humanities and Social Sciencies, Universitat Jaume I de Castelló, Castellón de la Plana, Spain

**Article Info**

***Article history:***

Received Mar 6, 2025
Revised Sep 30, 2025
Accepted Oct 16, 2025

***Keywords:***

Academic integrity
AI assisted-conferences
AI editor
AI traceability
Digital intelligence

**ABSTRACT**

Academic conferences serve as key platforms for knowledge exchange, yet they face challenges in managing large volumes of content efficiently while maintaining academic rigor. To address these challenges, this study introduces and evaluates the "AI editor": a novel human expert role who, using tools like ChatGPT, supervises, refines, and structures artificial intelligence (AI)-generated content in real time. Through a mixed-methods approach, we examine the role of AI in enhancing content creation and engagement. This approach included the experimental deployment of the AI editor in three sustainability-focused European academic conferences (in Spain and UK) and formative workshops with 127 university students from the same countries. While AI-assisted tools improve efficiency, concerns persist regarding traceability, reliability, and ethical oversight. Our findings indicate that AI by itself cannot guarantee scholarly integrity; continuous human oversight is indispensable. The AI editor ensures coherence, quality control, and compliance with academic standards, addressing a critical gap in AI adoption within research environments. This study contributes to the discourse on responsible AI use in academia by proposing a structured framework for its integration into conferences, balancing automation with human oversight. Moreover, it highlights the growing need for digital intelligence that enables researchers to interact ethically and effectively with AI and other digital technologies, fostering responsible and informed academic innovation.



***Corresponding Author:***

Esteban Galan-Cubillo
Department of Language Theory and Communication Sciences
Faculty of Philology, Translation and Communication, Universitat de València
Avenida Blasco Ibañez 32, Valencia 46010, Spain
Email: esteban.galan@uv.es

## 1. INTRODUCTION

Artificial intelligence (AI) is transforming industries, reshaping how knowledge is created, analyzed, and disseminated. In academia, its potential to enhance research workflows and optimize collaboration has drawn increasing attention [1]. Academic conferences, as key spaces for knowledge exchange, face challenges in managing time constraints, content quality, and resource allocation [2]. AI-powered tools, such as ChatGPT, offer innovative solutions to these inefficiencies, but their integration raises concerns about academic rigor and traceability [3].

While AI is increasingly integrated into academic workflows, research remains scarce on how to implement these tools while upholding quality, transparency, and ethical integrity [4]. A potential solution is

the AI editor, a human expert leveraging AI tools to curate, refine, and structure conference content [5]. This role was tested in three interdisciplinary academic events on sustainability (https://acortar.link/ltJuR5), where it facilitated the synthesis of complex discussions into structured outputs [6].

This paper frames the AI editor not as an autonomous system, but as a key component of a human-in-the-loop (HITL) framework. Unlike fully automated solutions that might operate without direct supervision, the AI editor is fundamentally a human-centric role. This expert leverages the speed and scale of AI for tasks like content synthesis and initial drafting, while retaining complete authority over critical validation, expert-guided editing, and ensuring the final output aligns with academic standards of rigor and integrity. This collaborative model is crucial, as it seeks to harness the efficiency of AI without surrendering the essential critical judgment and ethical oversight that only a human expert can provide.

Beyond efficiency, AI also introduces ethical and methodological challenges in academia, particularly regarding originality, reliability, and accountability [7], [8]. ChatGPT, for example, is highly effective in few-shot learning and generates human-like text, but its outputs require scrutiny due to potential biases and lack of traceability [9]–[11]. Ensuring responsible AI use in research and education demands clear guidelines and human oversight to uphold academic integrity [12], [13].

## 2. METHOD

This study examines how AI can be integrated into academic workflows in a way that supports, rather than replaces, human expertise. A responsible approach to AI adoption can help academic conferences improve efficiency while maintaining transparency and scholarly rigor [14], [15]. Ethical considerations were central to this study; all participants involved in both the conferences and the workshops were informed of the research objectives and provided informed consent for their anonymized data to be analyzed. For that purpose, the methodology employs a mixed-methods approach to evaluate the role of ChatGPT in academic content creation and collaboration. It integrates experimental deployment in real-world academic events and formative workshops to assess ChatGPT's impact on scholarly workflows. To guide this study, the following research questions (RQ) were formulated:

i) RQ1: what is the role of the AI editor in ensuring the quality, traceability, and impact of AI-generated content in academic conferences?
ii) RQ2: how do students and researchers utilize AI tools like ChatGPT for knowledge generation and academic content improvement?

