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COLUMN EDITOR'S NOTE

This JLA column posits that academic libraries and their services are dominated by information technologies, and that the success of librarians and professional staff is contingent on their ability to thrive in this technology-rich environment. The column will appear in odd-numbered issues of the journal, and it will delve into all aspects of library-related information technologies and knowledge management used to connect users to information resources, including data preparation, discovery, delivery, and preservation.

From Ethics to Execution: The Role of Academic Librarians in Artificial Intelligence (AI) Policy-Making at Colleges and Universities

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ABSTRACT

This paper highlights the importance of involving academic librarians in the development of ethical AI policies. The Academic Librarian Framework for Ethical AI Policy Development (ALF Framework) is introduced, recognizing librarians' unique skills and expertise. The paper discusses the benefits of their involvement, including expertise in information ethics and privacy, practical experience with AI tools, and collaborations. It also addresses challenges, such as limited awareness, institutional resistance, resource constraints, interdisciplinary collaboration, and evolving AI technologies, offering practical solutions. By actively involving librarians, institutions can develop comprehensive and ethical AI policies that prioritize social responsibility and respect for human rights.



KEYWORDS

AI; machine learning;
privacy; bias; academic
librarians; policy
development

Background

The development of ethical artificial intelligence (AI) policies

The development of ethical Artificial Intelligence (AI) policies has been an ongoing discussion since the early days of artificial intelligence, “and the current media hype about AI is not the first ever about advanced technologies” (Coeckelbergh, 2020, 80). The importance of ethical considerations in the development and use of AI technologies has been emphasized by early pioneers such as David Hilbert, John McCarthy, Ray

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Kurzweil, and Bill Joy. As AI continues to advance, there is an increasing need to consider the ethical implications of this technology. It has become clear that AI algorithms can be biased (Noble, 2018), and AI systems can be used to invade people's privacy (Renieris, 2023). According to Bill Joy, AI policies must be created because "the threat posed by artificial intelligence has less to do with destructive power than with the heightened capacity for individual mischief" (Williams, 2001, 64). "AI is not only about technology but also about what humans do with it, how they use it, how they perceive and experience it, and how they embed it in wider social-technical environments" (Coeckelbergh, 2020, 80). Furthermore, "AI is experiencing a renewed prominence in the public consciousness and public life, demanding policy responses beyond those focused on research and innovation" (Brookfield Institute, 2018, 2).

In response to these concerns, there has been a growing movement toward ethical AI policy development. Darrell West (2019), West and Allen (2020), and Byron Reese (2020) have argued that ethical considerations should be at the forefront of AI policy development and that policymakers should work collaboratively to create guidelines and regulations that address issues such as bias (Broussard, 2019, 2023), implicit bias (Nayyer & Rodriguez, 2022), transparency (O'Neil, 2017; Broussard, 2019, 2023), and privacy (Renieris, 2023). Academic librarians, with their expertise in information ethics, privacy, and intellectual freedom, have a valuable role to play in these policy discussions.

The role of academic librarians in AI policy discussions

Kennedy (2019), the Association of Research Libraries' executive director, has also emphasized the importance of considering the ethical implications of AI in library contexts. She suggests research libraries take a human-centered approach to AI development and usage by involving diverse stakeholders in the development process, prioritizing transparency and accountability in designing and implementing AI technologies. In 2020, Scout Calvert and Mary Lee Kennedy shared, "Emerging technologies [such as artificial intelligence tools] carry policy and regulatory implications. Several national and international initiatives, specifically focused on ethics, are already established. In a later publication titled "The Rise of AI: Implications and Applications of Artificial Intelligence in Academic Libraries," Sandy Hervieux and Amanda Wheatley (2022) emphasized the ongoing expansion of discussions around AI ethics, bias, and privacy. They asserted that libraries will play a crucial role in this discourse by making informed decisions and positioning themselves as leaders in addressing these important considerations.

Incorporating academic librarians into these discussions within groups creating policy on artificial intelligence ethics in higher education is critical to ensuring that AI technologies are developed and used to promote social responsibility, respect for human rights, and the common good. Academic librarians' expertise in information ethics, privacy, and intellectual freedom can provide unique and valuable insights and perspectives that are necessary for the development of comprehensive and ethical AI policies. By working collaboratively with researchers, policymakers, and other stakeholders, academic librarians can contribute to creating more ethical and responsible AI policies for the benefit of the academic community and society as a whole.

