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The future of legal education in South Africa: Transformative impacts of artificial intelligence on pedagogy, practice and curriculum development

Mr Tanaka Dakacha
University of the Witwatersrand

1 Introduction

The rapid advancement of technology has ushered in the digital age, transforming industries, professions, and education systems worldwide.[1] Among these transformations, artificial intelligence (AI) emerges as a pivotal force with significant implications for legal education. AI refers to 'the capability of a digital computer or a computer-controlled robot to perform tasks typically associated with intelligent beings.'[2] AI technologies, including machine learning algorithms, natural language processing, and virtual reality simulations, are no longer futuristic concepts.[3] They are already shaping how knowledge is delivered, acquired, and applied across various fields. However, despite many professions embracing these innovations, legal education in South Africa has largely remained anchored in traditional teaching methods, including the Socratic method, moot court exercises, and reliance on judicial precedents.[4]

1 AB Rashid & AK Kausik 'AI revolutionizing industries worldwide: A comprehensive overview of its diverse applications' (2024) 7 *Hybrid Advances* 1-34.
2 https://www.britannica.com/technology/artificial-intelligence (accessed 15 January 2025).
3 Rashid & Kausik (n 1).
4 E Snyman-Van Deventer 'Methods to use when teaching legal ethics in South Africa' (2021) 2*Obiter* 312.

The gap between current pedagogical approaches and the realities of a technology-driven legal profession poses a significant challenge. Law graduates are entering a swiftly evolving legal landscape where AI tools are transforming legal research, case analysis, and decision-making processes.[5] However, the slow pace at which legal education adapts to these changes raises concerns about whether South African law schools are adequately preparing students for this reality. Adding to this issue is the broader challenge of ensuring that AI's integration into legal education is both ethically grounded and accessible to diverse student populations. This chapter aims to explore the transformative impacts of AI on legal education in South Africa, with a particular focus on three critical areas – pedagogy, practice, and curriculum development. It explores how AI can enhance teaching methodologies by offering personalised learning experiences, fostering interactive simulations, and providing real-time feedback. Furthermore, the chapter examines the implications of AI on practical legal training and professional development, emphasising the need for legal professionals to remain adaptable in an AI-driven landscape. Finally, it explores curriculum development, highlighting the importance of incorporating ethical considerations into the education of future lawyers.

The central thesis of this chapter is that integrating AI into South African legal education presents both opportunities and challenges. However, by adopting a proactive and adaptive approach, South African legal education can prepare a generation of lawyers who are proficient in leveraging AI technologies and equipped to navigate the ethical and societal complexities of their use. The chapter aims to outline a path forward for legal education in South Africa, ensuring its relevance and effectiveness in the digital age.

2 The transformative impact of AI on pedagogy

The integration of AI into legal pedagogy promises to transform legal education by enhancing efficiency, accessibility, and personalisation. However, this transformative shift is not without challenges, particularly concerning the balance between technological capabilities and the

5 N Madaoui 'The impact of artificial intelligence on legal systems: Challenges and opportunities' (2024) *Problems of Legality* 285.

core principles of legal education. While AI-driven tools excel at processing vast quantities of information and delivering tailored learning experiences,[6] they risk undermining critical aspects of legal pedagogy, including the cultivation of analytical reasoning, the preservation of human-centred learning, and the contextual interpretation of complex legal texts.[7] In *Parker v Forsyth N.O. and Others* (*Parker*), the court warned that AI-generated legal arguments, though seemingly coherent, may lack the nuanced reasoning essential to legal practice without human oversight.[8] Moreover, ethical and regulatory concerns surrounding AI's application further complicates its role in pedagogy, particularly in regions like the Global South, where data representation and resource disparities exacerbate existing inequalities.[9] This section critically examines the multifaceted challenges posed by AI in legal pedagogy, focusing on its impact on critical thinking, interpretive depth, ethical considerations, and the potential dehumanisation of the educational experience. Through this analysis, it becomes clear that while AI holds immense potential, its limitations must be addressed to safeguard the integrity and inclusivity of legal education.

2.1 Personalissed learning experience

AI tools have significantly transformed legal education by enabling tailored learning experiences for students.[10] AI-driven tools can customise learning paths and provide students with real-time feedback tailored to their progress.[11] Adaptive learning platforms and AI tools like Grammarly and ChatGPT, though not legal-specific, demonstrate AI's

6 T Kabudi and others 'AI-enabled adaptive learning systems: A systematic mapping of the literature' (2021) *Computers and Education: Artificial Intelligence* 1-12.

7 AL Pinelo & AV Sanmartín 'What are you, critical legal education? An absurd symphony' (2025) *Law & Literature* 1-19.

8 2023 (1) ZAGPRD.

9 S Varsik & L Vosberg 'The potential impact of Artificial Intelligence on equity and inclusion in education' (2024) *OECD Artificial Intelligence Papers*, No. 23, OECD Publishing, Paris.

10 Z Xu 'AI in education: Enhancing learning experiences and student outcomes' (2024) *Applied and Computational Engineering* 104.

11 A Bhutoria 'Personalized education and artificial intelligence in the United States, China, and India: A systematic review using a human-in-the-loop model' (2022) *Computers and Education: Artificial Intelligence* 1-18.

broader ability to personalise content based on individual progress.[12] These tools recommend targeted exercises, revisit foundational concepts, and provide immediate feedback, fostering continuous improvement.[13] In legal education, AI tools like Lexis+ AI and ROSS Intelligence refine research and analysis, providing students with dynamic, context-based feedback rooted in case law and statutory interpretation.[14] AI therefore offers several advantages, particularly its capacity to personalise learning by accommodating diverse styles and paces to support students of varying abilities. It enhances efficiency by reducing repetitive tasks, allowing educators to focus on advanced or interactive teaching methods. Additionally, personalised guidance bridges the gap between theoretical concepts and practical applications, particularly through problem-solving exercises and case studies.[15]

However, this pedagogical reliance on AI introduces significant challenges, especially when comparing technology literacy to legal literacy. While AI systems may effectively guide students through predefined knowledge areas, over-reliance risks undermining their ability to critically analyse and engage with legal texts independently. Legal education emphasises the interpretation of nuanced statutory language, case precedents, and constitutional principles, which require a deep understanding of human values, ethical judgment, and interpretive skills that cannot be developed solely through AI assistance.[16]