### 2.1. Application in academic events

The experimental phase took place in three sustainability-focused academic conferences, serving as test environments to evaluate ChatGPT's role in academic knowledge exchange. ChatGPT contributed to: i) summarizing presentations and discussions into structured reports; ii) refining and organizing ideas to enhance scholarly output; and iii) facilitating interdisciplinary collaboration through AI-assisted synthesis. The AI editor played a role, overseeing AI-generated content to ensure accuracy, coherence, and alignment with conference objectives. Real-time participant feedback, gathered through interactive sessions and QR code-based surveys, assessed the tool's usability and perceived effectiveness. The AI-driven workflow followed a structured process:

– Automated transcription captured spoken content in sessions.
– The AI editor curated and validated AI-generated summaries.
– Customized ChatGPT models were adapted to event topics.
– Real-time content generation enhanced participant engagement.
– Post-event analysis provided structured conference reports.

To ensure transparency and reproducibility, the AI-driven workflow was executed using specific and controlled technologies. The primary tool was OpenAI's GPT-4 large language model, accessed via a custom-built agent named the "Conference analysis wizard." This specialized GPT was designed to operate on a structured, menu-driven basis, allowing the AI editor to systematically request various analyses from a live conference transcript. Key functions included generating main ideas, extracting notable quotes, drafting conclusions, identifying keywords, and connecting content to the sustainable development goals (SDGs). A critical instruction embedded in this agent was to base its analysis exclusively on the uploaded transcript, preventing the model from using its general training data unless explicitly prompted. This constraint ensured that all outputs were directly traceable to the conference discussions. The full instructions for the "Conference analysis wizard" are provided at https://acortar.link/8z78TY.

The human-led validation protocol was integral to the process and performed in real time by the AI editor. This protocol consisted of the expert meticulously cross-referencing the AI-generated outputs against the live transcriptions and their own notes. The primary goals of this validation were to: i) verify the

factual accuracy of summaries and quotes; ii) ensure the correct attribution of ideas to their respective speakers; and iii) confirm the overall coherence of the synthesized content with the session's objectives and context. This continuous oversight allowed for the immediate correction of any potential AI errors or hallucinations, guaranteeing the integrity of the final documentation. This workflow streamlined academic content generation, enabling researchers to engage dynamically with the material.

### 2.2. Formative workshops with students and researchers

In parallel, formative workshops were conducted with students and researchers. Participants were recruited from Universitat de València, the University of Glasgow, and Glasgow Caledonian University through a purposive sampling method, resulting in a total of 127 participants. This sampling strategy was chosen to access relevant student populations engaged in international academic environments. However, we acknowledge that this approach, focused on three European universities, limits the generalizability of the findings concerning student interactions with AI. Prior familiarity with AI tools was not a selection criterion but was documented in pre-workshop surveys to establish a baseline for analysis. Participants were introduced to AI-driven knowledge generation, text refinement, and research support. Their engagement strategies, challenges, and perceptions of AI integration in academia were observed and analyzed.

### 2.3. Data collection and analysis

Data were collected from: i) pre- and post-workshop evaluation forms documenting participant experiences and ii) participant observation during the events, recording interactions, the use of AI tools, and real-time reactions. A total of 127 pre-workshop and 72 post-workshop survey responses were analyzed, with participants representing a diverse international academic audience (UK, India, Spain, Italy, France, South Africa, and China). To account for potential bias stemming from varying levels of digital literacy, the pre-workshop evaluation forms specifically documented participants' prior familiarity and usage patterns with AI tools like ChatGPT. This baseline data was not used to filter participants but rather to contextualize their subsequent feedback and learning progression. By combining experimental AI deployment in conferences with hands-on AI training, this study provides a comprehensive assessment of ChatGPT's role in academic content creation, knowledge accessibility, and interdisciplinary collaboration.

## 3. RESULTS AND DISCUSSION

Data from workshops, focus groups, and surveys provided key insights into ChatGPT's impact on academic content creation. After hands-on training, participants reported an increase in confidence regarding ChatGPT's reliability, yet concerns about traceability and source attribution remained prevalent. While ChatGPT was particularly valued for brainstorming and initial drafting, participants hesitated to use it for fact-checking and final submissions, citing the lack of verifiable references. Beyond its role in content generation, ChatGPT, in combination with the AI editor, played a central role in restructuring academic workflows and fostering a more collaborative environment. By integrating AI-assisted content management, different conference roles were able to focus more effectively on their specific contributions, enhancing overall efficiency and coordination. Observations from the conducted workshops and conferences clearly highlighted the role of the AI editor in improving content quality. The AI editor manages real-time outputs, ensuring consistency and alignment across sessions while moderators validate and refine the AI-generated content to maintain accuracy and relevance.

### 3.1. The novel role of the AI editor: a human expert in academic conferences

Through organizing three sustainability-focused conferences—held in Madrid (2023), Valencia (2024), and Glasgow (2024) (https://acortar.link/ltJuR5)—we identified the transformative potential of introducing the AI editor role, explicitly defined as a human expert who supervises and collaborates with AI tools in academic events. The interdisciplinary nature and dynamic demands of these conferences required real-time content generation and adaptation. In this context, the AI editor, as a person integrating advanced AI capabilities, emerged as essential in facilitating the immediate synthesis, refinement, and clear presentation of complex, cross-disciplinary insights.