This paper examines the role of academic librarians in contributing to the development of ethical AI policies. It presents the Academic Librarian Framework for Ethical AI Policy Development (ALF Framework) as a tool to guide their involvement. The paper argues that incorporating academic librarians into AI policy discussions is essential to ensure the responsible and ethical development and use of AI technologies in academic institutions. It highlights their expertise in information ethics, privacy, and intellectual freedom, as well as their practical experience with AI initiatives. The paper also addresses challenges that may arise during implementation and provides practical solutions.

In the next section, I will briefly share an overview of the importance of ethical AI usage in academic institutions.

Overview of the importance of ethical AI usage in academic institutions

AI has the potential to revolutionize various aspects of academic institutions, ranging from research and teaching to community services and information assessment. By automating repetitive tasks, analyzing vast amounts of data, and generating insights beyond human capacity, AI-powered technologies offer immense benefits. However, these advantages must be carefully weighed against the potential risks and challenges associated with AI, such as bias, privacy breaches, and lack of accountability.

To ensure that AI technologies employed align with the values and principles of the academic community, it is crucial to incorporate ethical considerations throughout their development and use. Faculty members at academic institutions are committed to integrating social responsibility, critical thinking, diversity, equity, and inclusion into the curriculum. Ethical AI usage plays a pivotal role in achieving these objectives by promoting transparency, fairness, and unbiased application of AI technologies. Furthermore, it is essential to adhere to privacy principles, such as those outlined by the American Library Association (ALA), when developing and implementing AI technologies. The ALA's privacy principles emphasize safeguarding individuals' privacy, confidentiality, and intellectual freedom, which are fundamental values within academic librarianship (ALA Privacy Policy, 2012). By incorporating these principles, AI technologies can respect individuals' privacy rights and uphold academic values. Therefore, by combining ethical and privacy considerations, AI technologies can be developed, adopted, and utilized in a manner that aligns with the values and principles of academic institutions, ultimately fostering transparency, fairness, and respect for individuals' privacy rights.

The use of AI-powered tools in higher education holds immense potential for transforming research and teaching methodologies, but it also poses significant ethical challenges. Upholding values and principles in academic institutions necessitates ensuring ethical AI usage, which includes protecting individual rights, privacy, preventing discrimination, and avoiding manipulation. As key stakeholders, academic librarians play a vital role in promoting responsible AI development and usage within higher education. By prioritizing ethical AI usage and collaborating with diverse stakeholders, including associations like the American Library Association, academic institutions can cultivate trust, transparency, and social responsibility, thereby contributing to a more equitable and just society.

In the following section, I will provide an overview of academic librarians' practical experiences with generative AI.

Academic librarians' experiences with artificial intelligence at colleges and universities

The practical experience of academic librarians aligns with their active engagement in AI initiatives and the adoption of AI tools within academic libraries. Despite the slow uptake of AI-related technologies in many academic libraries, some institutions have recognized the potential of AI and established AI hubs or integrated AI into their services.

In Wheatley and Hervieux's (2019) environmental scan of artificial intelligence in Canadian and American academic research libraries, they highlight the growing interest and adoption of AI in libraries, driven by the potential benefits it offers for improving services, enhancing research workflows, and supporting users' information needs. The authors emphasize the need for academic librarians to actively engage with AI developments and strategically plan for its integration within their institutions.

Lawlor (2021) identifies several areas where AI technologies are being used already in academic libraries. These include user services, collections, discovery, research support, and scholarly communication. Examples of AI applications in these areas are discussed, such as chatbots for reference assistance, AI-driven recommendation systems for personalized content suggestions, and AI-powered tools for text analysis and data visualization.

Furthermore, academic librarians' involvement in AI initiatives, such as User Services, Collections, and Discovery, has been showcased in "The Rise of AI: Implications and Applications of Artificial Intelligence in Academic Libraries" by Hervieux and Wheatley (2022). This demonstrates that some academic librarians have actively embraced AI tools and technologies within their campuses, recognizing the importance of adapting to evolving technologies to enhance research workflows and meet the needs of researchers and students. Other librarians have empowered a university community through an Open Learning Pilot via an AI community workshop program (Toane et al., 2022). To meet the needs of students, librarians created an AI Lab (Dekker et al., 2022). Librarians improved machine translation literacy for international students through literacy instruction (Bowker et al., 2022). Wang et al. (2022) produced a collaborative space for AI. Hervieux and Wheatley (2022) demystified AI on their campus via a three-part workshop. Other librarians used robotic animals as a unique activity during exam week (Scherger et al., 2022).

