INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN PROGRESSIVE EDUCATION & DEVELOPMENT

OPEN ACCESS JOURNAL

Vol 15, Issue 3, (2026) E-ISSN: 2226-6348

Artificial Intelligence Versus Future of Journalism: A Conceptual Exploration of Human–AI Collaboration, Ethical Challenges, and the Transformation of News Production

Sarah Joyce Savaremuthu, Sowbaakawathy Ganesan

Faculty of Education and Humanities,UNITAR International University,Petaling Jaya, Malaysia

Corresponding Author Email: sarah.joyce@unitar.my

DOI Link: http://dx.doi.org/10.6007/IJARPED/v15-i3/28703

Published Online: 11 September 2026

Abstract

The rapid advancement of Artificial Intelligence (AI), particularly generative AI technologies, has significantly transformed contemporary journalism practices. While AI-powered systems provide opportunities for automated news production, enhanced information processing, and personalised content delivery, they have also raised critical concerns regarding journalistic credibility, ethical responsibility, misinformation, and the future role of human journalists. This conceptual paper examines the evolving relationship between artificial intelligence and journalism by synthesising recent literature on AI adoption, computational journalism, and media ethics. Through a review and analysis of scholarly discussions, this paper proposes a Human–AI Collaborative Journalism Framework, suggesting that AI should not be viewed as a replacement for journalists but as a technological partner that enhances journalistic capabilities. The paper argues that the future of journalism depends on maintaining a balance between technological innovation and human-centred journalistic values, including accountability, critical judgement, and public trust.

Keywords: Journalism, Artificial Intelligence (AI), Media Ethics, Conceptual Framework

Introduction

The media industry is currently experiencing one of its most significant technological transformations due to the rapid advancement of Artificial Intelligence (AI). Unlike previous digital innovations that mainly changed news distribution channels, AI has begun influencing the entire journalistic process, including information gathering, content production, editing, verification, and audience engagement. The emergence of generative AI systems such as large language models (LLMs) has accelerated discussions regarding the future role of journalists in an increasingly automated media environment.

Recent studies indicate that AI technologies are becoming integrated throughout the news production cycle, from automated writing and data-driven reporting to personalised content recommendation systems (Shi & Sun, 2024). News organisations have increasingly explored

AI applications to improve efficiency, particularly in producing routine news content and analysing large volumes of information. However, this development has also intensified debates regarding whether AI will replace human journalists or whether it will become a complementary tool that enhances journalistic capabilities.

Although AI demonstrates advanced capabilities in language generation and information processing, journalism requires more than content production. Journalism involves ethical decision-making, investigative judgement, contextual understanding, and social responsibility. Therefore, this paper explores the central question: Will artificial intelligence replace journalists, or will it redefine the future of journalism?

This paper adopts a conceptual approach by examining existing scholarly discussions on artificial intelligence and journalism. Rather than collecting empirical data, this study synthesises recent literature to explore the relationship between AI technologies and journalistic practices. The paper aims to develop a conceptual understanding of how AI may reshape the future of journalism while addressing ethical and professional challenges.

Problem Statement

The rapid integration of artificial intelligence (AI) into journalism has created a significant transformation in how news is produced, processed, and delivered. AI technologies can support journalists in tasks such as information gathering, data analysis, content generation, translation, verification, and audience engagement, creating opportunities for greater efficiency and productivity (Shi & Sun, 2024). At the same time, the increasing capability of AI to perform tasks traditionally undertaken by journalists has generated uncertainty regarding the extent to which human involvement will remain necessary in the future of journalism. The issue, therefore, extends beyond whether AI can perform particular journalistic tasks; it concerns how the increasing integration of AI may redefine the knowledge, skills, responsibilities, and professional identity of journalists (Wenger et al., 2025).

The central problem arises from the tension between the technological capabilities of AI and the inherently human dimensions of journalism. While AI can process large volumes of information and generate content rapidly, journalism also requires critical thinking, editorial judgement, contextual interpretation, ethical decision-making, investigative ability, and an understanding of social responsibility (Deuze, 2005; McCoy, 2015). These dimensions are particularly important when journalists are required to assess the credibility of information, identify misinformation, provide context, make editorial decisions, and consider the potential social consequences of published content. Consequently, the increasing use of AI does not simply introduce a new technological tool into journalism; it raises fundamental questions about which aspects of journalistic work can be automated, which require human judgement, and how the relationship between human journalists and AI should be defined (Wenger et al., 2025).

