

A Juridical Analysis of Copyright for Artificial Intelligence-Generated Works in the Education Sector

Denty Maretasari^{1*}, Santi Wideasari¹, Ahmad Ma'mun Fikri¹

¹Universitas Islam Nusantara Bandung, Bandung, Indonesia

*Correspondence e-mail: dentymaretasari@uninus.ac.id

Submission

2025-Aug-15

Review

2025-Sept-14

Accepted

2025-Sept-25

Published

2025-Nov-01

Abstract

The rapid development of Artificial Intelligence in the education sector presents new legal challenges, particularly regarding copyright ownership of autonomously produced works. The 2014 Copyright Law does not yet regulate the status of AI as a creator, creating a legal vacuum. This research aims to examine copyright regulations for AI works, the possibility of AI becoming a limited legal subject, and the urgency of updating regulations regarding ownership and attribution of AI-based works in the education sector. This research uses a normative juridical method with a doctrinal approach to analyze the legal certainty and legal implications of AI-based works in the education sector. The research finds that AI-based works lack legal certainty under the Copyright Law, creating a regulatory vacuum and potential disputes. The analysis demonstrates the need to recognize Artificial Intelligence as a limited legal subject to clarify attribution, ownership, and responsibility for the works it produces. The research concludes that the Copyright Law is inadequate to address AI works, and therefore legal reform is necessary for the sake of certainty and protection of rights. New, adaptive and collaborative arrangements are needed to enable Indonesia's legal system to accommodate AI developments and support a technology-based education ecosystem.

Keywords: Artificial Intelligence, Copyright Attribution, Copyright Law, Legal Certainty, Legal Vacuum.

How to Cite: Denty Maretasari, Santi Wideasari, Ahmad Ma'mun Fikri. "A Juridical Analysis of Copyright for Artificial Intelligence-Generated Works in the Education Sector." *Jurnal Ilmiah Dunia Hukum*, 10 no. 1 (2023): 1-12. DOI: 10.35973/jidh.v10i1.6556.

1. Introduction

Along with the development of the technological era in the form of the development of Artificial Intelligence (AI) technology, it has entered various aspects of life, especially in the education sector.¹ AI is one of the main pillars of the industrial revolution 4.0 which presents artificial intelligence that resembles humans.² In the education sector, AI has significant potential to transform the way we access knowledge, interact with learning materials, and evaluate student progress. The Industrial Revolution 4.0 has also accelerated the massive use of

¹ Sari Nurmalia, "The role of artificial intelligence (AI) in developing English language learner's communication skills," *Journal on Education* 6, no. 01 (2023): 754.

² Putri Sofiatul Maola, Indira Syifa Karai Handak, and Yusuf Tri Herlambang, "Penerapan artificial intelligence dalam pendidikan di era revolusi industri 4.0," *Educatio* 19, no. 1 (2024): 69.

digital technology in the education sector, aiming to create active, interactive, and efficient learning methods.³

Through complex algorithms, AI enables educators to analyze students' learning needs personally, considering that each individual has a different learning style and speed.⁴ AI enables faster and broader access to a variety of relevant learning materials. Furthermore, this technology plays a role in producing more personalized and effective learning, with the ability to more flexibly customize materials to suit each student's abilities and needs.⁵ By analyzing data from online activities, test results, and academic track records, AI is able to create more accurate learning profiles that support optimal achievement of educational goals.⁶

However, behind the various uses of Artificial Intelligence in the education sector, the implementation of this technology raises new legal challenges, particularly regarding the ownership of AI creations, responsibility for system decisions, and data and copyright protection. AI enables humans to create something that resembles human thought without requiring specialized expertise, as AI systems can generate text, images, and music simply by inputting commands. This development has two sides: one where technology can make significant contributions in various fields, but on the other hand, it can be used to commit legal violations such as copyright infringement and data misuse.⁷

Intellectual Property Rights (IPR), especially copyright, are a form of recognition or appreciation for human works that are born from their thought patterns and creativity.⁸ Intellectual Property Rights (IPR) provide exclusive rights to activities in the fields of art, technology, and science that have commercial value and are intended to support human life. One branch of IPR is copyright, which has received legal protection in Indonesia through Law of the Republic of Indonesia Number 28 of 2014 concerning Copyright (*Undang Undang Hak Cipta/UUHC*).⁹ As regulated in Article 1 number 1 of the Copyright Law, what is meant by copyright is an exclusive right that is automatically obtained by the creator based on the declarative principle after a creation is realized in a tangible form.¹⁰

³ Alvina Fridella Anggraini Br. Sitepu, Yohana Nadiva Olivia Sihotang, Raissa Sakira Syaharani, Hafiza Sinaga, and Lili Tansliova, "membangun literasi digital pembelajaran bahasa indonesia: strategi dan tantangan di era AI," *Jurnal Inovasi Penelitian Ilmu Pendidikan Indonesia* 8, no. 2 (2025): 34.