2.2 Experimental learning through simulations

AI-powered tools, such as virtual reality courtrooms, have redefined experiential learning. These simulations provide students with an engaging environment to practice courtroom proceedings or client consultations without real-world stakes.[17] The advent of AI-powered

12 T Al Shloul and others 'Role of activity-based learning and ChatGPT on students' performance in education' (2024) *Computers and Education: Artificial Intelligence* 1-18.
13 As above.
14 LexisNexis 'Introducing Lexis+ South Africa' https://www.lexisnexis.com/en-za/lexis-plus-south-africa (accessed 2 June 2025).
15 Bhutoria (n 11).
16 GE Devenish 'Teleological evaluation: A theory and modus operandi of statutory interpretation in South Africa' (1991) *South African Public Law* 62.
17 RC Martí and others 'Simulated courtroom trials: A challenging learning activity' (2022) *South Florida Journal of Development* 4204.

simulations, like the University of Johannesburg's VR Courtroom Game, marks a significant leap in experiential learning.[18] These tools replicate real-world legal environments, enabling students to practice courtroom procedures, client consultations, and legal drafting in a controlled setting. AI simulations offer practical engagement by providing a hands-on approach to learning, bridging the gap between classroom theory and legal practice.[19] They create a risk-free environment where students can experiment with different strategies, learn from mistakes, and build confidence without real-world consequences. Additionally, AI simulations democratise access to practical legal training, especially for students in remote or underfunded institutions.[20]

However, such technologies may risk dehumanising the educational experience by reducing opportunities for interpersonal interaction. The Socratic method, a staple of legal pedagogy, thrives on dynamic, in-person dialogue between educators and students,[21] a dimension difficult for AI to replicate authentically. This dehumanisation can result in a lack of empathy and reduced interpersonal skills among students, which are crucial in the legal profession. Legal practice often involves addressing human problems with compassion,[22] something simulations alone cannot effectively teach. Without human mentorship to contextualise these experiences, students risk developing a transactional rather than relational approach to law. Additionally, institutions with limited budgets may struggle to implement such technologies, widening the gap between well-funded and under-resourced law schools.[23]

18 University of Johannesburg 'A first in Africa – UJ set to transform legal education with a virtual reality courtroom' https://news.uj.ac.za/news/a-first-in-africa-uj-set-to-transform-legal-education-with-a-virtual-reality-courtroom/ (accessed 15 January 2025).

19 Al Shloul & others (n 12).

20 D Simshaw 'Access to AI justice: Avoiding an inequitable two-tiered system of legal services' (2022) *Yale Journal of Law & Technology* 152.

21 DG Marshal 'Socratic method and the irreducible core of legal education' (2005) *Minnesota Law Review* 1-17.

22 C Westaby & E Jones 'Empathy: an essential element of legal practice or 'never the twain shall meet'?' (2017) *International Journal of the Legal Profession* 1-26.

23 ST Faloye & N Ajayi 'Understanding the impact of the digital divide on South African students in higher educational institutions' (2021) *African Journal of Science, Technology, Innovation and Development* 1-11.

2.3 AI-assisted legal research

AI's ability to process and analyse extensive legal data sets, including case law, statutes, and academic resources, has transformed legal research.[24] Tools like Lexis+ AI enable students and professionals to retrieve legal information at unparalleled speed and produce documents with embedded citations.[25] AI offers several advantages in legal research, including efficiency in analysing through vast databases to identify relevant precedents and statutes quickly. Tools like Lexis+ AI not only retrieve documents but also provide synthesised legal insights, streamlining workflow.[26] Additionally, AI enhances comprehension by highlighting patterns and trends in judicial decisions, helping students draw connections across multiple legal domains.[27] Likewise, AI democratises access to comprehensive legal research, making high-quality materials more accessible to students in underfunded or remote institutions.[28]

However, AI faces several challenges, including superficial understanding, as it relies on pattern recognition and statistical probabilities rather than contextual comprehension.[29] Legal interpretation requires nuanced reasoning, informed by principles, historical context, and ethical considerations,[30] skills that AI lacks. Moreover, over-reliance on AI tools may discourage deep engagement with legal texts, resulting in superficial knowledge and hindering critical thinking amongst students.[31] Similarly, bias in training data can lead to

24 SM Biresaw & AU Saste 'The impacts of artificial intelligence on research in the legal profession' (2021) 5 *International Journal of Law and Society* 53-65.

25 LexisNexis 'LexisNexis launches Lexis+ AI, a generative AI solution with hallucination-free linked legal citations' https://www.lexisnexis.com/community/pressroom/b/news/posts/lexisnexis-launches-lexis-ai-a-generative-ai-solution-with-hallucination-free-linked-legal-citations?srsltid=AfmBOopLQC2v3lEzy8ezCwzyAYfYRfoTjSja0v1bgV_rSjUnz_TQUIDv%20 (accessed 15 January 2025).

26 As above.

27 S Greenstein 'Preserving the rule of law in the era of artificial intelligence (AI)' (2022) *Artificial Intelligence and Law* 291.

28 Simshaw (n 20).

29 O Ali and others 'The effects of artificial intelligence applications in educational settings: Challenges and strategies' (2024) *Technological Forecasting and Social Change* 1-18.

30 S Baer 'Speaking law: Towards a nuanced analysis of "cases"' (2017) 18 *German Law Journal* 272.

31 C Zhai and others 'The effects of over-reliance on AI dialogue systems on students' cognitive abilities: a systematic review' (2024) *Smart Learning Environments* 1-37.

skewed outputs, particularly affecting students in the Global South.[32] AI systems are prone to errors in complex interpretation,[33] misinterpreting ambiguous clauses or failing to account for historical context. As a result, ethical considerations emerge, prompting questions about integrity and accountability.

Therefore, while AI enhances efficiency in legal research, its limitations require a balanced approach in teaching methods. Students should be trained to cross-check AI outputs against primary sources, ensuring deep engagement with legal texts.[34] Assignments could require students to critically evaluate AI-derived research, emphasising the importance of human judgment in interpreting the law. Moreover, educators should advocate for inclusive AI training datasets that reflect diverse legal systems and contexts,[35] especially those of the Global South.