Despite growing scholarly and industry attention to AI in journalism, the future role of human journalists remains insufficiently defined. Existing discussions frequently focus on the capabilities, applications, and efficiency benefits of AI, while comparatively less attention is given to how these technological developments may reshape the broader role and professional responsibilities of journalists (Hossain & Wenger, 2024; Sivira Camacaro, 2025).

In particular, there remains uncertainty regarding whether AI should primarily be understood as a potential substitute for human journalistic labour or as a complementary technology that enables journalists to perform their roles more effectively. This uncertainty is further complicated by concerns surrounding accuracy, algorithmic bias, privacy, transparency, accountability, and the ethical use of AI-generated content (Wenger et al., 2025).

The problem is therefore not simply that AI is becoming more capable, but that journalism is entering a period in which the boundaries between technological automation and human journalistic responsibility are being renegotiated. Without a clearer understanding of this changing relationship, the adoption of AI may create challenges for journalistic standards, professional identity, ethical accountability, and the competencies required of future journalists (Hossain & Wenger, 2024; Wenger et al., 2025). At the same time, viewing AI solely as a threat to journalism may overlook its potential to support journalists by reducing routine workloads and enabling greater attention to investigative, analytical, and public-interest functions (Shi & Sun, 2024). A balanced understanding of both possibilities is therefore necessary.

This creates a need for a conceptual examination of how AI may influence the future of journalism and the role of human journalists within an increasingly AI-integrated media environment. Rather than assuming that AI will either replace journalists or simply serve as another newsroom tool, there is a need to examine the conditions under which AI may complement, transform, or potentially displace aspects of journalistic work. Such an examination can provide a clearer understanding of the evolving relationship between technological capabilities and human professional judgement, while also highlighting the ethical and professional considerations that should guide the integration of AI into journalism (Wenger et al., 2025; Sivira Camacaro, 2025).

Accordingly, this paper addresses the problem by conceptually examining the changing relationship between artificial intelligence and human journalists. It considers both the opportunities and challenges associated with AI-driven journalism and seeks to clarify how the role of journalists may evolve as AI becomes increasingly embedded within news production. By doing so, the paper provides a basis for understanding whether the future of journalism should be viewed primarily in terms of human displacement, technological assistance, or a redefinition of the journalist's role in an AI-integrated media environment.

Objectives of the Paper

This conceptual paper aims to:

1. Examine the role of artificial intelligence in transforming contemporary journalism practices.
2. Analyse the opportunities and challenges associated with AI-driven news production.
3. Explore the changing role of journalists in an AI-integrated media environment.
4. Propose a conceptual framework explaining the future relationship between AI technologies and human journalists.

Conceptual Approach

This paper adopts a conceptual research approach based on an analysis of recent academic literature published between 2020 and 2025. Conceptual papers contribute to knowledge

development by integrating existing theories, identifying emerging issues, and proposing new perspectives or frameworks (Jaakkola, 2020). The present paper reviews scholarly discussions surrounding artificial intelligence, automated journalism, generative AI, and media ethics to develop a conceptual understanding of AI's influence on journalism.

The Emergence of Artificial Intelligence in Journalism

Artificial Intelligence has transformed journalism through the introduction of automated journalism, computational journalism, and generative AI applications. Automated systems are capable of analysing structured datasets and producing news reports with minimal human intervention. These applications are particularly useful in areas such as financial reporting, sports journalism, and election updates where information follows predictable patterns.

According to Shi and Sun (2024), generative AI has expanded beyond automated reporting by enabling journalists to generate story ideas, summarise documents, translate content, and assist with research activities. AI tools have therefore shifted from being simple automation systems to becoming interactive communication technologies that influence journalistic workflows.

Similarly, Molla and Ahsan (2025) highlighted that AI journalism research has increased significantly after 2020, with major research themes focusing on automation, misinformation, ethics, and governance. Their bibliometric analysis demonstrates that AI is no longer viewed merely as a technological innovation but as a major transformation affecting journalism practices globally.

AI versus Human Journalists: Competition or Collaboration?

The debate surrounding AI and journalism often focuses on whether machines will replace human professionals. AI systems can perform several tasks traditionally conducted by journalists, including information retrieval, transcription, language translation, and basic article generation. However, journalism involves complex cognitive and ethical processes that remain dependent on human judgement.