⁴ Ni Putu Raka Martina Dewi, Ni Made Rai Martini Dewi, Sisto Bora Jaga Meha, Yohana Febriani Intan Niu, and Ramli Yohanis Nenohalan, "Peran artificial intelligence (ai) dalam pembelajaran berbasis teknologi di era digitalisasi pendidikan," *Prosiding Pekan Ilmiah Pelajar (PILAR)* 5 (2025).

⁵ Juwita Afrita, "'Peran artificial intelligence dalam meningkatkan efisiensi dan efektifitas sistem pendidikan,'" *COMSERVA: Jurnal Penelitian Dan Pengabdian Masyarakat* 2, no. 12 (2023): 3185.

⁶ Nabilatul Muthmainnah, Vitha Azalia Rahmayanti, and Moh Faizin, "Modernitas Alat Pendidikan Dalam Perspektif Artificial Intelligence Fenomena Kemajuan Zaman Pendidik Abad 21," *Pedagogi: Jurnal Ilmu Pendidikan* 24, no. 1 (2024): 49.

⁷ Elfian Fauzy, " *Rekonseptualisasi Perlindungan Hukum Atas Hak Cipta Terhadap Artificial Intelligence di Indonesia*," (Tesis Magister, Fakultas Hukum, Universitas Islam Indonesia: 2023).

⁸ Alifia Nurita Suryani, and Arief Rachman Hakim, "Tinjauan Hukum Komersialisasi Karya Cipta Hasil Artificial Intelligence (AI) Image Generator di Indonesia," *Jurnal Studi Hukum Modern* 6, no. 3 (2024): 24.

⁹ Undang-Undang Nomor 28 Tahun 2014 tentang Hak Cipta

¹⁰ Undang-Undang Nomor 28 Tahun 2014 tentang Hak Cipta Pasal 1 Ayat (1).

However, the development of Artificial Intelligence (AI) technology has now given rise to various new issues. One of these is the lack of clarity regarding who is the legitimate creator of works created by AI devices: the device developer, the user who gives the commands, or the AI itself. The lack of regulatory clarity in this context creates uncertainty regarding copyright ownership of AI-based creations, which in turn can impact legal disputes, commercial competition, and economic stability.¹¹

From a legal theory perspective, Gustav Radbruch emphasized that law must reflect three fundamental values: justice, utility, and legal certainty. Legal certainty is crucial for ensuring that every individual knows their rights and obligations and how the legal system will treat them. Similarly, Hans Kelsen, in his "Pure Legal Theory," explains that legal certainty is one of the primary goals of every law.¹² Therefore, in the context of AI, clear regulations are urgently needed to protect the rights of creators, users, and rights holders of works produced or influenced by this technology. The urgency of reformulating and modernizing Indonesia's Copyright Law regarding AI cannot be ignored.¹³ Besides the legal and ethical challenges, Indonesia also faces significant opportunities. However, achieving these challenges requires collaboration between all stakeholders' government, industry, academia, and civil society to create a Copyright Law that is fair, balanced, and supportive of innovation in the digital age.¹⁴

Based on the description presented in the background, this research formulates three main problems. First, it examines how copyright is regulated for works produced by Artificial Intelligence (AI) within Indonesia's positive legal system. Second, it investigates whether AI can be recognized as a limited legal subject, particularly within the framework of copyright protection in the education sector. Third, it analyzes the urgency and direction of legal reform needed to address the regulatory vacuum concerning the ownership and attribution of AI-generated works in educational contexts.

2. Research Method

The method used in this research is normative juridical, which is a type of legal research conducted by analyzing secondary data and library materials.¹⁵ The

¹¹ Syifa Silvana, and Heru Suyanto, "Reformulasi pengaturan hak cipta karya buatan artificial intelligence melalui doktrin work made for hire," *Jurnal Kertha Semaya* 12, no. 1 (2023): 12.

¹² Hans Kelsen, *Pure theory of law Berkeley* (California: University of California Press, 1967), 23.

¹³ Ruhiat Sobirin, "Perlindungan hukum terhadap hak ekonomi pencipta e-book atas proses pendistribusian e-book berdasarkan UU No. 28 Tahun 2014 tentang hak cipta dikaitkan dengan UU No. 11 Tahun 2008 tentang informasi dan transaksi elektronik," *Jurnal Hukum Media Justitia Nusantara* 7, no. 1 (2017): 35.

¹⁴ Khwarizmi Maulana Simatupang, "Tinjauan yuridis perlindungan hak cipta dalam ranah digital," *Jurnal Ilmiah Kebijakan Hukum* 15, no. 1 (2021): 67.