2.4 AI-assisted peer review

AI tools are increasingly used to assist in peer review processes,[36] helping students refine their legal writing and critical thinking. By analysing written work for grammatical accuracy, coherence, and argumentative strength, tools like Grammarly provide instant and detailed feedback. AI offers several advantages, including enhanced writing skills by highlighting structural and linguistic issues, enabling students to make real-time improvements.[37] It also expedites the peer review process, allowing educators and students to focus on substantive content rather than technical errors. Additionally, when used judiciously, AI can encourage students to reflect on their writing and reasoning, reinforcing key legal concepts.

However, AI faces several challenges, including superficial analysis, as it excels at identifying technical flaws but struggles with context-specific

32 As above.
33 D Babushkina 'Are we justified attributing a mistake in diagnosis to an AI diagnostic system?' (2023) *AI and Ethics* 567.
34 Ali & others (n 29).
35 RA Shams 'AI and the quest for diversity and inclusion: a systematic literature review' (2015) *AI and Ethics*.
36 M Khalifa & M Albadawy 'Using artificial intelligence in academic writing and research: An essential productivity tool' (2024) *Computer Methods and Programs in Biomedicine Update*.
37 As above.

critiques essential for legal argumentation.[38] Subtle nuances in statutory interpretation or persuasive rhetoric may be overlooked. Additionally, there is a risk of over-reliance, where students may depend heavily on AI,[39] neglecting the development of independent analytical skills, which are crucial in legal education. Furthermore, representation gaps may arise if AI systems are trained predominantly on data from the Global North,[40] failing to account for linguistic and legal differences in South African or other Global South contexts, leading to inaccuracies in feedback or the misapplication of foreign legal norms.

2.5 Broader linguistic, interpretive and ethical challenges

Language is central to law, with statutes, contracts, and case law requiring interpretation deeply rooted in historical and social contexts.[41] Despite its importance to legal education, AI often fails to grasp the nuance, intent, and context of legal language, limiting its effectiveness in legal interpretation.[42] Although generative AI has advanced in processing legal texts, it often struggles with the subtleties of legal language due to its reliance on pattern recognition. In *Parker*, the plaintiff's legal team used generative AI for research and submitted entirely fictitious case law, exposing AI's inability to verify or contextualise outputs against authoritative legal sources.[43] Interpretation requires an understanding that transcends textual analysis encompassing the application of human judgment, ethical considerations, and awareness of socio-political implications.[44] Interpretation requires more than textual analysis as it depends on human judgment, ethics, and socio-political insight, which AI, despite its speed and efficiency, cannot replicate. Consequently,

38 A Zafar 'Balancing the scale: navigating ethical and practical challenges of artificial intelligence (AI) integration in legal practices' (2024) *Discover Artificial Intelligence*.
39 Zhai & others (n 38).
40 CT Okolo and others 'Responsible AI in Africa – challenges and opportunities' in DO Eke and others (eds) *Responsible AI in Africa* (2023) 35-64.
41 T Endicott 'Law and language' 21 December 2021, https://plato.stanford.edu/entries/law-language/ (accessed 16 January 2025).
42 DU Socol de la Osa & N Remolina 'Artificial intelligence at the bench: Legal and ethical challenges of informing – or misinforming – judicial decision-making through generative AI' (2024) *Data & Policy* 2-24.
43 *Parker* (n 8) para 86-87.
44 C McCrudden 'Human dignity and judicial interpretation of human rights' (2008) 19 *European Journal of International Law* 655.

their outputs can appear superficially accurate while misrepresenting the foundational legal principles or intent behind a text. In *Parker*, the plaintiff's attorneys submitted AI-generated legal citations that were later found to be entirely fictitious, highlighting the serious professional and ethical risks of relying on misleading AI outputs.[45]

AI's unparalleled efficiency in processing large datasets and legal documents offers significant advantages, enabling students and professionals to access insights quickly. However, this efficiency can inadvertently discourage deep engagement with legal texts. For instance, if AI systems provide ready-made analyses, students may skip the laborious process of manually dissecting case law – a process critical for developing nuanced legal reasoning. While tools like Lexis+ AI are transformative, they also amplify the risk of students becoming passive consumers of legal information rather than active interpreters. This dynamic may result in a legal workforce that prioritises speed over depth, potentially eroding the intellectual rigor traditionally associated with the legal profession. To address this, legal curricula should incorporate critical engagement tasks like assessing, verifying, and critiquing AI-generated outputs to strengthen analytical reasoning and independent legal interpretation.

Lastly, AI's role in legal pedagogy introduces pressing ethical considerations. The opacity of AI algorithms raises questions about accountability in legal education. If a student relies on AI-generated legal research that proves incorrect, who bears responsibility? In addition to this, over-reliance on AI tools could exacerbate existing inequities, particularly in under-resourced regions where access to AI technology is limited. This creates a dichotomy where students with access to cutting-edge AI tools are better equipped, further marginalising those without such resources. AI tools are transforming legal education, moving from traditional, dialogical methods like the Socratic approach to personalised, tech-driven learning. In South Africa, the University of Johannesburg employs technologies like virtual courtroom simulations to refine procedural and advocacy skills in low-risk settings, linking theory to practice.[46]

45 *Parker* (n 8) para 86-87.

46 University of Johannesburg 'A first in Africa – UJ set to transform legal education with a virtual reality courtroom' https://news.uj.ac.za/news/a-first-in-africa-uj-

However, despite AI's growing presence in legal education, many South African curricula overlook its ethical, cultural, and legal complexities.[47] Many law faculties still lack courses on AI ethics, algorithmic bias, and machine learning, leaving graduates unprepared to critically address issues like digital discrimination, data privacy risks, and opaque automated decision-making. In *Parker*, legal counsel relied on AI-generated case law without verifying its validity, exposing both professional oversight and the lack of doctrinal and ethical safeguards in AI-assisted legal research.[48] Such incidents reveal AI's inability to replicate human legal judgment, which requires interpreting ambiguity, balancing interests, and considering moral and cultural contexts. Over-reliance on AI risks producing outputs that are legally coherent but lack nuance, empathy, and socio-legal insight.