At research institutions other librarians at used AI for collections and discovery. According to Coleman et al. (2022), they explored using machine learning to classify images and improve the accessibility of collections. Harper et al. (2022) used unsupervised machine learning to improve the discovery of theses and dissertations. Milholland and Maddalena examined how robotic process automation improved the discoverability of metadata in an institutional repository.

Librarianship needs to proactively engage with AI developments, strategically plan for AI integration, and collaborate with other units within universities. This proactive

approach enables academic librarians to position themselves at the forefront of AI instruction and research (Rysavy & Michalak, 2022), leveraging the potential impact of AI on information retrieval.

Additionally case studies such as the one by Rysavy and Michalak (2022), emphasize the practical aspects of AI tool adoption in libraries. They showcase how an academic library has integrated tools like Grammarly and Scholarcy to support for writing and evaluation of information in a library users' research workflows. This practical experience includes implementing effective marketing strategies and comprehensive training programs to maximize the benefits of these AI-powered tools.

In 2023, librarians have increasingly advocated for AI-powered tools to be integrated into library services and operations. Lo (2023) introduces the CLEAR Framework, a comprehensive approach for enhancing information literacy through effective interaction with AI language models. The framework, including the principles of Concise, Logical, Explicit, Adaptive, and Reflective, allows librarians to guide students in generating accurate AI-generated content. It emphasizes the importance of adapting information literacy instruction to the evolving AI landscape. Additionally, Cox and Tzoc (2023) explore the implications of the AI language model ChatGPT for academic libraries. ChatGPT, developed by OpenAI, utilizes deep learning techniques to generate text in response to user queries. The authors discuss the potential impact of ChatGPT on various aspects of library services and operations. They highlight its potential role in discovery and search, research assistance, reference services, teaching and learning, textbook creation, information literacy, writing and creation, plagiarism concerns, copyright issues, productivity enhancement, and equity and inclusion considerations. The authors emphasize the need for librarians to evaluate and integrate AI tools like ChatGPT into their work while also ensuring the preservation of human interactions and addressing potential biases and challenges.

In the following section, I will examine academic librarians' value in contributing to AI policy development including their expertise, practical experience, and interdisciplinary collaboration.

The value of academic librarians: expertise, practical experience, and interdisciplinary collaboration

The involvement of academic librarians in AI policy development offers a range of benefits that contribute to developing more comprehensive and ethical policies. Firstly, academic librarians bring unique perspectives and insights based on their expertise and experience in areas such as information ethics, privacy, and intellectual freedom. This enables them to provide valuable guidance on ethical research methods, data management, and usage policies, ensuring that AI technologies are developed and utilized to prioritize social responsibility, human rights, and the common good.

Secondly, academic librarians play a crucial role in identifying and addressing sources of bias in AI algorithms' training data sets. They can ensure the diversity and representativeness of data sets and help researchers employ appropriate methods to eliminate bias. This effort promotes transparency, fairness, unbiased outcomes, and accountability in AI systems.

Thirdly, academic librarians contribute to developing data management and usage policies, including AI-related ones. They actively participate in committees responsible for policy development, safeguarding individual privacy rights, respecting intellectual property, and fostering intellectual freedom. Their involvement helps establish ethical and responsible practices in the development and utilization of AI.

Furthermore, academic librarians are well-positioned to develop educational resources and training programs that enhance individuals' understanding of the ethical implications of AI. Through workshops, seminars, and online resources, they promote awareness and comprehension of algorithmic bias, data privacy, and intellectual property rights. By equipping those involved in AI policy development with a thorough understanding of ethical considerations, academic librarians facilitate informed decision-making.

By involving academic librarians in AI policy development, institutions can harness both their interdisciplinary expertise and collaborative approach. Academic librarians possess experience in collaborating with researchers, practitioners, and faculty across an array of fields. Leveraging their interdisciplinary knowledge, they can work alongside computer scientists, legal experts, and other stakeholders to develop comprehensive and inclusive approaches to AI policy. This ensures that diverse perspectives are represented in policy discussions and facilitates the development and utilization of AI technologies that prioritize social responsibility, human rights, and the common good.

The involvement of academic librarians in AI policy development leads to the formulation of more comprehensive and ethical policies. Their expertise in information ethics, privacy, and intellectual freedom, combined with their ability to collaborate across disciplines, makes them invaluable partners in shaping AI policies that align with ethical principles and societal well-being.