The introduction of the AI editor in academic conferences represents a shift in how AI-generated content is managed and refined. This role combines technical expertise with academic oversight, ensuring that AI-assisted outputs are aligned with the conference's themes, objectives, and quality standards. A key function of the AI editor is to maintain consistency and adaptability across sessions, preventing fragmentation of ideas and ensuring that all generated content follows a coherent structure. By refining

AI-generated drafts in real time, the AI editor helps synchronize discussions and aligns them with the broader conference narrative, enabling a smoother knowledge exchange process.

Beyond content refinement, ongoing adjustments and clear communication between the AI editor and other conference roles are essential for maximizing AI's potential. Regular updates in prompt design, feedback loops, and real-time modifications allow the AI editor to respond dynamically to session developments, ensuring that AI-generated content remains accurate, relevant, and reflective of the evolving discussions. This collaborative workflow enhances how AI supports human expertise, rather than replacing it. By centralizing quality control and content structuring through expert human oversight, the AI editor allows each conference participant to focus on their unique contributions, creating a more efficient and cohesive academic experience. Table 1 outlines the key responsibilities of the AI editor in AI-assisted conferences. The AI editor plays a crucial role in managing AI-generated content by optimizing prompts, structuring transcriptions, and ensuring final outputs meet academic standards.

Table 1. Key responsibilities of the AI editor

| Task | Description |
|---|---|
| Prompt creation | The AI editor develops and tests prompts, calibrating the GPT model to generate optimal content tailored to the specific needs of the conference. |
| Transcription input | The AI editor sets the foundation for clear and cohesive documentation by transforming raw transcription data into structured formats. |
| Expert-guided editing | To ensure relevance and quality, the AI editor refines the final output by aligning it with expert feedback, delivering a polished and impactful document. |

### 3.2. Conference chair: guiding the vision with AI-enhanced insights

With the role of AI editor as a human expert generating consistent and high-quality content, the conference chair can concentrate on strategic oversight and vision. The chair's role includes selecting documents for the AI system, a task now enhanced by the AI editor's ability to produce well-crafted drafts rapidly. This shift allows the conference chair to focus more on quality control and thematic consistency across sessions, ensuring the conference's overall integrity. Collaboration with the AI editor further reduces the risk of redundant or contradictory content, streamlining the chair's role in maintaining coherence and value throughout the event. The conference chair plays a pivotal role in orchestrating the success of a conference, with responsibilities that include document selection, quality control, and avoiding redundancy. These tasks ensure the conference's integrity, coherence, and overall value for attendees. Table 2 summarizes the key responsibilities of the chair in managing AI-generated content within academic conferences. The chair ensures the relevance, coherence, and clarity of the outputs, maintaining high academic standards and preventing redundancy.

Table 2. Responsibilities of the chair in AI-assisted conferences

| Task | Description |
|---|---|
| Document selection | The chair determines which documents should be requested from the AI, ensuring the content is well-structured and relevant to the conference. |
| Quality control | The chair oversees the coherence and quality of AI-generated outputs for each session, ensuring consistency and a meaningful experience for participants. |
| Avoiding redundancy | By preventing contradictions or repetitions across sessions, the chair ensures clarity and maintains the overall integrity of the conference. |

### 3.3. Session moderator: refining content in partnership with AI

The AI editor's role also transforms the responsibilities of the session moderator. By supplying background material for each session, the moderator equips the AI editor with essential context, enhancing the quality and relevance of AI-generated content. The moderator now focuses more on overseeing and refining this output, aligning it with the conference's goals. This dynamic partnership enables the moderator to direct the AI's contributions toward specific objectives, ensuring that the content reflects the intended message of each session and meets the attendees' expectations. The session moderator is instrumental in shaping the success of individual conference sessions. Their responsibilities include background preparation, content supervision, and ongoing refinement, ensuring that each session aligns with the broader goals of the conference. Table 3 outlines the key responsibilities of the session moderator in AI-assisted conferences. The session moderator ensures the AI-generated content is grounded in relevant background information, meets conference objectives, and remains refined and high-quality throughout the event.

Table 3. Responsibilities of the session moderator in AI-assisted conferences

| Task | Description |
|---|---|
| Background preparation | The session moderator provides the AI Editor with essential background materials for each session, establishing a strong foundation for accurate and relevant content creation. |
| Content supervision | They carefully oversee the development of session content, ensuring it adheres to the conference's goals and maintains high-quality standards. |
| Ongoing refinement | The moderator continuously refines and adjusts the session content throughout preparation, ensuring it remains up-to-date and aligned with evolving needs. |

### 3.4. Academic contributor: focusing on delivery and engagement

The AI editor significantly reduces the workload of the academic contributor by providing structured, high-quality drafts, allowing scholars to focus on refining and delivering their content. With AI-assisted preparation, contributors can adapt presentations dynamically, incorporating real-time feedback and engaging more meaningfully with their audience. Beyond the event, the AI-generated outputs serve as a foundation for academic publications, enabling contributors to refine and expand their work into research papers, presentations, or workshops. This integration of AI into the content creation process enhances the efficiency and impact of academic communication [16]. Table 4 outlines how the AI editor supports academic contributors by reducing preparatory workload and facilitating the transformation of conference materials into academic outputs.