3 The transformative impact of AI on legal practice

AI is transforming legal practice by enhancing efficiency, accuracy, and accessibility.[49] It has transformed legal research, document drafting, predictive analytics, and client advisories.[50] Tools like Lexis+ AI enable quick handling of vast legal information,[51] reducing time on labour-intensive tasks and improving legal work quality. However, challenges include ethical implications, potential over-reliance, and unauthorised legal practice complexities. Legal practitioners must critically assess AI outputs, as AI lacks the contextual understanding and interpretive nuance needed to navigate historical jurisprudence, cultural norms, and jurisdictional differences that shape legal meaning. Additionally,

set-to-transform-legal-education-with-a-virtual-reality-courtroom/ (accessed 15 January 2025).

47 S Cross & J Feldman 'Artificial intelligence in education: Considerations for South African schooling' (2025) *Journal of Education*.

48 *Parker* (n 8) para 86-87.

49 BU Ogoniba 'AI and access to justice: Improving legal services and equality' (2023) *Nigerian Bar Journal* 54-67.

50 C Brooks and others 'Artificial intelligence in the legal sector: Pressures and challenges of transformation' (2020) *Cambridge Journal of Regions, Economy and Society* 135.

51 LexisNexis 'LexisNexis launches Lexis+ AI, a generative AI solution with hallucination-free linked legal citations' https://www.lexisnexis.com/community/pressroom/b/news/posts/lexisnexis-launches-lexis-ai-a-generative-ai-solution-with-hallucination-free-linked-legal-citations?srsltid=AfmBOopLQC2v3lEzy8ezCwzyAYfYRfoTjSja0v1bgV_rSjUnz_TQUIDv%20 (accessed 15 January 2025).

AI use raises concerns about transparency, accountability, and systemic biases, particularly in the Global South, where training data often lacks representation.

This section explores AI's transformative impact on legal practice, focusing on three critical areas of the advantages and limitations of AI in legal research and analytics as illustrated by cases like *Mavundla v MEC: Department of Co-Operative Government and Traditional Affairs KwaZulu-Natal and Others* (*Mavundla*),[52] and *Parker*.[53] This section examines AI's role in continuous legal education, balancing technological proficiency with ethical practice, and addressing inclusivity, accessibility, bias, unauthorised practice, and equitable application of legal technologies. By engaging with these dimensions, the analysis delves into AI's dual-edged nature in legal practice, enhancing the profession while posing ethical, practical, and regulatory challenges. The discussion draws on judicial perspectives and recent academic insights to provide a balanced view of AI's impact, ensuring its integration aligns with justice, equity, and professional integrity.

3.1 AI for legal research and analytics

AI tools like ROSS Intelligence,[54] and Lexis+ AI,[55] have transformed legal research by using machine learning and natural language processing to quickly process large data volumes. They offer predictive analytics, identify case law patterns, and suggest relevant precedents, significantly reducing research time.[56] AI systems offer significant advantages in legal practice. They handle massive datasets at unparalleled speeds, enhancing efficiency and accuracy,[57] thus allowing practitioners to focus on higher-order analysis. This boosts productivity and enables quicker responses

52 2025 (2) ZAKZPHC.
53 *Parker* (n 8).
54 Ross 'A visual guide to AI' https://www.rossintelligence.com/what-is-ai (accessed 16 January 2025).
55 LexisNexis 'LexisNexis launches Lexis+ AI, a generative AI solution with hallucination-free linked legal citations' https://www.lexisnexis.com/community/pressroom/b/news/posts/lexisnexis-launches-lexis-ai-a-generative-ai-solution-with-hallucination-free-linked-legal-citations?srsltid=AfmBOopLQC2v3lEzy8ezCwzyAYfYRfoTjSja0v1bgV_rSjUnz_TQUIDv%20 (accessed 15 January 2025).
56 C Kerdvibulvech 'Big data and AI-driven evidence analysis: a global perspective on citation trends, accessibility, and future research in legal applications' (2024) *Journal of Big Data*.
57 As above.

to client needs. Additionally, AI tools identify patterns and connections across cases, providing enhanced insights that facilitate a deeper understanding of trends and help predict outcomes, particularly in areas like contract review and risk assessment.[58]

However, AI systems, while efficient, may lack the contextual understanding needed for nuanced legal interpretation, especially in constitutional or statutory matters. Moreover, over-reliance on AI tools can diminish critical engagement with legal texts, potentially reducing analytical rigor. Besides, the lack of Global South representation in training data can lead to biases, misinterpreting or overlooking jurisdiction-specific nuances such as those in South African legal frameworks.

In *Parker*,[59] the court emphasised the risks of delegating legal research or document preparation without proper oversight. The judgment highlighted the need for legal practitioners to rigorously engage with AI-generated research to ensure its accuracy and relevance.[60] While AI tools can produce technically accurate outputs, their inability to apply legal judgment poses a significant risk. Similarly, legal practitioners risk over-reliance on AI, potentially leading to erroneous advice if the underlying data or algorithms are biased or incomplete. Ethical dilemmas also arise when AI-generated outputs are used without adequate attribution or verification, blurring the lines between technological assistance and unauthorised practice.

3.2 Continuous legal education and professional development

As AI becomes integral to modern legal practice, continuous education is crucial for lawyers to stay proficient in emerging technologies. Institutions must prioritise AI literacy alongside traditional legal skills to prepare practitioners for the evolving profession. AI workshops and lifelong learning programs help legal professionals stay updated on technological advancements, ensuring they remain competitive in the job market. Training in AI tools allows lawyers to streamline workflows,

58 As above.
59 *Parker* (n 8) para 88-90.
60 *Parker* (n 8) para 90.

such as automating document review or employing predictive tools for case strategy, freeing up time for strategic and interpersonal tasks.

However, challenges include disparity in access, as not all legal professionals or institutions have equal access to AI resources and training. Smaller firms and rural practitioners may struggle to integrate AI, exacerbating existing inequalities. Similarly, ethical concerns with AI in continuous education demand careful consideration, especially regarding blurred accountability if AI outputs are flawed or biased. Moreover, resistance to change is common among legal professionals due to a lack of understanding or preference for traditional methods,[61] highlighting the need for targeted education on AI's benefits and limitations.