Academic librarians bring unique perspectives, expertise in ethical considerations, and practical experience that make them valuable contributors to ethical AI policy development. Their guidance on privacy and security, addressing bias, promoting transparency and accountability, and their interdisciplinary collaboration strengthen their contributions and ensure the development of comprehensive and inclusive AI policies. By actively engaging with AI technologies and adopting AI tools, academic librarians demonstrate their commitment to staying at the forefront of technological advancements and enhancing the research experience for their users.

Librarians possess not only practical experience with AI-powered tools but also other invaluable qualities that enable them to contribute to the development of ethical AI policy in collaboration with stakeholders on policy committees. In the following section, I discuss the Academic Librarian Framework for Ethical AI Policy Development (ALF Framework), which serves as a valuable tool that highlights the unique skill set and expertise of academic librarians who possess extensive experience in shaping ethical AI policies.

Explanation of the academic librarian framework for ethical AI policy development, or the ALF framework

The Academic Librarian Framework for Ethical AI Policy Development, or The ALF Framework recognizes the unique set of skills and expertise that academic librarians bring to the table in the development of ethical AI policies. Their contributions can be seen in several areas, including expertise in information ethics, privacy, and intellectual

freedom. They can provide guidance on ethical research methods, identify and address sources of bias in data sets used to train AI algorithms and develop policies related to data management and usage.

In addition to their specialized knowledge and expertise, academic librarians offer unique perspectives and insights into the ethical implications of AI usage. They can create educational resources and training programs to promote awareness and understanding of issues such as algorithmic bias, data privacy, and intellectual property rights. Furthermore, they can collaborate with researchers and practitioners in other fields to address the ethical implications of AI from diverse perspectives and needs.

The ALF Framework emphasizes the importance of academic librarians' experience in working with data and policy development. Their involvement in institutional committees responsible for developing and implementing ethical AI policies is critical in ensuring policies protect individual privacy rights, respect intellectual property, and promote intellectual freedom. By leveraging their unique skills and expertise, academic librarians can help ensure that AI technologies are developed and used to promote social responsibility, respect for human rights, and the common good.

In the next section, I will recommend implementing the ALF Framework at colleges and universities so academic librarians can join or participate in discussions about AI policy work.

Recommendations for implementing the ALF framework and contributions of academic librarians to ethical AI policy discussions at their organizations

In the process of demonstrating their expertise, librarians can leverage the ALF Framework to guide their understanding and application of AI ethics, intellectual freedom, and data management. This framework serves as an important tool to establish librarians' credentials in AI policy discussions.

The ALF Framework also provides a roadmap for building and strengthening relationships with key stakeholders. By offering valuable insights from the framework in their interactions, librarians can gradually establish their gravitas in policy deliberations.

Highlighting the unique value of the librarians' role in AI initiatives can also be approached through the lens of the ALF Framework. This might involve using the framework to guide AI-related projects, like creating an AI ethics resource guide, or structuring key services, such as data privacy training.

When advocating for their involvement in AI policy discussions, librarians can use the ALF Framework as a tool to make their case to administrators. By demonstrating how the framework aligns with the organization's goals and enriches policy discussions, librarians can effectively advocate for their inclusion.

The ALF Framework can be utilized to guide librarians' involvement in relevant committees dealing with AI or similar issues. By proactively applying the framework in committee discussions, librarians can underline their value and earn their seat at the table.

To secure the endorsement of leaders within the organization, librarians can illustrate how the ALF Framework aligns with the organization's strategic goals. Demonstrating the benefits of librarian involvement, guided by the framework, can be pivotal in earning leadership support.

Finally, in promoting cross-disciplinary collaboration, the ALF Framework provides a valuable tool for integrating various perspectives. Through fostering collaborations guided by the framework, librarians can highlight the necessity of their unique perspective in AI policy discussions.

Academic librarians play a significant role by being proactive, patient, and creative. Proactively engaging in AI ethics discussions, showing patience in building relationships, advocating for change, and embracing creativity in educating the public about AI ethics are essential to effecting meaningful change.

In the next section, I will discuss challenges and solutions to using the ALF Framework as a tool by academic librarians who wanted to get involved in AI policy development at their college or university.

