

## Chapter 10

# Gender Mainstreaming in AI-enhanced Journalism Practice, Education, and Research in African Contexts

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### Abstract

This chapter explores the integration of gender mainstreaming in artificial intelligence (AI)-enhanced journalism, journalism education, and research within African contexts, emphasising both the opportunities and challenges presented by emerging technologies. AI tools, while transformative, risk perpetuating existing gender biases if not implemented with a gender-sensitive approach. In African media, where patriarchal structures persist, the use of AI can further marginalise women's voices and perspectives in newsrooms, education, and research. This chapter not only identifies key gender-related issues in AI-enhanced media environments, such as biased content algorithms, underrepresentation in AI education, and insufficient gender-sensitive research but also offers a practical solution through gender mainstreaming toolkits. These toolkits serve as essential guides for media professionals, educators, and researchers, helping them to critically reflect upon and engage with the intersection of AI, and media, and to implement strategies that promote gender equity within local contexts. By addressing these challenges, the chapter provides a framework for ensuring that AI technologies contribute to a more inclusive and decolonised media landscape, advancing gender equality and diverse representation in African journalism.

*Keywords:* Gender mainstreaming; artificial intelligence (AI-enhanced newsrooms); journalism education; decolonisation; intersectionality; toolkits

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## Introduction

The integration of gender mainstreaming into journalism practice, education, and research within African contexts is critical for promoting gender equality and creating diverse, equitable media landscapes (Dralega, 2016; GMMP, 2020). Gender mainstreaming refers to the systematic assessment of gender implications in all areas of policy and practice (United Nations, 2002). Despite efforts to mainstream gender in global media, challenges persist, worsening gender imbalances in content production, representation, and decision-making (Gadzekpo, 2011; Gallagher et al., 2023; Kassova, 2020). These challenges are further complicated by the intersection of gender with other social categories such as race, class, ethnicity, sexuality, location, education, age and income (Buolamwini & Gebru, 2018; Crenshaw, 1991) and lately science and technology (Grzanka and Bhatia 2023) as well as the broader need for decolonising media practices to reflect African realities and indigenous perspectives (Kamlongera & Katenga-Kaunda, 2023a; Ndlovu-Gatsheni, 2015; Dralega, 2023a; Dralega, 2023b). In this chapter, we explore the issues, challenges, and potential solutions surrounding AI-enhanced journalism practice,<sup>1</sup> journalism and media education,<sup>2</sup> and research.<sup>3</sup> For a better understanding of this, there is a need to briefly revisit the current 'traditional' or longstanding challenges in gender mainstreaming in newsrooms, journalism education, and research within African contexts:

African newsrooms, with a few exceptions, remain male-dominated spaces where women are underrepresented, particularly in decision-making roles. Despite constituting a growing part of the workforce, women are often excluded from key editorial and leadership positions (Byerly, 2011; Ejigu Kassa & Sarikakis, 2020; Gallagher et al., 2023; Kaija, 2013; Kassova, 2020). This is compounded by the 'leaking pipeline' in journalism with the progressive reduction in the number of women as they move from journalism education into newsrooms and eventually leadership positions, highlighting systemic barriers that hinder their career advancement (Byerly, 2013; Kaija, 2013). Within newsrooms, women are also less likely to cover 'hard news' beats like politics, economics, and governance, where they are marginalised both as professionals and sources (Maractho, 2017). According to the Global Media Monitoring Project (GMMP, 2020), women constitute only 24% of news sources in Africa, reinforcing the invisibility of women's voices in public discourse. This underrepresentation not only limits the diversity of viewpoints but also perpetuates stereotypes that cast women in narrow roles, often as victims or passive figures, rather than active agents of change.

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<sup>1</sup>In this study, AI-enhanced journalism refers to the application/practice of artificial intelligence technologies to optimize journalistic processes, automate tasks, and generate data-driven insights, with a critical focus on the integration of gender mainstreaming to challenge and transform existing biases within media practices.

<sup>2</sup>The examination of education emphasizes how journalism and media educational programmes incorporate gender sensitivity into AI-related courses, fostering a critical understanding of both AI and gender dynamics.

<sup>3</sup>The research focus underscores the imperative of gender sensitivity in academic inquiry, exploring the intersections of AI, gender, and journalism to advance equitable and inclusive scholarship that challenges traditional biases and promotes gender equity.