3.3 Inclusivity and accessibility

AI can make legal education and practice more inclusive by breaking down barriers to entry.[62] AI-driven platforms democratise access to legal information, enabling underrepresented groups to engage with the profession.[63] Additionally, virtual platforms and AI-powered legal tools bridge geographical and financial barriers,[64] enabling students and professionals from underrepresented regions to access high-quality resources.[65] By lowering costs and expanding access to legal education resources, AI fosters diversity in the legal profession, ensuring broader representation in law.

However, challenges include the digital divide, where unequal distribution of technological resources creates barriers for underprivileged communities.[66] Without access to AI-driven tools, students in rural or economically disadvantaged areas may fall further behind. Additionally, cultural bias in AI development, which predominantly reflects Global North perspectives, risks marginalising the experiences and needs

61 K Michalakopoulou and others 'Barriers and opportunities to innovation for legal service firms: A thematic analysis-based contextualization' (2021) *Production Planning & Control* 604.
62 Ogoniba (n 49).
63 Simshaw (n 20).
64 As above.
65 N Pickering 'Enabling equality of access in higher education for underrepresented groups: a realist 'small step' approach to evaluating widening participation' (2021) *Research in Post-Compulsory Education* 111.
66 Varsik & Vosberg (n 9).

of the Global South, thereby reinforcing existing disparities and undermining inclusivity.[67] Furthermore, AI's ability to provide legal advice to underserved populations could blur the distinction between legal information and legal representation, raising questions about accountability and unauthorised practice of law. According to section 33 of the Legal Practice Act,[68] 'only practicing legal practitioners admitted and enrolled under the Act may appear in court or prepare legal documents for a fee.'

4 Transparency, accountability and ethical considerations

Legal professionals must rigorously examine AI-generated outputs to ensure they meet standards of transparency and accountability.[69] Unauthorised AI use, without proper legal oversight, can disproportionately impact vulnerable communities, especially in the Global South, where datasets may lack regional representation.[70] Additionally, the recent judgment of *Mavundla*,[71] reinforces the importance of procedural rigor and accountability in legal processes, and illustrates the dangers of allowing inadequately prepared individuals to handle complex legal matters. This concern mirrors the risks of AI performing tasks traditionally reserved for qualified legal professionals. AI's ability to generate legal advice or draft documents may blur the line between authorised and unauthorised practice, especially when non-lawyers or automated systems are involved. Similarly, when using AI tools for legal research, practitioners must ensure the accuracy and transparency of their outputs. AI-generated legal advice or research must undergo rigorous verification to avoid reliance on incomplete or misleading information. The *Mavundla* case highlights the consequences of failing to uphold these standards, as procedural lapses and inaccurate submissions can undermine the credibility of both the practitioner and the legal process.

67 As above.
68 Act 20 of 2014.
69 Zafar (n 38).
70 S Firmino 'Navigating artificial intelligence from a human rights lens: Impacts, tradeoffs and regulations for groups in vulnerable situations' July 2023, https://www.graduateinstitute.ch/sites/internet/files/2023-09/AI%26HR%20Final%20Report%20-%20Publication.pdf (accessed 23 January 2024).
71 *Mavundla* para 48.

Additionally, the judgment in *Mavundla*,[72] raised concerns about the ethical responsibilities of legal practitioners, particularly the risks of delegating critical tasks to inexperienced or unqualified individuals, such as Candidate Legal Practitioners without proper oversight. This principle applies directly to AI in legal practice. Legal practitioners must rigorously examine AI outputs to ensure they meet professional and ethical standards. Unsupervised or uncritical use of AI-generated advice could lead to flawed legal arguments or decisions, raising accountability questions, especially if AI introduces systemic biases or inaccuracies. In the context of legal practice, 'AI algorithms often function as "black boxes", providing outputs without explaining their reasoning or methodology.'[73] This opacity can lead to significant challenges, especially when AI is used to generate evidence or inform case strategy. Practitioners must ensure the reasoning behind AI-generated outputs is clear and defensible. The court's insistence in *Mavundla*,[74] on the professional duties of a legal practitioner aligns with the necessity of cross-verifying AI-generated research or advice. Practitioners must ensure that AI tools provide accurate and contextually relevant insights, especially in jurisdictions like South Africa, where legal systems may not be fully represented in global AI training datasets.

Practitioners should adopt guidelines similar to those emphasised in *Mavundla*,[75] where ethical lapses faced judicial scrutiny. In the context of AI, this means implementing strict protocols for AI use in legal research, ensuring compliance with professional standards, and addressing potential biases in AI-generated outputs. Legal practitioners must remain actively engaged in the decision-making process, even when delegating tasks. Similarly, when using AI, practitioners should maintain a central role in analysing and applying AI outputs, ensuring they align with legal principles and the specific needs of the case. By drawing parallels between the procedural and ethical lapses highlighted in *Mavundla*, and the risks associated with AI, this analysis emphasises the importance of integrating AI responsibly while maintaining the integrity and professionalism of the legal field.

72 As above.
73 V Hassija 'Interpreting black-box models: A review on explainable artificial intelligence' (2024) *Cognitive Computation* 45-74.
74 *Mavundla* (n 52) para 37.
75 As above para 51.

5 The transformative impact of AI on curriculum development

Through leveraging AI's capabilities in predictive analytics, personalised learning, and ethical content integration, legal curricula can evolve to meet the demands of the rapidly changing legal landscape. AI-driven tools enable institutions to anticipate emerging legal trends, customise educational experiences, and address skills gaps,[76] fostering a more agile and relevant approach to preparing students for modern legal practice. However, this transformation raises critical challenges. While AI enhances efficiency and adaptability, it risks perpetuating systemic biases, particularly when training data lacks representation from underrepresented regions like the Global South.[77] Additionally, ethical concerns about transparency, accountability, and the human-centric nature of education further complicate AI integration into legal curricula. Questions arise about whether AI can adequately complement traditional pedagogical values, which emphasise critical thinking, interpretive skills, and contextual understanding – qualities central to legal education.

This section delves into two core areas – predictive legal curriculum planning and the integration of ethical AI into legal education. By critically analysing AI's dual role as an innovation catalyst and a potential disruptor of foundational educational principles, the discussion highlights the need for a balanced approach that combines technological advancement with inclusivity, ethics, and human oversight.