¹⁵ Soerjono Soekanto dan Sri Mamudji, *Penelitian Hukum Normatif: Suatu Tinjauan Singkat* (Jakarta: Rajawali Pers, 2014), 14.

normative juridical method was chosen because the problem being studied is directly related to the analysis of positive legal norms regarding legal certainty regarding copyright ownership of works produced by artificial intelligence (AI). The regulatory gap in Law Number 28 of 2014 concerning Copyright requires an interpretation of written legal provisions, legal principles, and doctrines to determine whether AI can be considered a creator and who the legitimate copyright owner is. This research can be categorized as doctrinal research because law is often understood based on the contents contained in statutory regulations (law in books) or as norms and rules that regulate human behavior in a reasonable manner.¹⁶ The main focus of this research is to analyze the legal certainty of copyright ownership for works produced by Artificial Intelligence (AI), particularly in the context of education, as regulated in Law Number 28 of 2014 concerning Copyright. The research objective is to examine, review, and interpret various relevant legal sources related to the issue under study. The legal materials used include primary, secondary, and non-legal materials. The primary legal materials used include the Copyright Law, the Civil Code, and relevant international regulations and agreements, as they are binding and serve as the basis for normative analysis. Meanwhile, secondary legal materials, including legal literature, scientific journals, and expert opinions, were selected to provide explanations, interpretations, and comparisons regarding AI and copyright issues. Non-legal materials, such as technology reports, were used to support understanding the technical aspects of AI autonomy. All sources were selected based on their relevance, credibility, and ability to explain the gaps in the norms that are the focus of the research. After collecting these materials, the researcher will analyze the data using qualitative descriptive techniques involving three stages, namely classification, comparison, and connection.¹⁷

3. Research Results and Discussion

3.1. Regulation for AI-Generated Works in Indonesia

Advances in artificial intelligence (AI) technology have had a significant impact on the education sector. Implementing AI through adaptive learning mechanisms, such as academic chatbots, can help students stay on track and achieve their academic goals. This reflects a new era of digitalized education

¹⁶ Zainal Amirudin Asikin, *Pengantar Metode Penelitian Hukum* (Jakarta: Raja Grafindo Persada, Cet. Ke-1, 2004), 118.

¹⁷ Johnny Ibrahim, "Teori dan metodologi penelitian hukum normative," *Malang: Bayumedia Publishing* 57, no. 11 (2006): 353.

that is more efficient and personalized.¹⁸ However, in the context of intellectual property law in Indonesia, particularly Law Number 28 of 2014 concerning Copyright, there are no explicit provisions governing AI as a creator or inventor.¹⁹ This creates a legal vacuum that has the potential to give rise to future legal disputes, particularly in the education sector, which is increasingly dependent on AI-based technology. Despite this, legal issues, particularly those related to intellectual property, remain unclear.²⁰

One of the main issues that has emerged is the legal status of artificial intelligence, particularly regarding copyright for works produced in the field of education. Legally, Artificial Intelligence (AI) works in the educational context can be categorized as “creations” as referred to in Article 1 number 3 of the Copyright Law, which states “Creations are every creative work in the fields of science, art, and literature produced by inspiration, ability, thought, imagination, dexterity, skill, or expertise expressed in a tangible form.” This provision illustrates that creations are works born from the fields of science, art, and literature that originate from thought and are expressed in a tangible form. However, Article 1, number 2 of the Copyright Law states, “A creator is a person or persons who individually or jointly produce a work that is unique and personal,” which explicitly explains that the creator is a human or persons, not a machine or system. This provision is reinforced by Article 1, number 27 of the Copyright Law, which states, “A person is an individual or legal entity.” In this case, AI works autonomously, without significant creative intervention from humans, so the legal status of the work is ambiguous.²¹ This condition can give rise to conflicts if there is commercial use, plagiarism, or unauthorized redistribution by other parties. To illustrate this potential conflict, an example can be presented in the context of education. For example, if a school uses AI-based learning modules for paid online training, it must be determined who holds the copyright: whether the AI developer, the institution operator, or the teacher who merely triggers the Artificial Intelligence’s creative process. To understand the legal position of Artificial Intelligence in this context, it is important to understand the concept of a legal subject in legal theory. According to Utrecht, a legal subject is a person or entity that, according to law, is authorized to bear rights and obligations. This term comes from the Dutch word “rechtsubject” or, in English, “subject of law,” which refers to an entity that can act in a legal relationship. In general, only humans (natuurlijke persoon) and legal entities

¹⁸ Muh Arasy Hairul, “The use of chatbots in the english language teaching to promote modern language learning: A literature review,” *International Journal of Indonesian Education and Teaching* 5, no. 2 (2024): 142.

¹⁹ Undang-Undang Nomor 28 Tahun 2014 tentang Hak Cipta

²⁰ Syed Wajdan Rafay Bukhari, Saif Ullah Hassan, and Yasir Aleem, “Impact of artificial intelligence on copyright law: Challenges and prospects,” *Journal of the Law Society of Scotland* 5, no. 4 (2023): 652.

²¹ Chukwubikem I. Obianyo, “Legal challenges of artificial intelligence as a creator in patent and copyright,” *Nnamdi Azikiwe University Journal of Private and Property Law* 2, no. 1 (2025): 92.