Journalism education in Africa is still largely rooted in curricula that overlook the need for gender-sensitive training (Geertsema-Sligh, 2014; Made, 2010; Morna, 2002). Traditional journalism schools often adopt Western frameworks (Ezumah, 2019; Wasserman & de Beer, 2009) that do not fully address the complexities of gender inequalities in African societies (Kamlongera & Katenga-Kaunda, 2023b). Courses seldom integrate gender studies or intersectionality, leaving future journalists ill-equipped to report on issues of gender with nuance (Kamlongera & Katenga-Kaunda, 2023a, 2023b; Musa & Domatob, 2011). The absence of such training contributes to the perpetuation of patriarchal narratives in media content. Additionally, the sparsity of research on gender mainstreaming in African journalism education reflects a significant gap in efforts to promote equity in media institutions (Dralega et al., 2016).

The research landscape around gender and media in Africa faces its own set of challenges. While the GMMP (2020), Kamlongera and Katenga-Kaunda (2023a), and Steeves and Awino, I. (2015) and other initiatives have begun to document gender disparities, there remains a significant gap in intersectional research that explores how gender interacts with race, class, and other social dimensions in media representation and practice. This gap is particularly critical given the growing demand for decolonised research frameworks that challenge the dominance of Eurocentric models and offer more contextually relevant understandings of gender in African journalism (Dralega, 2023b; Kamlongera & Katenga-Kaunda, 2023b; Ndlovu-Gatsheni, 2015; Rodny-Gumede, 2022). Moreover, women in academia face similar barriers to those in the newsroom, including underrepresentation in leadership positions and marginalisation in key decision-making processes (Mwaura & Balliah, 2024).

### ***AI, Gender, and Journalism: Emerging Issues***

As AI increasingly becomes a driving force in the media, its implications for gender equality in journalism cannot be ignored. AI technologies are transforming African journalism by automating content production, enhancing reporting accuracy, and improving audience engagement (Dralega, 2023b; Munoriyarwa et al., 2021; Mutsvairo & Bebawi, 2023). Despite this African Journalism faces several context-related challenges including but not limited to knowledge gap; resource constraints; inadequate business strategies for AI; lack of collaboration between media and other stakeholders; scarce, costly and dirty data concerns over algorithmic harm and job insecurity fears; cultural resistance in the newsroom; language shortage; poor policy and legal frameworks (Dralega, 2023c; Mutsvairo, 2019; Ogola, 2023).

In developing mitigating measures to these general challenges, it is important to note that without inclusive especially, gender-sensitive frameworks, AI systems risk reinforcing gender biases embedded in the historical datasets on which they are trained (Kassova, 2020; Mutsvairo, 2019; UN Women 2024; West et al., 2019). To illustrate this continuity within AI-enhanced newsrooms in African newsrooms, Kassova's (2020) study informs:

The decision-makers within most of the newsrooms were male as were the journalists. This was also the case for the emergent new roles such as audience engagement editors, UX designers,

data visualisers, and data scientists. Institutionalized practices of gender exclusion were therefore being baked into new journalistic practices and newsroom structures. (Kassova 2020, p. 11)

In fact, the challenge of gender mainstreaming related to AI underscores existing challenges females face with access and use of information and communication technologies (ICTs) generally (AU, 2015; Jjuuko & Njuguna, 2019; Kassova, 2020). The AU report based on a study in eight countries of Angola, Botswana, Namibia, Malawi, Mozambique, South Africa, Zambia, and Zimbabwe documents that women face significant barriers to accessing ICTs due to factors such as insufficient infrastructure, high costs, limited availability, language challenges, low literacy rates, and restrictive social norms. These obstacles hinder the transformative potential of ICTs in advancing women's empowerment. Additionally, the lack of strong gender-focussed provisions in media laws and policies exacerbates these challenges, further impeding progress (AU, 2015).

AI systems are implicated in reproducing the same inequalities they were designed to overcome by underrepresenting women and marginalising them in key subject areas like politics and leadership (Kassova, 2020; O'Connor & Liu, 2024). These systems also risk perpetuating harmful stereotypes and making women invisible in news coverage, reinforcing patriarchal narratives already prevalent in African media spaces. Intersectional dimensions must therefore be considered, as AI may amplify not only gender biases but also ethnic, class, geographic, and digital disparities previously highlighted (Buolamwini & Gebru, 2018).

The need for decolonising AI technologies in journalism is crucial. AI systems and data are largely developed in the Global North and often do not account for African realities, thereby reinforcing Eurocentric models of media production and representation (Ai & Masood, 2021; Dralega, 2023b; Ndlovu-Gatsheni, 2015). In this chapter, measures that promote gender mainstreaming in AI-driven media environments deemed vital to ensure that these technologies do not exacerbate existing disparities but instead contribute to more inclusive, decolonised media practices.