Gutiérrez-Caneda et al. (2024) found that journalists and media professionals generally view AI as a supportive technology rather than a complete replacement for human journalists. While AI improves efficiency, professionals continue to emphasise the importance of human responsibility in verifying information and maintaining journalistic standards.

Future journalism is therefore likely to develop into a hybrid model, where journalists collaborate with AI technologies. In this model, AI functions as an assistant that supports journalists in processing information, while humans remain responsible for interpretation, ethical judgement, and decision-making.

Ethical Challenges of AI-Driven Journalism

Despite its advantages, AI adoption introduces significant ethical challenges. One major concern is algorithmic bias. Since AI systems learn from existing datasets, they may reproduce existing social, political, or cultural biases. This can influence news selection, representation, and audience exposure.

Porlezza and Schapals (2024) argue that AI journalism creates new ethical concerns related to transparency, accountability, responsibility, and diversity. When AI generates news content, audiences may question who is responsible for errors: the journalist, the organisation, or the technology developer.

Furthermore, misinformation and fabricated content represent critical challenges. Generative AI systems can produce convincing but inaccurate information, creating risks for public trust in journalism. Jones et al. (2023) emphasised that generative AI introduces significant risks related to misinformation, reliability, and newsroom governance.
Therefore, AI adoption requires clear ethical guidelines, transparency mechanisms, and human supervision.

AI versus Human Journalists: Competition or Collaboration?
The debate surrounding AI and journalism often focuses on whether machines will replace human professionals. AI systems can perform several tasks traditionally conducted by journalists, including information retrieval, transcription, language translation, and basic article generation. However, journalism involves complex cognitive and ethical processes that remain dependent on human judgement.

Gutiérrez-Caneda et al. (2024) found that journalists and media professionals generally view AI as a supportive technology rather than a complete replacement for human journalists. While AI improves efficiency, professionals continue to emphasise the importance of human responsibility in verifying information and maintaining journalistic standards.

Future journalism is therefore likely to develop into a hybrid model, where journalists collaborate with AI technologies. In this model, AI functions as an assistant that supports journalists in processing information, while humans remain responsible for interpretation, ethical judgement, and decision-making.

Ethical Challenges of AI-Driven Journalism
Despite its advantages, AI adoption introduces significant ethical challenges. One major concern is algorithmic bias. Since AI systems learn from existing datasets, they may reproduce existing social, political, or cultural biases. This can influence news selection, representation, and audience exposure.

Porlezza and Schapals (2024) argue that AI journalism creates new ethical concerns related to transparency, accountability, responsibility, and diversity. When AI generates news content, audiences may question who is responsible for errors: the journalist, the organisation, or the technology developer.

Furthermore, misinformation and fabricated content represent critical challenges. Generative AI systems can produce convincing but inaccurate information, creating risks for public trust in journalism. Jones et al. (2023) emphasised that generative AI introduces significant risks related to misinformation, reliability, and newsroom governance.
Therefore, AI adoption requires clear ethical guidelines, transparency mechanisms, and human supervision.

The Changing Role of Journalists in the AI Era

Rather than eliminating journalism careers, AI is expected to transform the skills required of future journalists. Traditional journalistic abilities such as writing, interviewing, and reporting will remain important; however, journalists will increasingly require technological competencies to work effectively within AI-driven news environments.

Future journalists must understand the limitations of AI, evaluate algorithmic outputs, and apply ethical judgement when using automated systems. According to Al-Zoubi et al. (2024), journalists recognise the potential benefits of AI but remain concerned about privacy issues, data bias, and the lack of clear regulatory frameworks. These concerns highlight the need for journalists to develop not only technological skills but also the critical and ethical competencies necessary to use AI responsibly.

This changing professional landscape also has important implications for journalism education, particularly because students enter learning environments with different levels of technological and academic proficiency. A single learning strategy may therefore not be equally effective for all students, suggesting the need for flexible and differentiated approaches to developing AI and digital skills (Kamaruzaman et al., 2023). At the same time, younger generations who have grown up surrounded by digital technologies may demonstrate greater familiarity with multimedia platforms and technological tools, providing a useful foundation for developing AI-related competencies in journalism education (Kamaruzaman et al., 2023).