(rechtspersoon) are recognized as legal subjects.²² This is in line with the opinion of L. J van Apeldoorn who stated that legal subjects must have the ability to hold rights, and the organ theory of Otto Von Gierke states that legal entities as legal subjects must have goals and the capacity to act independently in every decision issued.²³

Viewed from the perspective of Indonesia's positive legal system, artificial intelligence is not a legal subject like humans and legal entities which are legally recognized as legal subjects.²⁴ Works or products produced autonomously by Artificial Intelligence (AI) still raise debate regarding copyright attribution.²⁵ Under current conditions, works produced by AI are considered the property of the human or legal entity that operates, develops, or owns the AI. This is also emphasized in the ITE Law and Government Regulation Number 71 of 2019 concerning the Implementation of Electronic Systems and Transactions, which states that AI is an electronic agent that acts on human instructions. Thus, the work produced by AI cannot be claimed by the AI itself, but rather by the human or legal entity that created or operated the AI.²⁶ However, in practice, the distinction between human and AI contributions in the creation process is often unclear, leading to confusion in the recognition of legal rights and responsibilities. This situation reflects the imbalance between technological advances and applicable legal regulations. The legal system's unpreparedness to respond to this phenomenon has the potential to lead to legal uncertainty and conflicts of interest, particularly in the education sector, which is beginning to utilize AI extensively to create automated teaching materials, modules, and even scientific papers.

3.2. Feasibility of Recognizing AI as a Limited Legal Subject

To bridge the existing legal vacuum, a progressive normative approach is needed, allowing for the recognition of Artificial Intelligence (AI) as a specific legal subject within a limited scope, namely in the context of intellectual property. There are three main criteria that must be considered in assessing

²² Titik Triwulan Tutik, *Hukum perdata dalam sistem hukum Indonesia*, (Jakarta: Prenada Media Group, 2008), 23.

²³ Hari Sutra Disemadi, "Urgensi regulasi khusus dan pemanfaatan artificial intelligence dalam mewujudkan perlindungan data pribadi di Indonesia," *Jurnal Wawasan Yuridika* 5, no. 2 (2021): 182.

²⁴ Shofika Hardiyanti Qurrahman, Safira Ayunil, and Tsabita Aurelia Rahim, "Kedudukan dan konsep pertanggungjawaban artificial intelligence dalam hukum positif Indonesia," *Unes Law Review* 6, no. 4 (2024): 12689.

²⁵ Basilla Inakyora Nalya Arimbi, and Made Aditya Pramana Putra, "Implikasi hukum hak cipta dalam komersialisasi karya-karya artificial intelligence dalam industri kreatif," *Jurnal Media Akademik* 2, no. 11 (2024): 343.

²⁶ Ni Made Yordha Ayu Astiti, "Strict liability of artificial intelligence: pertanggungjawaban kepada pengatur AI ataukah AI yang diberikan beban pertanggungjawaban," *Jurnal Magister Hukum Udayana* 12, no. 4 (2023): 972.

the eligibility for legal protection of AI works: originality, creativity, and embodiment in digital format.²⁷ In fact, all creative works in Indonesia are automatically protected by the Copyright Law, as stated in Article 1 number 1 which states “Copyright is the exclusive right of the creator that arises automatically based on the declarative principle after a creation is realized in a tangible form without reducing restrictions in accordance with the provisions of laws and regulations.” This provision states that copyright is a special right (exclusive right) that can only be obtained or owned by a creator, when he succeeds in pouring his thoughts into a tangible form.²⁸

The absence of regulations that explicitly regulate the legal status of AI as a creator creates ambiguity in determining the responsible party when copyright infringement occurs on works produced by AI systems. Article 12 paragraph (1) states “Every person is prohibited from making commercial use, duplication, announcement, distribution, and/or communication of portraits that they have created for the purposes of commercial advertising or publicity without the written consent of the person being portrayed or their heirs.” The provisions in the Copyright Law emphasize that commercial use of a work, including duplication, announcement, distribution, or communication, must obtain written consent from the party that owns the rights. If the work is used for commercial purposes without permission, then this action is a copyright infringement that can be subject to legal liability. Article 7 paragraph (3) of the Copyright Law stipulates that copyright violations can be subject to criminal sanctions in the form of a maximum imprisonment of two years and/or a maximum fine of IDR 300.000.000. If the violation is committed through an AI system, the researcher, developer, or user of the system can be held legally responsible, depending on who has primary control in the process of creating and using the work. The legal process for this violation still refers to general criminal law procedures, which usually begin with a report from the rights holder who feels aggrieved. In the context of dispute resolution, one option that can be taken is a fair royalty payment scheme, which is determined through license negotiations or based on industry standard rates.

Articles 40–42 of Law Number 28 of 2014 explain that works of science, art, and literature can be subject to copyright law and have economic value, including as objects of fiduciary guarantees. Digital works produced by AI can receive legal protection if they meet the requirements of originality and are acceptable to the five human senses.²⁹ Although the Copyright Law

²⁷ Rafly Nauval Fadillah, “Perlindungan hak atas kekayaan intelektual artificial intelligence (ai) dari perspektif hak cipta dan paten,” *Das Sollen: Jurnal Kajian Kontemporer Hukum Dan Masyarakat* 2, no. 02 (2024): 135. See too, Tri Abriana Ma’ruf, “Analysis of Legal Protection of Copyright on Plagiarism of Artificial Intelligence Artworks,” *Golden Ratio of Law and Social Policy Review* 5, no. 1 (2025): 6.