### ***AI-related Gender Challenges in Newsrooms, Education, and Research***

AI technologies are increasingly deployed in African newsrooms for content automation, reporting, and audience analytics (Dralega, 2023b; Kothari & Cruikshank, 2022; Munoriyarwa, 2024). However, these systems are frequently trained on datasets that reflect historical gender biases, including the underrepresentation of women in critical areas like politics and economics (Manasi et al., 2022; Munoriyarwa et al., 2021; Mutsvairo, 2019; Mutsvairo & Bebawi, 2022). Additionally, the adoption of AI without a gender-sensitive framework risks entrenching the very stereotypes it was intended to overcome. Measures that can guide media organisations in addressing gender biases within AI systems are therefore essential to fill the gaps and promote equity in newsrooms.

AI adoption in journalism education is on the rise in Africa, offering new opportunities for teaching digital literacy and innovation.<sup>4</sup> However, without integrating

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<sup>4</sup>Various courses taught in universities such as: University of Rwanda, University of Stellenbosch, University of Cape Town, University of Dar es Salam and so on.

gender-sensitive and intersectional approaches, AI-enabled journalism education risks perpetuating the same gender disparities seen in traditional media practices (Dralega et al., 2016; Geertsema-Sligh, 2014; Made, 2010). Current curricula often lack a focus on gender and AI, leaving students unaware of how these technologies can either exacerbate or mitigate gender inequalities – a discursive and ethical challenge Jaakkola (2023) underscores in addition to teaching conceptual, didactic, AI ethics, and competences to budding journalist students. Developing frameworks or guidelines for gender-sensitive AI training in journalism schools is therefore necessary to prepare future journalists for equitable reporting and content production.

The intersection of AI, gender, and journalism research in Sub-Saharan Africa is still an emerging field. While AI has the potential to revolutionise media research, it also brings new challenges, particularly when it comes to gender equity. The current research landscape is sparse on critical empirical focus on how AI systems may perpetuate historical gender biases in media content and representation (Kassova, 2020; Kothari & Cruikshank, 2022; Munoriyarwa et al., 2021; Mutsvairo & Bebawi, 2023). This gap is compounded by the lack of intersectional analysis in existing research, which often overlooks how AI may affect women differently based on other identity markers such as race, class, ethnicity, geography, universal access, and information poverty in local context. Decolonising AI research in journalism is also crucial to ensure that African realities and diverse gender perspectives are fully integrated into the future of media research.

In a nutshell, the integration of gender mainstreaming in African journalism practice, education, and research remains essential for fostering inclusive media landscapes. Traditional challenges, such as the underrepresentation of women in newsrooms, gender-blind journalism education, and the lack of intersectional research, continue to hinder progress. However, as AI becomes more prevalent in African media, these challenges are compounded by new concerns over how AI technologies may reinforce or disrupt existing gender biases. Addressing these issues requires not only gender-sensitive frameworks but also a decolonial approach that centres African realities and challenges the dominant, eurocentric models of AI development and media representation. Below is an endeavour to address the current gaps in the form of toolkits for journalism practice, education, and research. These can be strengthened and adjusted to suit local contexts.

## **Methodology for Developing Gender Mainstreaming Toolkits in AI-enhanced Spaces**

The study draws from a mixed-methods approach, incorporating theoretical research, case example, and policy analysis to ensure that the toolkits for gender mainstreaming in AI-enhanced journalism practice, education, and research are robust, grounded in both theory and practice, and adaptable to various contexts, particularly in Africa.

### *Theory*

Theoretical foundations are drawn from several key areas, including gender and technology studies, which highlight the potential for AI algorithms to perpetuate existing gender biases (Noble, 2018; Wajcman, 2004). Additionally, feminist communication theories provide critical insights into the representation and participation

of women in media and newsrooms, guiding the creation of more equitable AI-enhanced spaces (Byerly, 2011; Gallagher, 2014). Intersectionality theory, as articulated by Crenshaw (1991), Grzanka and Bhatia, (2023) was integral to ensuring that the framework addressed overlapping identities such as race, class, and ability. This approach is vital in avoiding the reinforcement of multiple forms of oppression through AI-driven processes in both newsrooms and educational settings.

### ***Good Practices***

In addition to theoretical research, this methodology includes a review of strong existing case with good practices, which identified actionable steps for gender mainstreaming, particularly in the fields of journalism and education, such as UNESCO (2020) and the European Institute for Gender Equality (2024<sup>5</sup>). Also, key insights from journalism practice (BBC 50:50<sup>6</sup>) informed the development of specific guidelines to support gender equity in AI-enhanced environments.