5.1 Predictive legal education planning

AI has the capacity to transform legal curriculum planning by forecasting trends in legal practice and identifying emerging areas of importance.[78] Through machine learning and data analytics, 'AI systems can analyse vast amounts of information, including legislative changes, court rulings, and global legal trends, helping institutions design forward-looking curricula.'[79] AI tools enable institutions to anticipate changes in the legal

76 Ali & others (n 29).
77 LA Celi and others 'Sources of bias in artificial intelligence that perpetuate healthcare disparities – A global review' (2022) *PLOS Digit Health* 1-19.
78 Brooks & others (n 50).
79 Kerdvibulvech (n 56).

field and incorporate them into curricula. For example, as laws governing AI and data privacy evolve, AI can analyse legislative trends to ensure students are trained in these cutting-edge areas. Through identifying gaps in the current legal education and predicting future needs, AI can tailor curricula to address skills shortages, ensuring that students are equipped to meet the demands of the modern legal profession. Moreover, AI can rapidly adapt curricula to address individual learning needs and incorporate AI-driven simulations to teach complex litigation or ethical dilemmas that equips students with real-world problem-solving skills. Examples from institutions like Michigan Virtual demonstrate how AI tools can individualise learning paths and tailor resources to meet specific educational objectives.[80] Incorporating such systems in South Africa's legal education could foster targeted learning experiences, addressing disparities in access and quality.

However, challenges include over-reliance on predictive data, as AI may struggle to account for the unpredictable nature of legal and societal changes. This reliance risks creating a rigid curricula that fails to accommodate unanticipated developments. Bias in data is another issue, as AI training data may predominantly reflect the legal systems of the Global North,[81] leading to curricula that prioritise foreign legal norms over region-specific issues. In the South African context, this could perpetuate a lack of focus on customary law or socio-economic challenges unique to the country. Additionally, developing and maintaining AI-driven curriculum tools may be cost-prohibitive for under-resourced institutions, exacerbating existing disparities in legal education.

5.2 Integrating ethical AI into the curriculum

Including AI ethics in legal education is crucial for preparing students to navigate the complex interplay between technology and law. This involves equipping students with the knowledge to critically assess the legal, social, and moral implications of AI applications. Promoting ethical awareness is also important for legal professionals, who must understand issues

80 N McGehee 'AI in education: Student usage in online learning' 21 June 2024, https://michiganvirtual.org/research/publications/ai-in-education-student-usage-in-online-learning/ (accessed 17 January 2025).

81 M Hanna & others 'Ethical and bias considerations in artificial intelligence (ai)/ machine learning' (2025) *Modern Pathology*.

such as algorithmic bias, data privacy, and automated decision-making. Integrating these topics into the curriculum is therefore essential, as it ensures students develop a well-defined and robust ethical framework for practical AI applications. For example, modules on AI ethics can examine real-world scenarios, such as biases in predictive policing algorithms or challenges in regulating autonomous vehicles. Teaching students about the limitations and risks of AI, including its potential to perpetuate systemic biases, encourages a culture of accountability in legal practice. Additionally, the inclusion of AI ethics fosters interdisciplinary learning, encouraging collaboration between law and other fields, such as computer science and ethics,[82] thus prompting students to approach problems from multiple perspectives.

However, challenges include the complexity of ethical issues, as topics like algorithmic bias and automated decision-making require deep engagement with technical, philosophical, and legal concepts. Teaching these subjects effectively demands significant resources and expertise. Furthermore, ethical concerns related to AI often focus on issues prevalent in developed countries,[83] potentially overlooking challenges unique to South Africa, such as socio-economic disparities and the lack of digital infrastructure in rural areas. Ethical curricula often draws on Global North examples,[84] overlooking unique challenges in regions like the Global South, where digital divides and socio-economic disparities influence AI's impact. Integrating AI ethics into the curriculum may also face resistance from institutions or educators accustomed to traditional methods of teaching law.

5.3 Balancing innovation with tradition

The transformative impact of AI on curriculum development requires balancing innovation with the preservation of core legal principles. While AI tools offer opportunities for forward-looking education, they must complement, not replace, traditional pedagogical approaches. AI

82 A Balan 'Examining the ethical and sustainability challenges of legal education's AI revolution' (2024) *International Journal of the Legal Profession* 323.

83 K Wakunuma and others 'Socio-ethical implications of using AI in accelerating SDG3 in least developed countries' (2020) *Journal of Responsible Technology*.

84 R McGregor & MS Park 'Towards a deconstructed curriculum: Rethinking higher education in the Global North' (2018) *Teaching in Higher Education* 332.

can assist in curriculum development, but this must not overshadow the importance of critical thinking, legal reasoning, and ethical judgment – skills central to the legal profession. Efforts must be made to include diverse perspectives in AI training data,[85] and curriculum content ensuring students are exposed to a wide range of legal systems, including customary law and issues affecting the Global South. Institutions should collaborate with legal practitioners, technologists, and policymakers to design curricula that reflect the realities of practice while addressing the ethical challenges posed by AI.[86] Additionally, AI tools must supplement, not replace, human judgment. Involving educators in curriculum design ensures that AI outputs align with pedagogical goals and legal standards.

6 Ethical considerations of AI in legal education

The increasing integration of AI into legal education raises critical ethical concerns that must be addressed to ensure its equitable, accountable, and human-centric application. While AI offers transformative opportunities for efficiency, personalisation, and innovation, it also introduces risks related to bias, transparency, over-reliance, and regulatory compliance. In the legal field, where fairness and equality are paramount,[87] the risks of perpetuating biases, eroding transparency, and marginalising human judgment cannot be overlooked. This section examines these challenges in detail, analysing the implications of bias and fairness, the lack of accountability and transparency, and the limitations arising from AI's inability to replicate human judgment and ethics.