²⁸ Naiman Fahrudin, “Penerapan metode finite state machine pada game adventure “Franco”,” *JATI (Jurnal Mahasiswa Teknik Informatika)* 2, no. 1 (2018): 449.

²⁹ Fauzan Iraldi Singarimbun, “Implikasi hukum penggunaan ai dalam seni grafis terhadap hak kekayaan intelektual,” *Jurnal Penelitian Pendidikan Indonesia* 10, no. 3 (2024): 888.

(*Undang Undang hak Cipta/UUHC*) does not explicitly regulate the status of AI as creators, the law's provisions provide room for interpretation, stating that as long as there is an element of originality and human involvement (even minimal), AI-based works can receive legal protection. The declarative principle in the UUHC affirms that copyright protection applies automatically from the moment the work is realized in a tangible form.

In addition to theoretical and normative approaches, examining case studies in the field is also necessary to provide a concrete picture of the application of artificial intelligence in educational practices and digital creativity, as well as the potential legal issues it raises, particularly regarding copyright infringement.³⁰ This case study can reinforce the urgency of establishing legal protection for works involving AI, which until now has not been expressly regulated in the Indonesian legal system.³¹ One relevant international case is the lawsuit filed by Getty Images against Stability AI, an artificial intelligence-based startup operating in London. In early January 2023, Getty Images, as the copyright holder of millions of digital images and photographs, sued Stability AI for allegedly illegally using their copyrighted works to train their AI system. The AI technology at the center of this case is Stable Diffusion, a Generative Adversarial Network (GAN)-based model designed to generate realistic digital images based on text commands from users. Getty Images claims that Stability AI trained its Stable Diffusion model on over 12 million copyrighted digital images without obtaining permission or licenses from their rightful owners.³² This case highlights the fundamental problem with using AI to exploit data owned by others without permission and produce new works deemed "unique" by the technology. Ownership of such data becomes particularly important when AI-based works are used for commercial purposes or claimed as original by parties who do not own the rights to the source material.

3.3. Urgency and Direction of Legal Reform for AI Works in Education

Besides the Getty Images case, another example that demonstrates the different legal approaches to the involvement of Artificial Intelligence (AI) in the creative process is the case of the artwork "Suryast" by Ankit Sahni, which has given rise to different legal treatment between the United States and

³⁰ Xiangchuan Zhang, "Analysis of the copyright issues of AI-generated materials," *Science of Law Journal* 3, no. 1 (2024): 28.

³¹ Chu Meng, "Copyright Protection of Artificial Intelligence Generated Works from an Industrial Perspective," *China Legal Sci.* 11 (2023): 110.

³² Muhammad Khoirul Wahid Azmi, "Legality and legal protection of visual art works produced through artificial intelligence," *Dinamika* 30, no. 1 (2024): 9048.

Canada.³³ Another interesting case to analyze in the context of the relationship between AI and copyright is the painting entitled “Suryast,” created by Indian artist and lawyer Ankit Sahni in 2020. Sahni used an AI-based application called RAGHAV (Robust Artificially Intelligent Graphics and Art Visualizer) to create the two-dimensional artwork. The process of creating “Suryast” involved combining digital photographs taken by Sahni himself, which were then processed using RAGHAV to incorporate artistic elements from Vincent Van Gogh’s famous painting *The Starry Night*. Sahni registered the copyright for “Suryast” with the US Copyright Office (USCO) in the United States, listing himself as the primary applicant and RAGHAV as a co-author. He argued that the AI system’s contribution was independent and substantive to the final artwork. However, the USCO rejected the application on the grounds that the work did not demonstrate sufficient human creative involvement and that there was no significant difference between the input and output generated by the AI.³⁴ Sahni then appealed the rejection, arguing that the term “author” should not be understood exclusively as humans, but can also include intelligent systems that contribute creatively. However, the USCO still rejected the application, stating that “Suryast” was considered a derivative work that did not meet the standards for copyright protection under United States law. By comparison, the case had a different outcome when filed in Canada. In 2021, the Canadian Intellectual Property Office (CIPO) accepted a copyright application for the work “Suryast” and officially listed RAGHAV as a co-author alongside Ankit Sahni. Canada’s legal approach, as outlined in Article 41 of the Canada Copyright Modernization Act 2012, is more open to the role of technology in artistic creation. The law emphasizes the importance of protecting technology and recognizing new forms of digital creativity. Furthermore, Article 2 of the Canada Copyright Act C-42 (1985) recognizes originality as a result of creative expression, which in this case is seen as inherent in Sahni’s idea of combining two artistic sources into a single new work. CIPO believes that human creative thought remains the foundation of creation, even if the process is assisted by AI systems.³⁵ This case demonstrates the differing legal approaches between countries regarding the involvement of AI in the creative process. The United States tends to reject recognition of AI systems as parties capable of owning or sharing copyright, while Canada is beginning to recognize the possibility of AI as a co-creator under certain conditions.³⁶ This demonstrates that the recognition of AI as a limited legal subject remains an

³³ Christophe Geiger, “Elaborating a human rights-friendly copyright framework for generative AI,” *IIC-International Review of Intellectual Property and Competition Law* 55, no. 7 (2024): 1135.