### ***Policy and Framework Analysis***

A significant component of this methodology is policy and framework analysis, which involved reviewing existing gender mainstreaming policies such as European Institute for Gender Equality (2024) and AI ethical frameworks (Floridi et al., 2018). This review ensured that the toolkits align with global standards for gender-sensitive AI practices. A comparative analysis of the UNESCO guidelines for gender equality in media (FOJO, 2021<sup>7</sup>; Grizzle, 2012) and the OECD principles on AI (OECD, 2019) further adapted these global frameworks to meet the specific needs of AI-driven platforms in African newsrooms and educational settings. The combination of theoretical insights, best practices, and policy frameworks forms the basis of a comprehensive and contextualised toolkits for gender mainstreaming in AI-enhanced journalism and education.

### ***The BBC's 50:50 Project as a Model for Gender Balance***

An exemplary model for gender balance in AI-enhanced journalism practice is the BBC's 50:50 Project, a data-driven initiative aimed at achieving gender parity in media content established in 2017. Initially launched as a manual gender diversity framework, the project has grown to include 750 BBC teams, 145 partner organisations in 30 countries (BBC, 2022) and expanded beyond just gender diversity to include ethnicity and disability. In collaboration with Stanford University, the project integrated AI to track gender representation in real time, using data-driven systems that provide dashboards to editorial teams. These dashboards flag imbalances and enable producers to correct underrepresentation of women before content is published or aired. By 2021, the initiative had significantly increased the visibility of women across BBC programming, with over 70%

<sup>5</sup>The Gender Equality Plan and toolkit for academia and research here: <https://eige.europa.eu/gender-mainstreaming/toolkits/gear>.

<sup>6</sup>[www.bbc.co.uk/5050](http://www.bbc.co.uk/5050)

<sup>7</sup><https://sojethiopia.org/wp-content/uploads/Gender-in-Ethiopian-Media-Landscape-March-2021.pdf>

of participating teams achieving gender parity (BBC, 2021<sup>8</sup>). The project also works in collaboration with other partners including academia, such as journalism schools at the University of Newcastle, Liverpool John Moores University, Nottingham Trent University, and the University of the West of Scotland.<sup>9</sup> This project exemplifies how, AI can be leveraged (through practice, education, and research collaboration) to enhance gender balance in media.

## Toolkits for Gender Mainstreaming in AI-enhanced Journalism, Education, and Research

To address the challenges of gender inequality in AI-enhanced spaces, gender mainstreaming toolkits offer practical solutions for ensuring that AI technologies promote gender equity in journalism. These toolkits are designed to equip media professionals, educators, and researchers with resources to understand and address the gendered nature of AI technologies (Fig. 10.1). For journalism practice, the toolkits help media professionals critically assess how AI systems may reproduce gender biases and provide strategies for mitigating these issues (Gallagher, 2014). In journalism education, gender-sensitive AI curricula prepare future media professionals to use AI technologies in ways that challenge rather than reinforce, patriarchal structures.

Moreover, these toolkits promote decolonised approaches to AI in African media by incorporating Indigenous knowledge systems and prioritising the representation of African women’s voices. By doing so, they offer a pathway to more inclusive and equitable media practices across the continent. These crosscutting toolkits should be viewed as part of a broader approach to gender equity, complementing other strategies for sustainable social change within the media and education sectors.

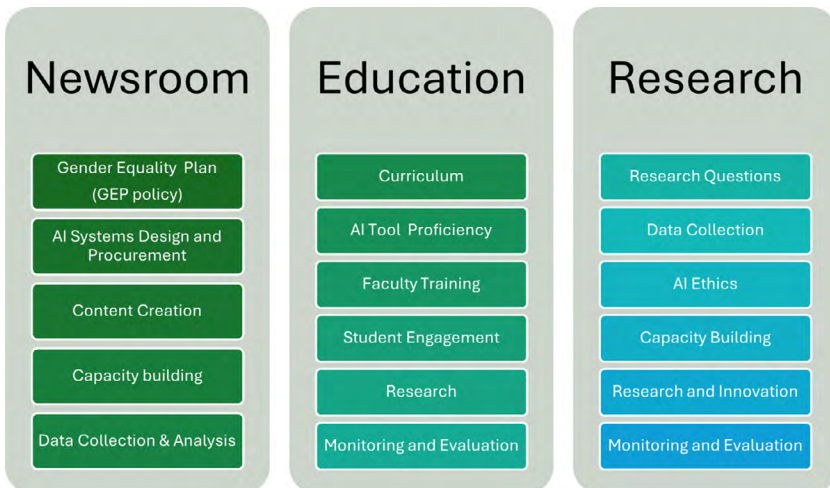


Fig. 10.1. Overview of Areas Covered in the Three Toolkits.