Table 4. Responsibilities of the academic contributor in AI-assisted conferences

| Task | Description |
|---|---|
| Content refinement | The AI editor provides structured drafts, allowing the academic contributor to focus on refining and personalizing the content. |
| Post-conference impact | AI-assisted drafts serve as a basis for future academic outputs, including publications and workshops. |

### 3.5. The use of ChatGPT by the students and researchers: surveys and key questions

This section presents findings from the formative workshops conducted with students and researchers in Spain and UK. Participants engaged with ChatGPT through structured activities designed to assess both their technical usage and their critical perceptions of the tool in academic contexts. Two main areas of interest guided the analysis:

i) Perceptions of ChatGPT's reliability and usefulness: surveys administered before and after the sessions measured changes in participants' trust in ChatGPT as a source of information and its perceived usefulness in knowledge creation.
ii) Concerns about traceability and oversight: participants were also invited to identify limitations associated with AI-generated content, particularly regarding transparency, consistency, and ethical use.

#### 3.5.1. Confidence in ChatGPT's reliability

The workshop produced a measurable increase in participants' confidence regarding ChatGPT's reliability. As shown in Table 5, the mean score for the item "ChatGPT is a trustworthy source of information" increased from 2.59 (SD=0.85) before the workshop to 3.04 (SD=0.64) after, reflecting a moderate but meaningful improvement (Cohen's d=0.60). This result indicates that direct, guided interaction significantly contributed to higher levels of confidence, reinforcing the importance of integrating critical oversight and supervision when using AI tools in academic contexts.

Table 5. Participants' confidence in ChatGPT's reliability before and after the workshops

| Survey item | Pre mean (SD) | Post mean (SD) | Cohen's d (effect size) |
|---|---|---|---|
| ChatGPT is a trustworthy source of information | 2.59 (0.85) | 3.04 (0.64) | 0.60 |
| ChatGPT is easy to use | 4.04 (0.97) | 4.15 (0.96) | 0.12 |
| ChatGPT is useful for creating knowledge | 3.06 (1.11) | 3.40 (1.02) | 0.32 |

#### 3.5.2. Concerns regarding traceability and reliability

Throughout the workshops, participants raised concerns about the traceability and reliability of AI-generated content. These included issues such as missing references, inconsistent responses, and the opacity of AI reasoning. To mitigate these risks, the AI editor role introduced human oversight, prompt logging, and cross-checking with original transcripts. Table 6 summarizes the main concerns identified, how they were addressed, and any remaining limitations.

Table 6. Traceability and reliability: observed issues, actions taken, and limitations

| Observed issue | Limitations | Action taken |
|---|---|---|
| Lack of references in AI outputs | The process remains manual and time-consuming, with no automatic referencing system in place. | Human editor reviewed and matched AI-generated content with original transcripts and workshop notes to ensure accuracy. |
| Inconsistent responses from AI | Reproducibility is limited without full access to AI model configurations and contextual parameters. | All prompts and outputs were logged to track changes and maintain consistency during sessions. |
| Opaque reasoning and lack of transparency | The internal logic of the model remains inaccessible, limiting user understanding of how conclusions are formed. | Restricted AI use to factual summarization tasks, avoiding analytical interpretations that require traceable logic. |
| Loss of important details in summaries | Some nuance or speaker intent may still be lost in the summarization process. | AI outputs were systematically compared with full transcripts to verify inclusion of key points. |
| High dependence on human judgment | Validation still relies on the expertise and consistency of individual reviewers. | Developed a protocol and kept a log of human-AI interactions to enhance transparency and replicability. |

### 3.5.3. Additional findings of interest

This section presents further results from the workshop feedback survey, focusing on participants' perceptions of ChatGPT's trustworthiness, ease of use, and usefulness for knowledge creation. Responses were collected using a 5-point Likert scale before and after the session. To better capture the impact of the workshop, we report Cohen's effect sizes alongside mean scores, indicating the magnitude of change for each item.

The results in Table 7 show a moderate increase in trust (Cohen's d=0.60) and a small-to-moderate improvement in perceived usefulness (Cohen's d=0.32). Perceptions of ease of use remained consistently high, with minimal change (Cohen's d=0.12). These outcomes suggest that the workshop was especially effective in enhancing participants' trust and epistemic engagement with ChatGPT. While ease of use was already rated highly before the workshop, the moderate gains in trustworthiness and utility indicate that targeted training can meaningfully improve user confidence. However, the findings also highlight the need for ongoing institutional support and critical engagement to ensure sustainable and reflective integration of AI tools in academic settings.