³⁴ Tri Abriana Ma’ruf, “Analysis of Legal Protection of Copyright on Plagiarism of Artificial Intelligence Artworks,” *Golden Ratio of Law and Social Policy Review* 5, no. 1 (2025): 5.

³⁵ Nadya Dewi Chrisanti, and Hariyo Sulistiyantoro, “Analisis perlindungan hukum hak cipta karya seni buatan artificial intelligence ditinjau pada negara indonesia, inggris, dan kanada (studi komparatif di Indonesia, Inggris, dan Kanada),” Kabillah: *Journal of Social Community* 9, no. 2 (2024): 139.

³⁶ Toby Bond, and Sarah Blai, “Artificial Intelligence & copyright: Section 9 (3) or authorship without an author,” *Journal of Intellectual Property Law & Practice* 14, no. 6 (2019): 423.

open debate globally and underscores the urgency for Indonesia to quickly develop a legal framework that is relevant and adaptive to developments in artificial intelligence technology.

The two case studies described, Getty Images' lawsuit against Stability AI and the case of the artwork "Suryast" by Ankit Sahni and AI RAGHAV, clearly demonstrate that the lack of a clear legal framework regarding the role and position of AI in the creation of works creates serious uncertainty. Issues of copyright attribution, ownership of digital works, and the legal validity of AI works are at the center of ongoing global debate. In the case of Stability AI, it is clear how the unauthorized use of copyrighted datasets to train AI systems can lead to lawsuits, while in the case of "Suryast," there are differences in legal interpretation between the United States, which rejects recognition of AI as a co-author, and Canada, which accepts it. This situation emphasizes the lack of international consensus regarding the recognition of AI as a subject or authority in the copyright system.

Considering the complexities outlined above, it can be asserted that the development of Artificial Intelligence (AI) in the education sector has presented significant legal challenges, particularly regarding the attribution of copyright to works autonomously generated by AI systems.³⁷ The absence of legal norms explicitly governing the legal status of AI as creators has created a legal vacuum (*rechtsvacuum*) that opens up the potential for disputes in the intellectual property sector. Therefore, it is crucial for the Indonesian legal system to promptly respond to this development through progressive and comprehensive regulatory reforms, while upholding the basic principles of applicable law. Recognizing AI as a limited legal subject in certain contexts, particularly in the area of copyright, can be considered a relevant normative step. Legal reformulation that adapts to technological dynamics will play a significant role in ensuring legal certainty, ensuring balanced protection of rights, and creating an innovative and equitable education ecosystem.

4. Closing

From the results of the discussion and legal analysis that have been carried out, it can be concluded that the copyright provisions for creativity generated by Artificial Intelligence (AI) within Indonesia's positive legal system remain unclear. Law Number 28 of 2014 concerning Copyright does not explicitly regulate the status of AI as a creator. Article 1, number 2, states that a creator is a person or persons who produce a unique and personal creation, while Article 1,

³⁷ Daryl Lim, "Generative AI and copyright: Principles, priorities and practicalities," *Journal of Intellectual Property Law and Practice* 18, no. 12 (2023): 841.

number 27, clarifies that “person” refers to an individual or legal entity, not a system or machine. Artificial intelligence cannot yet be recognized as a full legal subject, as the Indonesian legal system only recognizes humans and legal entities as legal subjects. However, in limited contexts, particularly copyright, AI can be considered a normatively limited legal subject.

This aims to address regulatory gaps and provide legal certainty for works produced by AI. The urgency of legal reformulation is crucial to respond to increasingly rapid technological developments. This reformulation is expected to include new regulations regarding the attribution of creation, ownership, and accountability for AI works, as well as a fair and proportional copyright protection scheme. In addition, Article 12, paragraph (1) of the Copyright Law stipulates that the use of creations for commercial purposes must obtain permission from the rights holder. If AI works are used commercially without permission, sanctions may be imposed in accordance with Article 7 paragraph (3), which stipulates a maximum prison sentence of 2 years and/or a fine of up to IDR 300.000.000.

Thus, recognizing AI as a limited legal subject under copyright is a normative alternative worth considering to provide legal certainty, protect rights, and encourage innovation in technology-based education. Therefore, an adaptive and progressive legal response is needed to ensure that the Indonesian legal system is not left behind by the rapid development of artificial intelligence technology, particularly in the context of education and intellectual property.