<sup>8</sup>BBC 5050 Impact Report 2021: <https://www.bbc.com/5050/documents/50-50-impact-report-2021.pdf>.

<sup>9</sup><https://www.bbc.co.uk/5050/stories/academia>

### ***Toolkit I: Gender Mainstreaming in AI-enhanced Newsrooms***

As African newsrooms increasingly adopt AI technologies for *content* creation, curation, and distribution, integrating gender mainstreaming in these digital transformations becomes essential. Toolkit one (Table 10.1) offers guidance for media houses to ensure that AI deployment upholds gender equity, avoids bias, and enhances gender-sensitive reporting.

Gender mainstreaming in AI-enhanced newsrooms is essential to fostering equity and representation in the rapidly evolving media landscape. African media houses must approach AI not just as a technological innovation but as a tool for reinforcing gender-sensitive journalism. This toolkit integrates gender sensitivity into the AI-driven future of African newsrooms, addressing both technical and ethical dimensions. By incorporating these steps, media houses can become leaders in the fight for gender equity in journalism, leveraging AI to bridge existing gaps.

Table 10.1. Toolkit I: Overview for Newsrooms.

Task	Activity	Key Action
<p>Policy and Strategy Development  <i>Objective: Set up a gender-responsive AI strategy within media organisations</i></p>	<p><i>Gender mainstreaming policy:</i> Develop an overarching policy that includes AI usage guidelines emphasising gender equality in editorial decisions and newsroom operations</p> <p><i>AI and gender advisory committee:</i> Create a standing committee within the newsroom to oversee the integration of AI technologies with an explicit gender focus</p>	<p>Formulate gender-responsive editorial guidelines, ensuring AI systems in place are designed or selected to enhance rather than diminish gender balance. For instance, ensure inclusive language standards; bias detection and mitigation; balanced representation in content; data and algorithm transparency; content moderation and reporting tools, etc.</p> <p>Ensure gender balance in decision-making panels related to AI system procurement and deployment</p>
<p>AI System Design and Procurement  <i>Objective: Obtain AI tools that actively prevent gender bias</i></p>	<p><i>Bias auditing tools:</i> Implement AI bias auditing tools that assess the datasets and algorithms for gender discrimination</p> <p><i>Inclusive AI training:</i> Ensure the algorithms used in news generation reflect African gender realities, considering local languages, dialects, and gender nuances</p>	<p>Collaborate with AI developers to ensure training data is diverse and includes gender-sensitive labels. AI technologies that source data from social media, for instance, should be checked for gender stereotyping or misinformation</p> <p>Incorporate gender-neutral or gender-diverse names, images, and stories in AI-generated content</p>
<p>Gender-sensitive Content Creation with AI</p>	<p><i>Promoting diverse sources:</i> Train AI systems to diversify the sources and voices featured in news coverage, especially highlighting female experts, activists, and leaders</p>	<p>Ensure that AI tools employed for source selection and interviews include a high percentage of women experts</p>

(Continued)

Table 10.1. (Continued)

Task	Activity	Key Action
<p><i>Objective: Create AI-enhanced content that reflects gender inclusivity and balance.</i></p>	<p><i>AI-generated content review protocol: Set up a review process where AI-generated content is evaluated for gender sensitivity before publication</i></p>	<p>Utilise natural language processing (NLP) tools to flag potential gender biases in written content, ensuring gender-neutral language and representation.</p>
<p>Capacity Building for Newsroom Staff <i>Objective: Build gender awareness and AI literacy across newsroom staff</i></p>	<p><i>AI and gender training: Conduct regular workshops to upskill newsroom staff on both AI use and gender-sensitive reporting. This should include training on how to critically engage with AI-generated content through a gender lens</i></p>	<p>Train staff on how AI works, its limitations in terms of gender bias, and how to complement AI with human editorial oversight for balanced reporting</p>
<p>Data Collection and Analysis <i>Objective: Collect gender-disaggregated data on the performance and outcomes of AI tools</i></p>	<p><i>Gender audit of AI tools: Introduce regular gender audits of AI tools in use to evaluate their impact on gender representation in content</i></p>	<p>Periodically assess whether AI-generated content, bylines, or data trends skew disproportionately towards male-centric perspectives or topics</p>
<p><i>Tracking gender representation: Use AI-powered analytics to track the gender representation in news coverage, identifying disparities and trends</i></p> <p><i>Regular reporting: Establish quarterly reporting on gender balance in AI-generated content, including key performance indicators (KPIs) such as the proportion of female experts interviewed, the percentage of women in leadership, and gender portrayal in news</i></p>	<p><i>Develop dashboards that visualise gender representation metrics, ensuring newsroom staff can monitor progress over time</i></p> <p><i>Media houses should publish these reports publicly as part of their commitment to gender equity</i></p>	<p>Develop dashboards that visualise gender representation metrics, ensuring newsroom staff can monitor progress over time</p> <p>Media houses should publish these reports publicly as part of their commitment to gender equity</p>