Table 7. Pre- and post-workshop responses on key perceptions of ChatGPT (n=72)

| Survey statement | Pre mean (SD) | Post mean (SD) | Cohen's d | Interpretation |
|---|---|---|---|---|
| ChatGPT is a trustworthy source of information | 2.59 (0.85) | 3.04 (0.64) | 0.60 | Moderate increase in trust |
| ChatGPT is easy to use | 4.04 (0.97) | 4.15 (0.96) | 0.12 | Stable perception, high ease |
| ChatGPT is useful for creating knowledge | 3.06 (1.11) | 3.40 (1.02) | 0.32 | Small gain in perceived utility |

## 3.6. Discussion

These findings suggest that while ChatGPT clearly has the potential to complement human oversight in academic content creation, its role must remain carefully defined and supervised. Participants preferred using ChatGPT primarily for early-stage tasks, such as brainstorming and initial drafting, reinforcing the importance of human judgment in critical evaluation and decision-making processes. This cautious stance highlights that AI integration should aim to enhance workflow efficiency without undermining the core values of academic rigor and critical thinking [17]. In this context, the introduction of the AI editor role in academic conferences emerges as particularly valuable but also reveals practical challenges. Effective implementation demands substantial preparation, including careful alignment with conference themes, systematic calibration of AI models, and coordination among conference organizers. After the event, the AI editor remains central to verifying and refining AI-generated content, underscoring the continuous need for expert human validation to ensure content accuracy and relevance [18].

While survey results suggest positive outcomes from using ChatGPT in academic settings, these quantitative findings should be interpreted with caution due to potential limitations inherent in Likert-scale surveys, such as social desirability bias. To address this, our analysis incorporated data triangulation, combining quantitative responses with qualitative insights from participant observations and focus group discussions conducted during the workshops. For example, although surveys indicated a significant increase in reported confidence, observational data highlighted participants' nuanced reservations in practical scenarios. Specifically, participants consistently expressed reluctance to rely on ChatGPT for critical tasks like fact-checking or final manuscript submission, primarily due to concerns about source verification and traceability. This qualitative context clarifies that increased survey confidence primarily reflects trust in ChatGPT's utility for brainstorming and drafting, rather than as an authoritative information source. Thus, this triangulated approach provides a deeper, more accurate understanding of how researchers cautiously and critically integrate AI tools into their academic workflows.

The study's findings highlight ChatGPT's evolving role in academia. Although confidence in its reliability increased after training, the moderate trust levels suggest that ChatGPT is more effective as a supportive tool rather than a primary resource. By maintaining a balanced level of trust, users are more likely to leverage ChatGPT as an assistant for idea generation and content drafting without over-relying on it for final outputs [19]. This cautious yet optimistic approach aligns with best practices for integrating AI tools, ensuring their efficiency while reinforcing human critical thinking and expertise [20]. Beyond generating content, academic conferences provide valuable opportunities to foster AI literacy. Participants not only enhance their technical skills but also develop a deeper understanding of AI's ethical and practical implications, reflecting recent academic discourse on its ethical boundaries [21] and emerging trends in its practical application in scientific writing [22]. This dual focus on technical and ethical literacy ensures that AI integration is both effective and socially responsible. However, traceability and source reliability remain key challenges, particularly in interdisciplinary fields like sustainability, where source credibility is essential [23]. Over 70% of participants in the study identified the lack of verifiable references in AI-generated content as one of their primary concerns. Table 8 outlines the specific roles and technological requirements established for the participants in this context.

Table 8. Roles and technological requirements for conference participants

| Role | Primary tools | Key contributions | AI integration benefits |
|---|---|---|---|
| Conference chair | Not required | Provides strategic oversight and ensures thematic consistency. | Enhanced by streamlined workflows and reduced redundancy risks. |
| Session moderator | Not required | Organizes and refines session outputs to align with conference goals. | Supported by AI-generated drafts for improved content quality. |
| AI editor | ChatGPT and transcription software | Synthesizes and edits content, ensuring traceability, and accuracy. | Enables real-time content generation and structured documentation. |
| Academic contributor | Not required | Focuses on delivering engaging presentations and detailed analysis. | Relieved of initial drafting tasks, allowing for deeper focus. |

These results underscore the need for improved traceability mechanisms to ensure accuracy and transparency in AI-assisted scholarly work. The implementation of the AI editor demonstrated that combining automation with expert supervision can mitigate these risks, enhancing trust in AI-assisted processes. Transparency emerged as a key factor in building confidence in AI-generated content. During the analyzed conferences, participants noted that traceability mechanisms helped build trust, reinforcing previous research highlighting the importance of accountability in algorithmic decision-making [24]. In this context, integrating AI into academic conferences not only enhances efficiency in knowledge production but also presents a collaborative model where human oversight and AI coexist to improve the quality of academic content. Collaboration between the AI editor, conference chair, and session moderator ensures that content remains aligned with the event's objectives, while human supervision plays a fundamental role in validating accuracy, mitigating errors, and upholding rigorous academic standards [25]. Figure 1 visually illustrate this collaborative model and the central role of the AI editor. Building on the collaboration framework introduced in Figure 1; Figure 2 outlines the specific interactions between the AI editor, conference chair, session moderator, and academic contributors across all phases of the conference workflow—from preparation to post-event refinement.