Based on this research, the author recommends that the government and policymakers immediately formulate specific regulations governing the legal status of Artificial Intelligence (AI) in the context of copyright, taking into account the criteria of originality, creativity, and human involvement in the creation of AI-based works. Recognizing AI as a limited legal subject in the realm of intellectual property is essential to fill the existing legal gap, while also providing certainty regarding copyright and legal responsibility for actors in the education and technology industries. Furthermore, the establishment of a balanced legal framework that supports the development of AI must involve collaboration between the government, academic institutions, legal practitioners, and the technology industry as a joint effort to address the dynamics of technology and law. Clear technical guidelines or evaluation standards are also needed to determine human contributions to AI-generated works, in order to clarify who is entitled to the copyright. Legal reforms that are adaptive to technological advances must be initiated to ensure the protection of creators’

rights continues to be implemented properly, spur innovation, and avoid potential legal disputes that are detrimental to all parties in the future. Thus, the Indonesian legal system can be more responsive and support the growth of an innovative and equitable technology-based education ecosystem.

REFERENCES

- Afrita, Juwika. "Peran artificial intelligence dalam meningkatkan efisiensi dan efektivitas sistem pendidikan." *COMSERVA: Jurnal Penelitian Dan Pengabdian Masyarakat* 2, no. 12 (2023): 3181-3187.
- Arimbi, Basilla Inakyora Nalya, and Made Aditya Pramana Putra. "Implikasi hukum hak cipta dalam komersialisasi karya-karya artificial intelligence dalam industri kreatif." *Jurnal Media Akademik (JMA)* 2, no. 11 (2024).
- Asikin, Amirudin Zainal. "Pengantar metode penelitian hukum." *Jakarta: Raja Grafindo Persada* (2004).
- Astiti, Ni Made Yordha Ayu. "Strict Liability of Artificial Intelligence: Pertanggungjawaban kepada Pengatur AI ataukah AI yang Diberikan Beban Pertanggungjawaban." *Jurnal Magister Hukum Udayana* 12, no. 4 (2023): 962-980.
- Azmi, Muhammad Khoirul Wahid. "Legality and Legal Protection of Visual Art Works Produced through Artificial Intelligence." *Dinamika* 30, no. 1 (2024): 9041-9059.
- Bond, Toby, and Sarah Blair. "Artificial Intelligence & copyright: Section 9 (3) or authorship without an author." *Journal of Intellectual Property Law & Practice* 14, no. 6 (2019): 423-423.
- Bukhari, Syed Wajdan Rafay, Saif Ullah Hassan, and Yasir Aleem. "Impact of artificial intelligence on copyright law: Challenges and prospects." *Journal of the Law Society of Scotland* 5, no. 4 (2023): 647-656.
- Chrisanti, Nadya Dewi, and Hariyo Sulistiyantoro. "Analisis Perlindungan Hukum Hak Cipta Karya Seni Buatan Artificial Intelligence Ditinjau Pada Negara Indonesia, Inggris, dan Kanada (Studi Komparatif di Indonesia, Inggris, dan Kanada)." *Kabillah: Journal of Social Community* 9, no. 2 (2024): 132-143.
- Dewi, Ni Putu Raka Martina, Ni Made Rai Martini Dewi, Sisto Bora Jaga Meha, Yohana Febriani Intan Niu, and Ramli Yohanis Nenohalan. "Peran artificial intelligence (ai) dalam pembelajaran berbasis teknologi di era digitalisasi pendidikan." *Prosiding Pekan Ilmiah Pelajar (PILAR)* 5 (2025).

- Disemadi, Hari Sutra. "Urgensi regulasi khusus dan pemanfaatan artificial intelligence dalam mewujudkan perlindungan data pribadi di Indonesia." *Jurnal Wawasan Yuridika* 5, no. 2 (2021): 177-199.
- Fadillah, Rafly Nauval Fadillah Rafly Nauval. "Perlindungan Hak Atas Kekayaan Intelektual Artificial Intelligence (AI) dari Perspektif Hak Cipta dan Paten." *Das Sollen: Jurnal Kajian Kontemporer Hukum Dan Masyarakat* 2, no. 02 (2024).
- Fahrudin, Naiman. "Penerapan Metode Finite State Machine Pada Game Adventure "Franco"." *JATI (Jurnal Mahasiswa Teknik Informatika)* 2, no. 1 (2018): 446-453.
- Fauzy, Elfian. "Rekonseptualisasi Perlindungan Hukum Atas Hak Cipta Terhadap Artificial Intelligence di Indonesia". (Tesis Magister, Fakultas Hukum, Universitas Islam Indonesia: 2023).
- Geiger, Christophe. "Elaborating a human rights-friendly copyright framework for generative AI." *IIC-International Review of Intellectual Property and Competition Law* 55, no. 7 (2024): 1129-1165.
- Hairul, Muh Arasy. "The use of chatbots in the english language teaching to promote modern language learning: A literature review." *IJIET (International Journal of Indonesian Education and Teaching)* (2024).
- Ibrahim, Johnny. "Teori dan metodologi penelitian hukum normatif." *Malang: Bayumedia Publishing* 57, no. 11 (2006).
- Kelsen, Hans. "Pure theory of law. Berkeley." Cal.: University of California Press (1967).
- Lim, Daryl. "Generative AI and copyright: Principles, priorities and practicalities." *Journal of Intellectual Property Law and Practice* 18, no. 12 (2023): 841-842.
- Ma'ruf, Tri Abriana. "Analysis of Legal Protection of Copyright on Plagiarism of Artificial Intelligence Artworks." *Golden Ratio of Law and Social Policy Review* 5, no. 1 (2025): 01-09.
- Maola, Putri Sofiatul, Indira Syifa Karai Handak, and Yusuf Tri Herlambang. "Penerapan artificial intelligence dalam pendidikan di era revolusi industri 4.0." *Educatio* 19, no. 1 (2024): 61-72.
- Meng, Chu. "Copyright Protection of Artificial Intelligence Generated Works from an Industrial Perspective." *China Legal Sci.* 11 (2023): 110-134.
- Muthmainnah, Nabilatul, Vitha Azalia Rahmayanti, and Moh Faizin. "Modernitas Alat Pendidikan Dalam Perspektif Artificial Intelligence Fenomena Kemajuan Zaman Pendidik Abad 21." *Pedagogi: Jurnal Ilmu*