***Toolkit II: Gender Mainstreaming in AI-enhanced Journalism Education***

As journalism education in Africa adapts to the growing use of AI in the media industry, integrating gender mainstreaming into journalism curricula and assessment is essential. This toolkit (Table 10.2) proposes strategies and actions to incorporate gender sensitivity into AI-driven journalism training. It ensures that future journalists are not only adept at using AI technologies but also equipped to recognise and mitigate gender biases, thereby promoting inclusive journalism practices.

Integrating gender mainstreaming in AI-enhanced journalism education is critical to preparing future journalists who are equipped to navigate the ethical and social complexities of AI. Jaakkola (2023) highlights the discussive (in addition to conceptual, didactic, and competence) challenges of AI in journalism training pointing to the need to address societal issues such as (gender) inequality. By incorporating gender-sensitive approaches into curriculum design, tool proficiency training, faculty development, and student engagement, journalism schools can ensure that AI technologies enhance rather than hinder gender equity in African newsrooms. This toolkit can empower journalism educators to ensure that gender mainstreaming is integrated into the evolving landscape of AI in journalism, preparing students to lead with both technological expertise and ethical responsibility.

Table 10.2. Toolkit II: Overview for Education.

Task	Activity	Key Action
Gender-responsive Curriculum Development <i>Objective: Embed gender-sensitive AI practices into the core of journalism education</i>	<p><i>Gender and AI modules:</i> Introduce dedicated modules on AI and gender within journalism programmes to discuss gender bias in AI, algorithmic discrimination, and the importance of gender inclusivity in media technologies</p> <p><i>Decolonisation and intersectional approach:</i> Curriculum should address intersectionality, highlighting how AI impacts different gender identities across race, class, and geography, etc.</p>	<p>Develop courses that focus on how AI systems can both perpetuate and dismantle gender stereotypes, particularly in African media contexts</p> <p>Include case studies from African contexts, analysing how AI systems have affected different genders across various socioeconomic backgrounds</p>
AI Tool Proficiency with a Gender Lens <i>Objective: Train journalism students on AI tools while highlighting potential gender biases</i>	<p><i>AI training with gender focus:</i> Provide practical workshops on AI-powered tools such as automated news writing, data journalism, and content curation, coupled with discussions on gender bias detection</p> <p><i>Practical assignments on gender-sensitive AI use:</i> Incorporate AI-related assignments that challenge students to produce gender-balanced content, identifying biases in AI-generated outputs and suggesting improvements</p>	<p>Teach students how to critically assess datasets for gender biases and how to use AI ethically in journalism practice</p> <p>Students should be required to audit AI-generated news for gender representation, use gender-neutral language, and ensure diverse sourcing in their reports</p>
Faculty Training and Awareness <i>Objective: Equip educators with the skills to teach gender-sensitive AI use in journalism</i>	<p><i>Faculty development workshops:</i> Regularly train lecturers on the intersection of AI and gender issues, ensuring that they can effectively guide students on how to avoid algorithmic bias</p> <p><i>Gender-inclusive teaching materials:</i> Develop and update teaching resources to include gender-balanced case studies, examples of AI in journalism, and literature on gender mainstreaming</p>	<p>Conduct workshops on the latest AI technologies used in journalism, with an emphasis on gender equity in content creation and analysis.</p> <p>Ensure that all course materials reflect gender diversity, using examples of women and non-binary individuals who have contributed to AI in journalism.</p>