Research on technology-assisted learning also suggests that the integration of digital tools can enhance students' engagement, motivation, and participation by creating more interactive learning experiences (Zakaria et al., 2018). This perspective is particularly relevant to journalism education, where AI and other digital technologies can be incorporated into practical and learner-centred activities such as AI-assisted research, information verification, multimedia production, data analysis, and digital storytelling. Rather than treating AI solely as a subject to be studied, journalism educators can use AI as a learning tool while guiding students to critically evaluate its outputs, limitations, and ethical implications.

Therefore, the changing role of journalists in the AI era requires journalism education to evolve alongside the profession. Journalism curricula must incorporate AI literacy, digital ethics, and computational journalism skills while continuing to strengthen core journalistic competencies. Such an approach can better prepare future journalists to adapt to technology-driven news environments while maintaining the critical thinking, professional judgement, and ethical standards essential to journalism.

Conceptual Framework

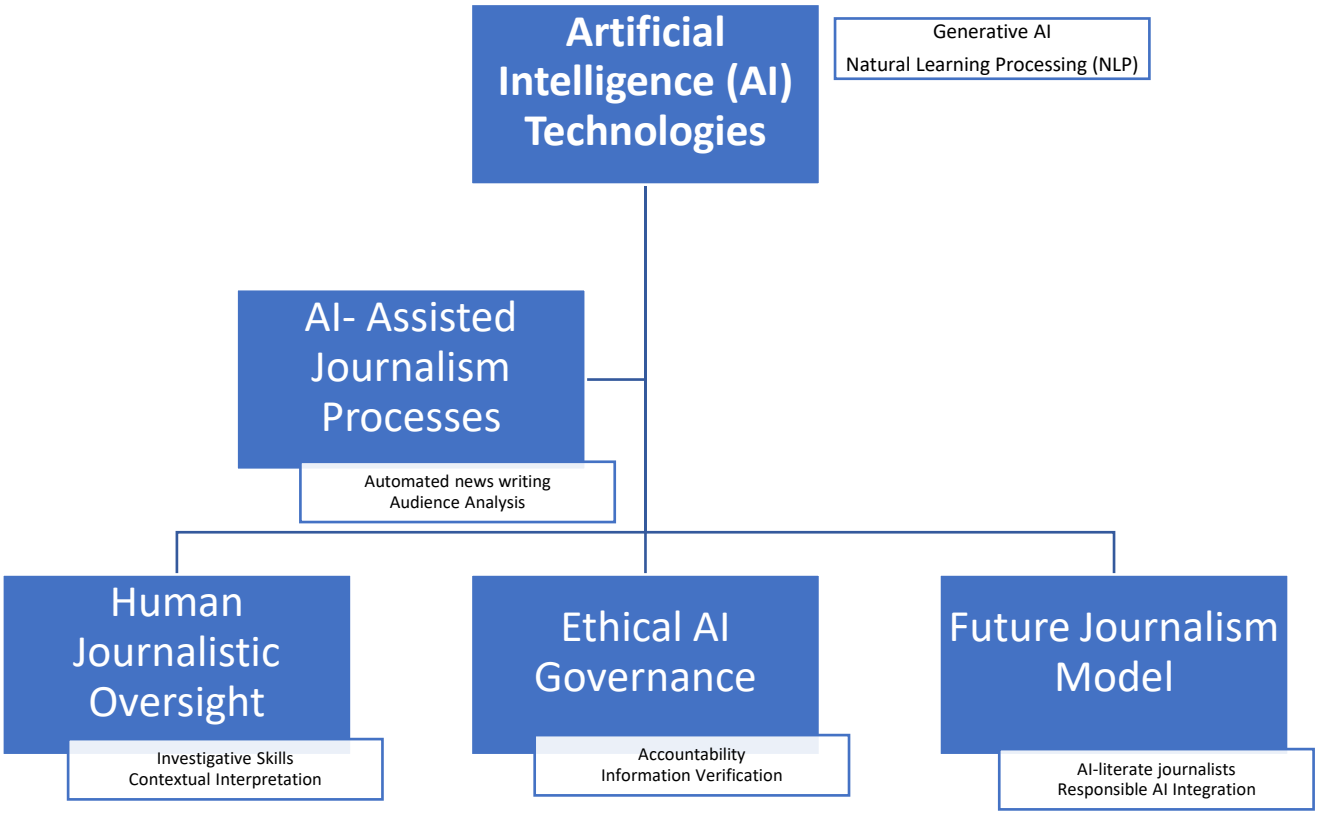

Figure1: The Conceptual Framework of the Study

Research Gap and Rationale of the Study

The rapid transformation of the journalism industry has created new expectations for journalism graduates, particularly as digital technologies, social media, multimedia production, data-driven journalism, and artificial intelligence (AI) continue to reshape journalistic practice. While foundational competencies such as writing, reporting, interviewing, and news judgement remain essential, contemporary journalists are increasingly expected to possess technological and digital competencies that enable them to work effectively within evolving news environments (Deuze, 2001; McCoy, 2015). Consequently, journalism education must continually respond to changes in professional practice to ensure that graduates are adequately prepared for the demands of the industry.