6.1 Ethical implications of AI in pedagogy and practice

AI systems, such as adaptive learning platforms and generative AI models like Lexis+, have enhanced efficiency by automating repetitive tasks, providing personalised feedback, and expediting legal research.[88] However, these efficiencies must be balanced with concerns about their ethical use. AI tools often reflect the biases present in their training

85 D Zowghi & M Bano 'AI for all: Diversity and inclusion in AI' (2024) *AI and Ethics* 873.
86 Balan (n 82).
87 Zafar (n 38).
88 Rashid & Kausik (n 1).

data.[89] For instance, datasets predominantly sourced from Global North jurisdictions may lack representation of customary laws, regional statutes, or socio-economic contexts relevant to South Africa. In legal education and practice, this issue has far-reaching consequences for fairness, a fundamental principle of justice.[90] Biased AI systems can lead to unjust outcomes,[91] which is particularly concerning in legal education, where students learn to uphold the principles of equality and justice. Failing to address these issues risks undermining the credibility and fairness of AI-enhanced educational tools. These biases can lead to disproportionate impact on underrepresented communities, perpetuating existing inequalities and injustices in legal systems.

Addressing these challenges require deliberate effort to diversify training data and ensure that AI systems are inclusive of various legal systems and social contexts. Academic discussions should emphasise the importance of algorithmic audits and stakeholder involvement to identify and correct biases in AI systems used for legal education. Moreover, legal education institutions must incorporate ethical training into their curricula. Teaching students to critically evaluate AI outputs, understand algorithmic biases, and recognise the limitations of AI systems is essential for ensuring responsible use in practice. Similarly, collaborative human-AI approaches, where educators guide the use of AI tools, can help balance efficiency with ethical rigor.[92]

7 Regulatory and policy implications

AI's role in education requires robust regulatory frameworks to address accountability, data privacy, and ethical concerns. In South Africa, the Protection of Personal Information Act (POPIA Act),[93] provides a foundation for regulating data collection and usage, but AI's rapid evolution requires more specific policies tailored for educational applications. AI systems in legal education and practice often rely on vast

89 Hanna & others (n 81).
90 J Rawls 'I. Justice as Fairness' (1957) *The Journal of Philosophy* 164.
91 PS Varsha 'How can we manage biases in artificial intelligence systems – A systematic literature review' (2023) *International Journal of Information Management Data Insights* 1-9.
92 Khalifa & Albadawy (n 36).
93 Act 4 of 2013 sec 3(1).

amounts of student data for personalisation and analysis.[94] The POPIA Act regulates the protection of such data,[95] but compliance challenges arise when AI tools are developed or hosted outside South Africa, where different data privacy standards apply. Institutions must therefore implement strong data governance policies, including anonymisation of student data and clear consent protocols, to safeguard privacy and ensure compliance with the POPIA Act. Additionally, AI tools should provide clear explanations for their outputs.[96] The complexity and opacity of AI algorithms, particularly those based on deep learning, present significant challenges in ensuring accountability and transparency.[97] These issues undermine trust in AI systems and hinder their effective integration into legal education. Many AI systems operate as 'black boxes', producing outputs without providing clear explanations of how its decisions are reached.[98] This lack of transparency makes it difficult for legal educators and students to assess the reliability and validity of AI-generated advice or research. For example, AI tools like Lexis+ AI may generate recommendations based on patterns in case law, but without understanding the algorithm's reasoning, users cannot ensure that the conclusions are legally sound. Legal educators and students need to understand how AI algorithms generate recommendations or conclusions to ensure that they are ethically sound and legally defensible. A lack of transparency in AI systems risks undermining trust and accountability, particularly in legal practice, where decisions have significant societal implications.

Additionally, when errors or biases arise in AI outputs, identifying responsibility becomes complex. Should accountability lie with the developers of the tools or educators using the tools or the institutions deploying them? This ambiguity is particularly problematic in legal education, where accountability is critical to fostering ethical practice. To address these concerns, AI systems must be designed with explainability

94 S Farber 'Harmonizing AI and human instruction in legal education: A case study from Israel on training future legal professionals' (2024) *International Journal of the Legal Profession* 349.
95 POPIA Act sec 2(a).
96 S Ali and others 'Explainable Artificial Intelligence (XAI): What we know and what is left to attain Trustworthy Artificial Intelligence' (2023) 99 *Information Fusion* 1-52.
97 Hassija (n 73).
98 As above.

in mind.[99] Legal educators and students should be able to trace the reasoning behind AI outputs, enabling informed decision-making and reducing the risk of unjust outcomes. Collaborative efforts between AI developers, legal professionals, and policymakers are essential for creating transparent AI systems.[100] Moreover, policies must address the unauthorised practice of law, particularly when AI systems are used to draft legal documents or provide legal advice. Regulatory bodies like the Legal Practice Council and the South African Law Reform Commission should establish guidelines that define the appropriate scope of AI use in educational and professional contexts, ensuring that AI complements rather than replaces human expertise. Collaboration between educational institutions, legal professionals, and policymakers is therefore important to create comprehensive regulations that address ethical, legal, and social implications.[101]

8 Lack of human judgment and ethical reasoning

Legal education emphasises critical thinking, ethical decision-making, and the ability to navigate complex societal issues.[102] These human-centred skills are difficult, if not impossible, for AI systems to replicate. For example, legal dilemmas often involve 'balancing competing interests',[103] considering historical context, and evaluating societal implications. However, AI which relies on statistical patterns, lacks the capacity for moral reasoning or empathy, leading to decisions that may overlook the nuances of complex cases. For instance, an AI system used to assess sentencing might rely solely on numerical data, ignoring mitigating circumstances or broader societal impacts that a human judge would consider. Furthermore, over-reliance on AI tools risks reducing legal education to a technical process, undermining the development of interpersonal skills, ethical reasoning, and empathy. These intangible

99 J Maclure 'Explainability and public reason: The argument from the limitations of the human mind' (2021) *Minds and Machines* 421.

100 H Felzmann and others 'Transparency you can trust: Transparency requirements for artificial intelligence between legal norms and contextual concerns' (2019) *Big Data & Society* 1-14.