<p>Student Engagement and Gender Sensitisation <i>Objective: Foster a gender-sensitive learning environment for students in AI-enhanced journalism courses</i></p>	<p><i>Gender and AI awareness campaigns:</i> Organise awareness campaigns within journalism schools to encourage discussions on gender and AI, creating platforms for students to engage with these issues critically  <i>Mentorship programmes with a gender focus:</i> Establish mentorship programmes connecting students with professionals who specialise in gender and AI in journalism, encouraging gender-conscious career development</p>	<p>Create events such as panel discussions, guest lectures, or hackathons focussed on addressing gender biases in AI tools used for journalism</p> <p>Match students with mentors who can guide them on how to navigate AI technology while advocating for gender equity in their journalism careers</p>
<p>Research and Innovation in Gender and AI <i>Objective: Promote research on AI, gender, and journalism, fostering innovation in gender-sensitive AI applications</i></p>	<p><i>Research on gender bias in AI journalism tools:</i> Encourage students and faculty to engage in research that explores how AI can perpetuate or mitigate gender bias in journalism  <i>Gender-sensitive AI innovation labs:</i> Establish innovation labs within journalism schools where students can develop AI tools that promote gender inclusivity in news production</p>	<p>Develop research projects that assess the impact of AI on gender representation in African newsrooms, suggesting ways to counteract these biases</p> <p>Fund student-led projects that explore how AI can be used to amplify women's voices and highlight gender diversity in news reporting. Journalism schools should track how male, female, and non-binary students engage with AI tools, ensuring that no group is marginalised in AI-related coursework or career opportunities</p>
<p>Monitoring and Evaluation <i>Objective: Track and assess the effectiveness of gender mainstreaming efforts in AI-focussed journalism education</i></p>	<p><i>Gender Disaggregated Data in Education Outcomes:</i> Collect and analyse gender-disaggregated data on student performance, participation, and career progression to identify gaps and opportunities for gender mainstreaming  <i>Regular curriculum audits:</i> Conduct regular audits of journalism programmes to ensure that gender sensitivity and AI integration are being effectively addressed</p>	<p>Journalism schools should track how male, female, and non-binary students engage with AI tools, ensuring that no group is marginalised in AI-related coursework or career opportunities</p> <p>Use external reviewers to evaluate the extent to which the curriculum and pedagogy reflect gender mainstreaming in AI-related topics</p>

### ***Toolkit III: Gender Mainstreaming in AI-enhanced Journalism Research***

As AI continues to revolutionise journalism, integrating gender into research on AI in journalism is vital to addressing systemic biases and ensuring equitable representation. This toolkit (Table 10.3) proposes strategies for researchers (both experienced and students) to integrate gender-sensitive methodologies and ethical considerations into their AI-related journalism research, particularly in African contexts. It promotes an approach that fosters gender equality, avoids reinforcing stereotypes, and critically examines AI's impact on media ecosystems.

This toolkit provides a comprehensive framework for integrating gender mainstreaming into AI and journalism research, particularly within African contexts. By focussing on gender-sensitive research design, ethical considerations, data inclusivity, and innovative methodologies, researchers can ensure that AI enhances gender equity in journalism rather than perpetuating existing biases. Through capacity building and collaborative networks, research institutions can lead the way in promoting gender-sensitive AI research that drives equitable change in African media. By following this toolkit, researchers in journalism and AI can ensure that their work not only advances the field of AI but also contributes to reducing gender bias and promoting equity within African journalism. The recommendations provided can help foster a more inclusive and fair media environment, ensuring that AI's potential benefits are realised for all genders.

Table 10.3. Toolkit III: Overview for Research.

Task	Activity	Key Action
<p>Gender-sensitive Research Design  <i>Objective: Embed gender equity into the research design process for AI and journalism studies</i></p>	<p><i>Gender-inclusive research questions:</i> Formulate research questions that explicitly address how AI impacts gender representation in journalism, focussing on the African context</p> <p><i>Intersectional approach:</i> Apply an intersectional lens to research, examining how AI affects different genders in relation to race, class, ethnicity, and geographic location within Africa</p>	<p>Develop research projects that investigate how AI-generated content, algorithms, and automated news systems affect the representation of different genders in newsrooms and media outputs. What consequences emerge for society</p> <p>Ensure that research on AI and journalism reflects the diverse experiences of African women, and other marginalised groups, avoiding one-dimensional gender analysis</p>
<p>Data Collection and Analysis  <i>Objective: Ensure that data collection and analysis processes are gender-sensitive and inclusive</i></p>	<p><i>Gender-disaggregated data:</i> Collect and analyse gender-disaggregated data in AI journalism research to understand the differential impact of AI on men, women, and non-binary individuals</p> <p><i>Inclusive datasets:</i> Ensure the datasets used for AI and journalism research are diverse and free from inherent gender biases. This involves curating data that accurately represent women, non-binary individuals, and gender-diverse communities</p>	<p>Develop data collection strategies that track the representation of different genders in AI-generated news stories, focussing on sources, subjects, and experts</p> <p>Collaborate with AI developers to ensure that training datasets for AI systems reflect gender diversity and avoid reliance on Western-centric or male-dominated data sources</p>
<p>Ethical Considerations in AI and Gender Research  <i>Objective: Address ethical challenges in AI research with a focus on gender mainstreaming</i></p>	<p><i>Ethical AI framework:</i> Develop ethical frameworks for AI journalism research that prioritise gender equity and inclusivity. Ensure that AI technologies used in newsrooms do not perpetuate gender stereotypes or discriminatory practices</p>	<p>Incorporate ethical review processes that evaluate AI tools and methodologies for their impact on gender representation and avoid harm to marginalised communities</p>