Figure 1. Roles involved in the implementation of AI in academic conferences

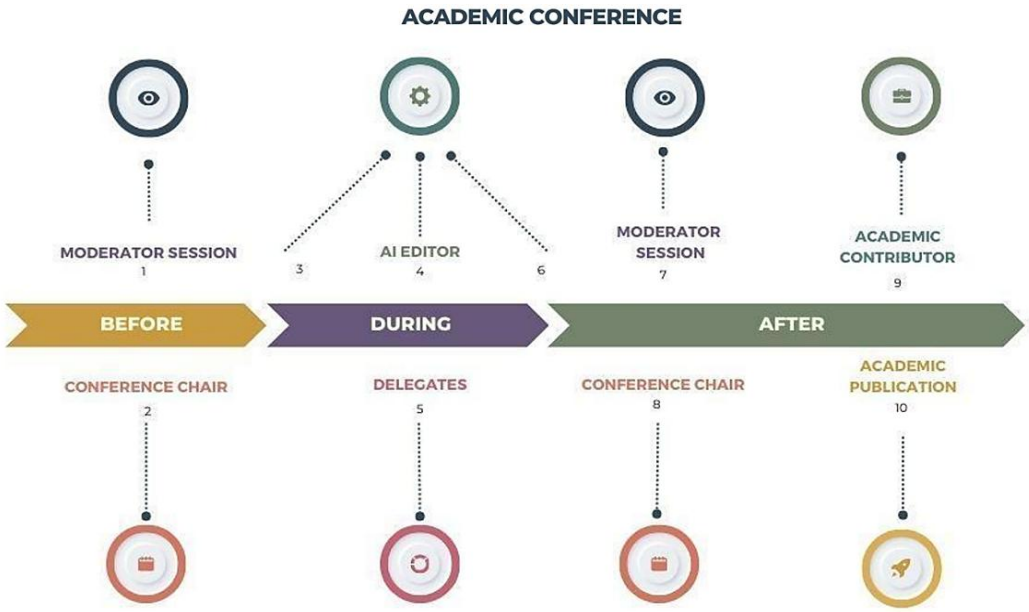


Figure 2. Chronogram of the academic conference workflow

### 3.7. Limitations and future research

While this study provides valuable insights into the implementation of an AI editor role, it is essential to acknowledge its limitations. First, our findings are derived from a specific context: three sustainability-focused conferences with participants primarily from European institutions (Spain and UK). This geographical and thematic focus means that the results, particularly those related to student perceptions and interdisciplinary collaboration, may not be directly generalizable to other academic cultures or disciplines, such as science, technology, engineering, and mathematics (STEM) or the humanities, which may have different collaborative norms and standards for evidence. Second, the study employed a purposive sampling method for the workshops. While appropriate for this exploratory phase, this approach does not capture the full diversity of the global academic community. Participants' prior exposure to and attitudes toward AI were self-reported and varied, which may have influenced their engagement and perceptions.

These limitations open several avenues for future research. To validate and extend our findings, the AI editor framework should be tested in a wider range of settings. Future studies should:

i) Replicate this research in different geographical and cultural contexts (e.g., North American, Asian, or African universities) to explore how institutional and cultural factors shape AI adoption.
ii) Implement the AI editor role in conferences dedicated to different academic disciplines to assess its adaptability and effectiveness across various scholarly fields.
iii) Conduct longitudinal studies to track how the perceptions and skills of researchers evolve with sustained exposure to AI-assisted workflows.
iv) Compare the effectiveness of different AI models and platforms beyond ChatGPT to develop more robust and versatile frameworks for AI-human collaboration in academia.

## 4. CONCLUSION

This study explored the potential of AI tools to enhance academic conferences by proposing and evaluating the new role of the AI editor. The main findings indicate that AI-assisted content generation significantly improves workflow efficiency and allows participants to focus more on analysis and discussion. Despite persistent challenges in the traceability and reliability of AI outputs, the implemented model demonstrated that these risks can be effectively mitigated. The key was the introduction of the AI editor, a human expert who oversees content synthesis, ensures academic rigor, and fosters a new collaborative synergy among conference chairs, session moderators, and academic contributors. The research underscores that AI functions best as a supportive tool that complements, rather than replaces, human expertise and critical thinking. As a broader implication, these findings highlight the growing importance of digital intelligence—the ability to use digital tools critically and ethically—as an essential competency for the academic community to maintain knowledge integrity in a constantly evolving technological environment.