In Malaysia, previous studies have highlighted several concerns regarding the alignment of journalism education with changing industry requirements. Aripin et al. (2014) examined journalism education from the perspectives of students and identified concerns relating to curriculum, learning facilities, and changing expectations. Ismail et al. (2015) examined Malaysian journalism education in relation to the UNESCO model curricula and highlighted the need to consider the relevance and applicability of journalism education within the Malaysian context. From an industry perspective, Yusof et al. (2018) found that media practitioners emphasised the importance of knowledge, professional skills, adaptability, and specialised competencies in preparing journalism graduates for employment. These studies collectively demonstrate the importance of continually evaluating journalism curricula in response to changes within the profession.

However, despite these contributions, an important research gap remains in the Malaysian journalism education literature. Previous studies have examined journalism education from different perspectives, including students' expectations (Aripin et al., 2014), the applicability of the UNESCO model curriculum (Ismail et al., 2015), and industry practitioners' expectations regarding graduate competencies (Yusof et al., 2018). While these studies provide valuable insights into curriculum relevance and industry expectations, they do not specifically examine how recent graduates evaluate the adequacy of the undergraduate journalism curriculum after completing their studies and entering the professional environment. Consequently, there remains limited empirical evidence on whether the knowledge and skills developed through an undergraduate journalism curriculum adequately meet the realities of contemporary journalism practice from the perspective of those who have recently experienced the transition from university to the workplace. This gap provides the rationale for the present study.

The need to examine this issue has become increasingly significant as technological transformation continues to influence journalism practice. Recent research indicates that journalism education faces challenges in keeping pace with digital transformation and emerging technologies (Hossain & Wenger, 2024). The emergence of AI has further intensified these challenges, with recent scholarship highlighting the need for journalism programmes to reconsider curriculum content, technological competencies, faculty preparedness, and ethical considerations associated with AI (Wenger et al., 2025; Sivira Camacaro, 2025). Nevertheless, the increasing emphasis on technological competencies should not be interpreted as a replacement for foundational journalistic skills. Rather, journalism education needs to determine how traditional competencies can be maintained while incorporating the technological skills required by contemporary journalism.

This study is therefore motivated by the need to evaluate whether an undergraduate journalism curriculum remains relevant to the changing requirements of the journalism profession. By focusing on recent graduates, the study provides an opportunity to examine the curriculum retrospectively through the experiences of individuals who have completed their university education and encountered professional expectations beyond the classroom. Their perspectives can provide valuable insights into which areas of the curriculum have effectively prepared them for professional practice and which areas may require further development or revision.

The contribution of this study lies in providing graduate-based evidence for the evaluation of an undergraduate journalism curriculum in Malaysia. By examining the perspectives of recent graduates, the study complements existing research based on student, academic, and industry perspectives and provides a more comprehensive understanding of curriculum relevance and adequacy. In particular, the findings can identify areas of strength in foundational journalistic competencies as well as potential gaps in technological, multimedia, social media, and other emerging skills. Such evidence may support journalism educators and curriculum developers in strengthening the balance between core journalistic competencies and the technological capabilities required in contemporary news environments.

Conclusion

Artificial Intelligence represents both a disruption and an opportunity for journalism. While AI has the capacity to automate routine reporting tasks and improve newsroom efficiency, it cannot fully replace the human qualities essential to journalism, including critical thinking, ethical reasoning, investigative ability, and social responsibility.

The future of journalism should not be understood as a competition between humans and machines. Instead, AI should be viewed as a transformative partner that enhances journalistic capabilities while allowing human professionals to maintain editorial control. The success of AI-driven journalism will depend on responsible implementation, ethical governance, and the ability of journalists to adapt to technological change.

This conceptual paper argues that the future of journalism should not be framed as a competition between artificial intelligence and human journalists. Instead, AI represents a transformative force that will redefine journalistic practices through collaboration. The proposed Human–AI Collaborative Journalism Framework highlights that while AI may enhance efficiency and productivity, human journalists remain essential in ensuring ethical decision-making, contextual understanding, and public accountability.