(Continued)

Table 10.3. (Continued)

Task	Activity	Key Action
Capacity Building for Gender-Sensitive AI Research <i>Objective: Build research capacity for gender mainstreaming in AI and journalism</i>	<p><i>Transparency and accountability:</i> Ensure transparency in how AI systems are designed, trained, and applied in journalism, and hold systems accountable for gendered outcomes</p> <p><i>Training for researchers:</i> Provide targeted training for journalism researchers on gender-sensitive methodologies and the ethical use of AI in media studies. This should include workshops on recognising gender bias in AI technologies</p> <p><i>Collaborative research networks:</i> Encourage collaboration among researchers, particularly across African universities and gender advocacy organisations, to advance AI research that centres gender equity.</p>	<p>Researchers should document how AI tools were used in media research, the sources of data, and their implications for gender equity, ensuring that these are published in research findings</p> <p>Develop training programmes that equip researchers with the tools to critically engage with AI systems, focussing on gender representation and inclusion in AI-based media research</p> <p>Establish regional and international networks (and funding) that foster collaborative projects, sharing best practices in gender-sensitive AI research</p>
Promoting Gender-sensitive Innovation in AI <i>Objective: Encourage innovative research that develops AI tools and methodologies promoting gender equity in journalism</i>	<p><i>AI innovation with a gender lens:</i> Promote the development of AI tools and platforms that enhance gender inclusivity in newsrooms, ensuring that women and non-binary individuals are well-represented in both the content and the creation process</p> <p><i>AI and gender policy advocacy:</i> Conduct research that informs policy on the ethical and gender-sensitive use of AI in African media, advocating for regulatory frameworks that prevent bias in AI systems</p>	<p>Fund research projects that explore the development of AI models aimed at balancing gender representation in media stories, sources, and news subjects</p> <p>Partner with governments and media regulatory bodies to provide research-backed recommendations on AI and gender policies that protect against discrimination and promote inclusivity</p>

<p>Monitoring and Evaluating Gender Outcomes in AI Research  <i>Objective: Regularly monitor and evaluate the gender outcomes of AI-focussed journalism research</i></p>	<p><i>Gender equity metrics:</i> Develop and apply gender equity metrics to assess the outcomes of AI and journalism research, ensuring that research findings contribute to gender balance in media practices  <i>Periodic reviews of research impact:</i> Conduct periodic reviews of AI-related research projects to evaluate their long-term impact on gender representation in journalism and the media industry</p>	<p>Use metrics that evaluate the impact of AI research on gender equity, such as the proportion of female or non-binary sources in AI-generated content or the diversity of voices highlighted in news coverage                  Establish a review mechanism where research projects are assessed for their contribution to reducing gender bias and enhancing inclusive journalism practices</p>
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## Concluding Remarks

The integration of AI in journalism practice, education, and research presents both opportunities and challenges for gender equality in African contexts. Without gender mainstreaming and decolonised approaches, AI systems risk perpetuating the same patriarchal and Western norms that have long dominated African media landscapes. The toolkits for gender mainstreaming offer a practical solution to these challenges, ensuring that AI technologies contribute to a more equitable, inclusive, and decolonised media environment. Despite this, we are reminded of African realities such as resource constraints, bureaucratic hurdles, patriarchal cultural beliefs, and unequal access to technology that may complicate adoption and the mainstreaming of gender in AI newsrooms, education, and research. For instance, many educators and researchers lack familiarity with AI, creating a capacity gap that must be addressed before implementing gender-responsive AI curricula. Also, investing in infrastructure, AI tools, and training is critical to overcoming some of these barriers. Addressing these structural, cultural, and financial barriers at different levels is essential for AI to support gender-sensitive transformations across the continent.

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