Challenges and solutions to implementing the ALF framework

Taking advantage of the ALF Framework may present certain challenges, but with careful consideration and proactive measures, these challenges can be addressed to ensure the successful integration of ethical AI policies. The following are some common challenges and potential solutions for implementing the ALF Framework:

One of the main challenges is limited awareness and understanding of librarians' unique skills, perspective, and knowledge as outlined in the ALF Framework among stakeholders interested in ethical AI policy development at colleges and universities. To address this, it is crucial to develop a comprehensive communication plan that raises awareness about the framework. This can involve organizing workshops, webinars, and training sessions specifically focused on the ALF Framework. Collaborating with relevant associations and organizations can help disseminate information and resources effectively.

Another challenge that may arise is institutional resistance to change. Some institutions may have established processes and policies that do not align with the principles of the ALF Framework. Consequently, librarians may not be considered to join groups advocating for ethical AI policy discussions. To overcome this challenge, it is important to advocate for the importance of ethical AI policies and the role of academic librarians in policy development. Engaging in open dialogue with institutional decision-makers can help highlight the potential benefits of implementing the ALF Framework.

Resource constraints, such as limited time, budget, and staff, pose another challenge. To address this, it is essential to prioritize allocating resources to AI policy development initiatives. This may involve advocating for additional resources, such as dedicated staff positions or funding for training and educational programs. Exploring opportunities for collaboration with other departments or institutions can also help share resources and expertise effectively.

Effective interdisciplinary collaboration is crucial for developing comprehensive and ethical AI policies. However, establishing such collaboration can be challenging. To overcome this challenge, it is important to foster a culture of collaboration by actively seeking partnerships with researchers, faculty, administrators, and IT staff involved in AI initiatives. Creating interdisciplinary working groups or committees can facilitate ongoing collaboration and communication. Developing shared goals and establishing

clear communication channels is vital to ensuring effective coordination among different disciplines and departments.

The evolving landscape of AI technologies poses another challenge. Keeping up with the latest advancements and integrating them into AI policies can be a complex task. To address this challenge, it is important to stay informed about the latest developments in AI technologies and ethical considerations through continuous professional development. Engaging in ongoing research and collaboration with researchers and practitioners in the field is crucial. Regularly reviewing and updating policies to adapt to the evolving landscape of AI technologies and ethical guidelines is also essential.

By addressing these challenges proactively, academic librarians can navigate the complexities of implementing the ALF Framework more effectively. It is important to acknowledge and overcome these challenges to ensure that AI policies are developed and implemented in a manner that upholds ethical standards and promotes the common good.

Conclusion

Incorporating academic librarians into ethical AI policy development is crucial to ensuring that AI technologies are developed and used to promote social responsibility, respect for human rights, and the common good. Academic librarians bring a unique set of skills, expertise, and perspectives to the table, making them invaluable contributors to AI policy discussions.

Academic librarians possess expertise in information ethics, privacy, and intellectual freedom, all of which are highly relevant to AI ethics. They can provide guidance on ethical research methods, identify and address bias in data sets, and develop policies related to data management and usage. Their involvement ensures that AI systems are developed and utilized in ways that prioritize transparency, fairness, and accountability.

Furthermore, academic librarians' practical experience with AI initiatives and collaborations demonstrates their active engagement in adopting AI tools within academic libraries. This experience aligns with their commitment to staying at the forefront of technological advancements and enhancing the research experience for users.

The Academic Librarian Framework for Ethical AI Policy Development (ALF Framework) recognizes the value of academic librarians in shaping ethical AI policies. The framework emphasizes their expertise, unique perspectives, collaboration with diverse stakeholders, and experience in policy development. By implementing the ALF Framework, institutions can leverage the contributions of academic librarians to develop more comprehensive and ethical AI policies.

To effectively implement the ALF Framework, academic librarians must stay informed about AI ethics, build relationships with stakeholders, advocate for ethical AI policies, create educational resources, and actively participate in policy review and revision. While challenges may arise, such as limited awareness, institutional resistance to change, resource constraints, and the evolving landscape of AI technologies, proactive measures can address these challenges.

By involving academic librarians in AI policy development, institutions will benefit from their expertise, practical experience, and interdisciplinary collaboration. Academic

librarians contribute to developing policies prioritizing social responsibility, respect for human rights, and the common good. Their involvement ensures that AI technologies align with the values and principles of the academic community, promoting transparency, fairness, and respect for individuals' privacy rights.

Involving academic librarians in ethical AI policy development is essential to harness their expertise and perspectives. By actively engaging academic librarians, institutions can develop comprehensive and ethical AI policies that contribute to a more equitable and just society. Academic librarians play a critical role in shaping the responsible and inclusive integration of AI technologies in academia, ultimately fostering trust, transparency, and social responsibility within the academic community and society as a whole.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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