**FUNDING INFORMATION**

This work has been developed within the framework of research project PID2023-149976OB-C21, funded by "MCIN/AEI/10.13039/501100011033/FEDER, UE", as well as by grant GACUJIMB/2024/14 from Jaume I University. This research was also supported by a research stay grant awarded to first author by the University of Valencia (grant reference INV24-01-16).

**AUTHOR CONTRIBUTIONS STATEMENT**

This journal uses the Contributor Roles Taxonomy (CRediT) to recognize individual author contributions, reduce authorship disputes, and facilitate collaboration.

| Name of Author | C | M | So | Va | Fo | I | R | D | O | E | Vi | Su | P | Fu |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esteban Galan-Cubillo | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ |
| Emilio Saez-Soro | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | | ✓ | | ✓ | | ✓ | |

C : **C**onceptualization
M : **M**ethodology
So : **So**ftware
Va : **Va**lidation
Fo : **Fo**rmal analysis
I : **I**nvestigation
R : **R**esources
D : **D**ata Curation
O : Writing - **O**riginal Draft
E : Writing - Review & **E**diting
Vi : **Vi**sualization
Su : **Su**pervision
P : **P**roject administration
Fu : **Fu**nding acquisition

**CONFLICT OF INTEREST STATEMENT**

Authors state no conflict of interest.

**DATA AVAILABILITY**

The data that support the findings of this study are available as follows:

– Database of questionnaire results at https://acortar.link/Yu63hd
– Questionnaires used during the study at https://acortar.link/KT3iuH

**REFERENCES**

[1] A. S. Bahammam, K. Trabelsi, S. R. P. -Perumal, and H. Jahrami, "Adapting to the impact of artificial intelligence in scientific writing: balancing benefits and drawbacks while developing policies and regulations," *Journal of Nature and Science of Medicine*, vol. 6, no. 3, pp. 152–158, 2023, doi: 10.4103/jnsm.jnsm_89_23.

[2] B. Wohlfarth, S. R. Streit, and S. Guttormsen, "Artificial intelligence in scientific writing: a deuteragonistic role?," *Cureus*, vol. 15, no. 9, 2023, doi: 10.7759/cureus.45513.

[3] C. Marnewick and A. Marnewick, "Digital intelligence: a must-have for project managers," *Project Leadership and Society*, vol. 2, 2021, doi: 10.1016/j.plas.2021.100026.

[4] D. B. Resnik and M. Hosseini, "The ethics of using artificial intelligence in scientific research: new guidance needed for a new tool," *AI and Ethics*, vol. 5, no. 2, pp. 1499–1521, 2025, doi: 10.1007/s43681-024-00493-8.

[5] D. E. Gonda, J. Luo, Y.-L. Wong, and C.-U. Lei, "Evaluation of developing educational chatbots based on the seven principles for good teaching," in *2018 IEEE International Conference on Teaching, Assessment, and Learning for Engineering*, 2018, pp. 446–453. doi: 10.1109/TALE.2018.8615175.

[6] E. Chetwynd, "Ethical use of artificial intelligence for scientific writing: current trends," *Journal of Human Lactation*, vol. 40, no. 2, pp. 211–215, 2024, doi: 10.1177/08903344241235160.

[7] F. Ouyang, L. Zheng, and P. Jiao, "Artificial intelligence in online higher education: a systematic review of empirical research from 2011 to 2020," *Education and Information Technologies*, vol. 27, no. 6, pp. 7893–7925, 2022, doi: 10.1007/s10639-022-10925-9.

[8] G. Marcus, "The next decade in AI: four steps towards robust artificial intelligence," *arXiv:2002.06177*, 2020.

[9] H. Felzmann, E. F. Villaronga, C. Lutz, and A. T. -Larrieux, "Transparency you can trust: transparency requirements for artificial intelligence between legal norms and contextual concerns," *Big Data & Society*, vol. 6, no. 1, 2019, doi: 10.1177/2053951719860542.

[10] J. Batista, A. Mesquita, and G. Carnaz, "Generative AI and higher education: trends, challenges, and future directions from a systematic literature review," *Information*, vol. 15, no. 11, 2024, doi: 10.3390/info15110676.

[11] J. Morley, A. Elhalal, F. Garcia, L. Kinsey, J. Mökander, and L. Floridi, "Ethics as a service: a pragmatic operationalisation of AI ethics," *Minds and Machines*, vol. 31, no. 2, pp. 239–256, 2021, doi: 10.1007/s11023-021-09563-w.

[12] K. A. C. Fardim, S. E. d. P. Gonçalves, and J. P. M. Tribst, "Scientific writing with artificial intelligence: key considerations and alerts," *Brazilian Dental Science*, vol. 26, no. 3, 2023, doi: 10.4322/bds.2023.e3988.