101 As above.

102 Pinelo & Sanmartín (n 7).

103 TM Benditt 'Law and the balancing of interests' (1975) *Social Theory and Practice* 321.

skills are essential for legal professionals tasked with addressing human problems. Likewise, over-reliance on AI risks eroding critical thinking and analytical skills. Students may come to depend on AI-generated outputs for legal research or case preparation, undermining their ability to engage deeply with legal texts and principles. This overdependence could lead to complacency, with practitioners accepting AI outputs without critical scrutiny, increasing the likelihood of errors in legal reasoning.[104]

To mitigate these risks, legal education must adopt a hybrid approach that integrates AI tools while preserving the human-centric aspects of the field.[105] AI should augment, not replace, human judgment, enabling students to focus on developing critical thinking and ethical reasoning skills. Developing mechanisms for human oversight in AI applications is therefore essential to ensure that educators and legal professionals retain control over decision-making processes. In addition, encouraging interdisciplinary collaboration between law, technology, and ethics to address the multifaceted challenges posed by AI is equally significant.[106]

9 Ethical integration and the future of AI in legal education

The ethical considerations surrounding AI in legal education extend beyond immediate concerns of bias and privacy. They shape the broader goal of preparing students to navigate a legal landscape increasingly influenced by technology. Ethical AI integration requires fostering critical thinking, promoting inclusivity, and maintaining the human-centric values that underpin the legal profession.[107] To address these challenges, the integration of AI in legal education must be guided by ethical principles that prioritise fairness, accountability, and human judgment.[108] Key strategies include embedding ethical AI training in curricula. Legal education institutions should introduce courses that teach students to critically evaluate AI systems, understand their limitations, and recognise potential biases. Additionally, ethical training should include case studies highlighting the risks and benefits of AI in legal

104 Zafar (n 38).
105 As above.
106 Balan (n 82).
107 Zafar (n 38).
108 Balan (n 82).

practice,[109] fostering a deeper understanding of its societal implications. Institutions should advocate for diverse datasets and involve stakeholders from underrepresented regions to ensure that AI systems reflect a broad range of legal traditions and social contexts. Policymakers, educators, and AI developers must collaborate to establish robust frameworks for accountability, transparency, and ethical use of AI in legal education. These frameworks should address data privacy, bias mitigation, and the scope of AI's role in legal practice. Ensuring collaborative oversight is crucial. Developing mechanisms for human oversight in AI applications will ensure that educators and legal professionals retain control over decision-making processes. Furthermore, fostering interdisciplinary collaboration between law, technology, and ethics is crucial for addressing the multifaceted challenges posed by AI.[110]

The transformative impact of AI in legal education is evident across its applications in pedagogy, practice, and curriculum development. AI-driven tools enable personalised learning experiences, streamline legal research, and provide institutions with predictive insights for future curriculum planning. These innovations align legal education with the evolving demands of modern practice, ensuring students are equipped with the technological skills required to succeed in a tech-driven legal landscape. However, alongside these benefits are significant challenges. Ethical concerns, such as algorithmic bias, lack of transparency, and over-reliance on AI, highlights the risks of undermining foundational principles like fairness, accountability, and human judgment. The disparities in access to AI tools – particularly between urban and rural institutions – further emphasises the need for equitable implementation. Additionally, AI's inability to replicate the moral reasoning, empathy, and nuanced interpretation essential to legal practice necessitates careful integration to avoid diminishing the human-centric values of the profession. This chapter highlights the double-edged nature of AI in legal education. While its potential to enhance learning outcomes and improve efficiency in legal education is undeniable, its implementation requires proactive measures that addresses ethical, practical, and systemic concerns.

109 As above.
110 As above.

To fully realise the benefits of AI while mitigating its risks, a multi-stakeholder approach is essential.[111] Law schools should invest in AI infrastructure, allocating resources to acquire AI-driven tools and build the necessary infrastructure for integration into curricula. This includes securing access to legal research platforms like Lexis+ AI and adaptive learning technologies. Moreover, developing interdisciplinary programs that combine AI, ethics, and law will equip students with the skills to navigate the intersection of technology and legal practice.[112] As well, addressing access inequalities is crucial and institutions must ensure equitable access to AI tools, particularly for students in under-resourced areas, through partnerships with government and private organisations for funding and technical support. Additionally, policymakers should establish ethical AI guidelines to define parameters for AI use in legal education and address issues such as data privacy, algorithmic accountability, and bias mitigation. For South Africa, this could involve amending the POPIA Act to include specific provisions for educational AI systems.

Furthermore, promoting inclusivity in AI development by requiring the inclusion of diverse datasets in AI training will ensure that AI tools reflect the socio-legal contexts of underrepresented regions, including the Global South. Encouraging collaboration between educational institutions, legal practitioners, and technology developers will align AI integration with societal and professional needs. Educators should adopt AI-driven tools in teaching, leveraging virtual simulations for experiential learning and adaptive platforms for personalised instruction. Additionally, by focusing on ethical awareness, educators should use case studies and real-world examples to help students critically evaluate AI applications in law. Finally, preserving human-centric values is essential. Educators must prioritise the development of critical thinking, ethical reasoning, and empathy, ensuring that technology complements rather than replaces these vital skills.

111 C Li 'Responsible AI governance can be achieved through multistakeholder collaboration' 14 November 2023, https://www.weforum.org/stories/2023/11/ai-development-multistakeholder-governance/ (accessed 19 January 2025).

112 Farber (n 94) & Balan (n 82).

10 Conclusion

The integration of AI into legal education offers transformative opportunities to enhance pedagogy, practice, and curriculum development, preparing future legal professionals to navigate an increasingly technology-driven legal landscape. AI's capabilities, including personalised learning, adaptive assessments, predictive research tools, and dynamic curriculum planning, promises to modernise traditional educational models, making them more efficient and accessible. However, this transformation also raises significant ethical, social, and practical challenges that require deliberate and equitable solutions. Key concerns include the perpetuation of systemic biases due to skewed datasets, the opacity of AI algorithms which undermines transparency and accountability, and the potential erosion of critical human values such as empathy, ethical reasoning, and contextual judgment which are important in legal education.

To address the challenges AI brings to legal education, this chapter proposes an ethically grounded framework based on transparency, inclusivity, and interdisciplinary collaboration. Responsible integration requires regular algorithm audits, inclusion of Global South legal perspectives in training data, and sustained cooperation among educators, technologists, and policymakers. While AI supports personalised learning, faster research, and adaptive curriculum design, it may also dehumanise education, reinforce bias, and weaken critical thinking and ethical judgment. Its limitations in interpreting culturally and historically nuanced legal language highlight the need to preserve human-led instruction. Combining AI's capabilities with strong foundations in legal reasoning and ethics will help South African institutions remain innovative, globally relevant, and socially responsive. This approach ensures that future lawyers are not only proficient in using AI but also guided by justice, equity, and professional integrity.