- Pendidikan* 24, no. 1 (2024): 46-55.
- Obiany, Chukwubuikem I. "Legal challenges of artificial intelligence as a creator in patent and copyright." *Nnamdi Azikiwe University Journal of Private and Property Law* 2, no. 1 (2025): 88-99.
- Qurrahman, Shofika Hardiyanti, Safira Ayunil, and Tsabita Aurelia Rahim. "Kedudukan dan Konsep Pertanggungjawaban Artificial Intelligence Dalam Hukum Positif Indonesia." *Unes Law Review* 6, no. 4 (2024): 12687-12693.
- Sari, Nurmalia. "The role of artificial intelligence (AI) in developing English language learner's communication skills." *Journal on Education* 6, no. 01 (2023): 750-757.
- Silvana, Syifa, and Heru Suyanto. "Reformulasi pengaturan hak cipta karya buatan artificial intelligence melalui doktrin work made for hire." *Jurnal Kertha Semaya* 12, no. 1 (2023): 12.
- Simatupang, Khwarizmi Maulana. "Tinjauan yuridis perlindungan hak cipta dalam ranah digital." *Jurnal Ilmiah Kebijakan Hukum* 15, no. 1 (2021): 67.
- Singarimbun, Fauzan Iraldi. "Implikasi hukum penggunaan ai dalam seni grafis terhadap hak kekayaan intelektual." *JPPi (Jurnal Penelitian Pendidikan Indonesia)* 10, no. 3 (2024): 886-893.
- Sitepu, Alvina Fridella Anggraini Br, Yohana Nadiva Olivia Sihotang, Raissa Sakira Syaharani, Hafiza Sinaga, and Lili Tansliova. "Membangun literasi digital pembelajaran bahasa indonesia: strategi dan tantangan di era Ai." *Jurnal Inovasi Penelitian Ilmu Pendidikan Indonesia* (2025): 30-35.
- Sobirin, Ruhiat. "Perlindungan Hukum Terhadap Hak Ekonomi Pencipta e-book Atas Proses Pendistribusian e-book Berdasarkan UU No. 28 Tahun 2014 Tentang Hak Cipta Dikaitkan Dengan UU No. 11 Tahun 2008 Tentang Informasi dan Transaksi Elektronik." *Jurnal Hukum Media Justitia Nusantara* 7, no. 1 (2017).
- Soekanto, Soerjono, and Sri Mamudji. "Penelitian Hukum Normatif Suatu Tinjauan Singkat, cet. 16." *Rajawali Pers, Jakarta* (2014): 13-14.
- Suryani, Alifia Nurita, and Arief Rachman Hakim. "Tinjauan Hukum Komersialisasi Karya Cipta Hasil Artificial Intelligence (AI) Image Generator di Indonesia." *Jurnal Studi Hukum Modern* 6, no. 3 (2024).
- Tutik, Titik Triwulan. "Hukum Perdata dalam Sistem Hukum Indonesia." *Prenada Media Group. Jakarta* (2008).
- Undang-Undang Nomor 28 Tahun 2014 tentang Hak Cipta
- Zhang, Xiangchuan. "Analysis of the copyright issues of AI-generated

materials." *Science of Law Journal* 3, no. 1 (2024): 25-29.

Conflicts of Interest Statement : Privileged information or ideas obtained through peer review must be kept confidential and not used for personal gain. Reviewers must not consider manuscripts in which they have a conflict of interest as a result of a relationship, or competitive, collaborative, or other relationship with the author, company, or any institution associated with the newspaper.

Copyright: this is an open access article distributed under the terms of the creative commons attribution 4.0 international license (CC-BY 4.0), which permints unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Jurnal ilmiah dunia hukum is an open access and peer-reviewed journal published by faculty of Law Untag Semarang