[13] L. Ouyang *et al.*, "Training language models to follow instructions with human feedback," *arXiv:2203.02155*, 2022.

[14] M. Bobula, "Generative artificial intelligence (AI) in higher education: a comprehensive review of challenges, opportunities, and implications," *Journal of Learning Development in Higher Education*, no. 30, 2024, doi: 10.47408/jldhe.vi30.1137.

[15] M. S. Goundar and B. A. Kumar, "The use of mobile learning applications in higher education institutes," *Education and Information Technologies*, vol. 27, no. 1, pp. 1213–1236, 2022, doi: 10.1007/s10639-021-10611-2.

[16] M. T. Hicks, J. Humphries, and J. Slater, "ChatGPT is bullshit," *Ethics and Information Technology*, vol. 26, no. 2, 2024, doi: 10.1007/s10676-024-09775-5.

[17] N. Diakopoulos, "Accountability in algorithmic decision making," *Communications of the ACM*, vol. 59, no. 2, pp. 56–62, 2016, doi: 10.1145/2844110.
[18] R. A. A. -Eguía, A. R. -Videla, H. F. -Barria, and C. Y. Baeza, "Artificial intelligence in scientific writing: what are the ethical boundaries?-a reflection inspired by the myth of Prometheus," *Colombia Medica*, vol. 54, no. 4, 2024, doi: 10.25100/cm.v54i4.5954.
[19] R. Luckin, W. Holmes, M. Griffiths, and L. B. Forcier, *Intelligence unleashed: an argument for AI in education*. London, United Kingdom: Pearson, 2016.
[20] R. M. -Villarreal, E. V. -Perdomo, D. E. S. -Navarro, R. T. -Aguilera, and F. S. Gerardou, "Challenges and opportunities of generative AI for higher education as explained by ChatGPT," *Education Sciences*, vol. 13, no. 9, 2023, doi: 10.3390/educsci13090856.
[21] R. Winkler and M. Soellner, "Unleashing the potential of chatbots in education: a state-of-the-art analysis," *Academy of Management Proceedings*, vol. 2018, no. 1, 2018, doi: 10.5465/AMBPP.2018.15903abstract.
[22] S. A. Fisher, "Large language models and their big bullshit potential," *Ethics and Information Technology*, vol. 26, no. 4, 2024, doi: 10.1007/s10676-024-09802-5.
[23] S. Makridakis, "The forthcoming artificial intelligence (AI) revolution: its impact on society and firms," *Futures*, vol. 90, pp. 46–60, 2017, doi: 10.1016/j.futures.2017.03.006.
[24] T. B. Brown *et al.*, "Language models are few-shot learners," *Advances in neural information processing systems*, vol. 33, pp. 1877–1901, 2020.
[25] T. Foltýnek, N. Meuschke, and B. Gipp, "Academic plagiarism detection: a systematic literature review," *ACM Computing Surveys*, vol. 52, no. 6, pp. 1–42, 2020, doi: 10.1145/3345317.

## BIOGRAPHIES OF AUTHORS

**Dr. Esteban Galan-Cubillo** is a Full Professor in the Department of Language Theory and Communication Sciences at the Universitat de València. He holds a bachelor's degree in communication, which earned him the national prize for the best academic record, and a Ph.D. in Communication. With over 15 years of experience in audiovisual production, he has collaborated with prominent entities, providing him with a practical perspective on cultural industries and their evolution. His research interests include digital tools in audiovisual production, transmedia narratives, sustainability, and cultural industries. He is co-directs the international research project "From ideas: out of the box" and has been leading the transmedia podcast since 2017, reflecting his commitment to innovative media forms and digital storytelling within cultural industries. He is also an advocate for sustainable practices in the fashion and culture industries, promoting environmentally conscious evolution in these sectors. He can be contacted at email: esteban.galan@uv.es.

**Dr. Emilio Saez-Soro** is a permanent faculty member in the Department of Communication Sciences at Universitat Jaume I, where he coordinates the quality assessment of the undergraduate program. He holds a bachelor's degree in Sociology from UNED (1994) and a Master's degree in Journalism and Communication from the University of Valencia and Levante-EMV newspaper. He earned his Ph.D. from Universitat Jaume I with the dissertation Teleworking for professionals: the flexibilization of flexibility. Since 2005, he has been teaching in the field of audiovisual communication and public relations, offering courses such as production and hypermedia development, conceptual design of video games, and video games and gamification. His research focuses on video games, transmedia storytelling, gamification, teleworking, and virtual communities. He has led the planeta debug project, a laboratory for innovation in video games and climate change, and is a member of the GAMERS and INIT research groups. He has published extensively in peer-reviewed journals and international conferences and has co-authored several books on digital communication and video games. He can be contacted at email: soro@uji.es.