Acknowledgement

Our sincere gratitude to UNITAR International University for providing the support for this research.

References

Al-Zoubi, O. A., Ahmad, N., & Abdul Hamid, N. (2024). Artificial intelligence in newsrooms: Ethical challenges facing journalists. *Studies in Media and Communication, 12*(1), 401–412.

Aripin, N., Ismail, A., Yusof, N., & Ismail, R. (2014). Journalism education curriculum in Malaysia: A preliminary study in a Malaysian public university. *Procedia - Social and Behavioral Sciences, 155*, 159–164. https://doi.org/10.1016/j.sbspro.2014.10.273

Deuze, M. (2001). Educating 'new' journalists: Challenges to the curriculum. *Journalism & Mass Communication Educator, 56*(1), 4–17. https://doi.org/10.1177/107769580105600102

Dierickx, L., Opdahl, A. L., Khan, S. A., & Lindén, C. G. (2024). A data-centric approach for ethical and trustworthy AI in journalism. *Ethics and Information Technology, 26*, Article 64.

Gutiérrez-Caneda, B., Lindén, C. G., & Vázquez-Herrero, J. (2024). Ethics and journalistic challenges in the age of artificial intelligence: Talking with professionals and experts. *Frontiers in Communication, 9*.

Hossain, M. S., & Wenger, D. (2024). Has journalism education kept up with digital transformation? *Journalism & Mass Communication Educator, 79*(2), 129–146. https://doi.org/10.1177/10776958231224038

Ismail, A., Ismail, R., Aripin, N., & Yusof, N. (2015). Journalism education in Malaysia: Dancing with UNESCO's model curricula. *International Journal of Science, Commerce and Humanities, 3*(3), 1–12.

Jaakkola, E. (2020). Designing Conceptual Articles: Four Approaches. *AMS Review*, *10*, 18–26.

Jones, B., Luger, E., & Jones, R. (2023). *Generative AI & journalism: A rapid risk-based review*. University of Edinburgh Research Explorer.

Kamaruzaman, S. S. S., Azmi, N. N., Zulkflee, Z., Prakas, J., & Maniam, M. (2023). Language learning strategy: Comparison of online and face-to-face ESL classrooms. *International Journal of Academic Research in Progressive Education and Development, 12*(2), 511–527. https://doi.org/10.6007/IJARPED/v12-i2/16753

McCoy, B. R. (2015). 2014 journalism graduate skills for the professional workplace: Expectations from journalism professionals and educators. *Journal of Media Education, 6*(2), 17–40.

Molla, M. A. M., & Ahsan, M. (2025). Artificial intelligence and journalism: A systematic bibliometric and thematic analysis of global research.

Porlezza, C., & Schapals, A. K. (2024). AI ethics in journalism studies: An evolving field between research and practice. *Journalism and Media Studies*.

Sivira Camacaro, R. (2025). The university training of journalists in the context of artificial intelligence: A systematic review. *Doxa Comunicación: Interdisciplinary Journal of Communication Studies and Social Sciences, 40*, 513–529. https://doi.org/10.31921/doxacom.n40a2225

Shi, Y., & Sun, L. (2024). How generative AI is transforming journalism: Development, application and ethics. *Media, 5*(2), 582–594.

Wenger, D., Hossain, M. S., & Senseman, J. R. (2025). AI and the impact on journalism education. *Journalism & Mass Communication Educator, 80*(1), 97–114. https://doi.org/10.1177/10776958241296497

Yusof, N., Ismail, A., Ismail, R., Aripin, N., Kassim, A., & Ishak, M. S. (2018). Industry perspective on journalism education curriculum in Malaysia. *Malaysian Journal of Learning and Instruction, 15*(1), 149–172. https://doi.org/10.32890/mjli2018.15.1.6

Zakaria, N. Y. K., Zakaria, S. N., Yazid, M. I. M., & Zakaria, H. Y. (2018). Game-based assessment for pre-service teachers in academic writing. In M. E. @ E. M. Matore, T. M. T. Soh, H. Norman, & M. M. Yunus (Eds.), *EduInnovation: Inovasi pendidikan dalam era Revolusi Industri 4.0* (pp. 37–40). Fakulti Pendidikan, Universiti Kebangsaan Malaysia.