NELGA GOOD PRACTICES:

Integrating **AI Tools** for Effective Research Communication

The Network of Excellence on Land Governance in Africa (NELGA) is a partnership of leading African universities and research institutions with proven leadership in education, training and research on land governance. Currently NELGA has more than **70 partner institutions** in over 40 countries and is organized in 6 regional and 1 technical nodes supported by a Secretariat.

Introduction

This training program on AI focuses on helping researchers, policymakers, and communication specialists enhance the efficiency, quality, and reach of their work—from literature reviews to policy engagement—through guided, well-structured learning experiences. Rather than merely introducing AI tools, the program centres on cultivating a new mindset, establishing ethical guidelines, and reinforcing responsible usage practices.

We aim to empower researchers:

- ✔ Adopt AI in literature reviews, teaching, policy briefs, and research communication.

- ✔ Recognise and navigate ethical considerations, including transparency of AI usage and integrity in academic outputs.

- ✔ The transition from initial AI scepticism to confident use, positioning AI as a supportive asset rather than a replacement for expertise.

To that end, The Network of Excellence on Land Governance in Africa (NELGA) conducted multiple training sessions to equip researchers, policymakers, and communication specialists with AI-driven research communication skills. The first was held in Dar es Salaam, Tanzania, and a second took place in Kumasi, Ghana. Both trainings aimed to help researchers and academics integrate AI into literature reviews and teaching, enabling more effective knowledge-sharing. It also supported policy professionals and decision-makers in translating academic insights into actionable strategies using AI for evidence-based decision-making. Additionally, media and communication specialists benefited from learning how to distil complex research into accessible takeaways for broader audiences.

The first training followed a hybrid approach, beginning with a three-day in-person workshop in Dar es Salaam, Tanzania, and continuing with two online coaching sessions—each delivered in English and French—to accommodate participation from the entire continent. This structure provided a continuous learning cycle, allowing participants to integrate new insights into their research practices.

To ensure a hands-on experience, the training incorporated peer and expert feedback, where facilitators, guest speakers, and fellow participants provided tailored guidance on AI adoption in research and policy communication.

Topics Covered

- Integrating AI in Research Communication
- Prompt Engineering Essentials
- Key AI Tools for Researchers
- Ethical Considerations & Fact-Checking

Overall Design and Rationale

Kobs Experiential Learning Theory guided the training which emphasises four cycles.

1. **Concrete Experience:** Participants tried AI tools firsthand and in real-time.
2. **Reflective Observation:** Group debriefs encouraged participants to discuss successes, challenges, and observations.
3. **Abstract Conceptualization:** Facilitators introduced ethical considerations and best practices, helping participants connect personal experiences to broader concepts.
4. **Active Experimentation:** Learners were encouraged to apply new insights immediately, refining prompts or adopting additional AI features in practical research scenarios.

Lessons Learned

- **The Follow-up Online Sessions**: After the in-person session, participants had the opportunity to integrate AI tools into their everyday research routines. The follow-up online sessions became more focused, as participants could bring real-life challenges they encountered, receive tailored guidance, and refine their skills.

- **Hands-On Experience Reduces Fear:** Giving researchers time to engage directly with tools like ChatGPT helped reduce psychological barriers and fear toward AI. This shows the importance of structured time to experiment with new tools and build confidence in a supportive environment.

- **Mindset Shift is Essential:** Before focusing on AI from a technical perspective, it is essential to shift participants' mindsets. The training started by emphasising the "why" behind its adoption. By showcasing tangible benefits and demonstrating real-world scenarios, participants can better understand the relevance of AI in their work.

- **AI Tools:** Instead of relying on ChatGPT for everything, it is better to use scientific AI tools (SciSpace or Consensus) for literature reviews or evidence-based queries.

- **Examples of AI Application in Research**
  Participants identified several concrete ways AI-enhanced their work:

  - **Grammar and Writing Improvements:** Leveraging AI for proofreading and stylistic editing. Example: Grammarly

  - **Streamlining Literature Reviews:** Using SciSpace or Consensus to compile relevant sources on specific research topics.

  - **Refining Policy Briefs:** Employing ChatGPT to translate technical research findings into accessible language for non-specialist audiences.

Challenges

- ✅ **Access and Cost:** These were significant challenges, as free versions of advanced AI tools typically offered only basic features. At the same time, participants expressed a need for paid subscriptions to unlock more advanced functionalities.

- ✅ **Ethical and Academic Integrity:** Despite the enthusiasm for AI's capabilities, fear of plagiarism was a notable concern for many. To address this, the training incorporated several solutions:

  - 👉 Participants engaged in a structured debate on ethical AI use, allowing them to consider multiple perspectives and discuss real-world dilemmas around plagiarism.

  - 👉 Emphasis was placed on transparency in academic work, recognising the need to cite AI-generated content and delineate one's own contributions.

  - 👉 Researchers were taught to cross-check AI-generated information against trusted sources before integrating it into their writing.

Impact & Validation

Shifts in Perspectives

Participant feedback indicated a high confidence level in applying AI tools post-training, with responses ranging from "Very Confident" to "Confident." There were shifts in perspectives:

- ✅ From Skepticism to Confidence: Participants moved from initial doubts about AI tools to feeling comfortable integrating them into daily workflows, overcoming fears related to complexity and potential misuse.

- ✅ From General Usage to Specialised Application: Rather than relying solely on broadly focused platforms (e.g., ChatGPT), participants recognised the value of specialised tools like SciSpace or Consensus for more targeted research tasks.

- ✅ Recognition of Practical Benefits: Researchers acknowledged how AI can streamline and enhance various aspects of their work, from literature reviews to public communication.

Key Areas of Integration

1. **Writing:** Participants leveraged AI for grammar checks and clarity improvements, making their writing more polished and publication-ready.

2. **Teaching** Participants used AI for course material development and enhanced their teaching methods.

3. **Policy:** Researchers employed AI to translate complex research into concise, actionable recommendations, further bridging the gap between academic findings and policy implementation.

4. **Literature Review and Communication**: AI tools facilitated faster information retrieval and more targeted search results when looking for scientific papers.

Conclusion

Research professionals can benefit from the strategic and ethical integration of AI tools.The training program in Dar es Salaam, supported by online sessions, highlighted how experiential learning can build researchers' competence and confidence in using AI. **A similar training held in Ghana also enabled participants to explore practical, context-specific use cases, further strengthening their ability to integrate AI into their research in a responsible and effective way**.

Next Steps

- ✅ **Institutionalise AI Training:** Incorporate AI capacity-building modules into existing NELGA learning programs, ensuring researchers are onboarded with up-to-date skills.

- ✅ **Develop Ethical Guidelines:** Create easily accessible guidelines outlining best practices on data privacy, plagiarism checks, and reputable source citations.

- ✅ **Create Community Engagement:** Create online researcher communities that regularly share experiences and update one another on evolving AI best practices.

By integrating these recommendations, we can collectively shape a more innovative, ethical, and impactful academic landscape.

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