PoliSync
International Policy Engagement

Certificate in Applied AI for Social Good

Course 3: AI for Research, Insights & Data

What: 1 hour of video lessons + up to 1 hour hands on exercises and use cases.

When: Monday 20/4/26 - Friday 24/4/26 (learn at your own pace) + live session on Friday 30 April 13:00 – 14:00 CET.

Course lead: Dr Jenna Nassiri

Guest experts: Dr Marie McAuliffe, Dr Robin Sutherland-Harris & Mr Tim Ngwena

Workshop coordinator: Valentina Lazzarini (v.lazzarini@polisync.org)

Syllabus

Course description

This course introduces participants to the practical and ethical use of Generative AI (GenAI) tools in non-profit research and knowledge creation. Across three focused lessons, learners will explore how to integrate AI into evidence-based research workflows - from gathering credible data to co-writing reports and policy briefs that align with organizational missions.

The first lesson, **Data Collection**, demonstrates how to conduct sector-relevant desk research using AI-powered platforms to identify, evaluate, and synthesize credible sources. Participants learn to narrow research questions, build search strategies, and critically assess the quality and limitations of evidence.

The second lesson, **Co-Writing with AI**, focuses on transforming research findings into well-structured outputs. Learners practice summarizing complex materials, refining arguments, and maintaining authorial integrity using the SHARE framework (Streamline, Heighten, Arrange, Ratify, Evidence).

The third lesson, **AI for Data Cleaning and Visualisation** introduces participants to the practical use of AI tools for preparing and communicating quantitative evidence. Learners explore how to clean and organise simple datasets, and generate ideas and visual concepts for data visualisations ideally suited for their audience.

By the end of this course, participants will be able to use AI tools effectively to enhance research rigor, efficiency, and impact in grant writing, advocacy, and policy development.

AI Tools Covered:

- Scite
- Connected Papers
- ChatGPT
- NotebookLM
- Excel

Lessons

Introduction

This course introduces participants to Generative AI (GenAI) tools for applied research in the non-profit sector. Learners will explore how to use AI systems responsibly and effectively to conduct secondary research, assess evidence quality, and co-write reports and policy briefs aligned with organizational missions.

Participants will gain practical experience using tools such as ChatGPT, Scite, Connected Papers, and NotebookLM, with emphasis on developing critical digital literacy and maintaining research integrity.

By the end of this course, learners will be able to:

- Use GenAI tools effectively for secondary research and evidence gathering
- Critically assess the credibility, bias, and rigor of GenAI-generated content
- Produce research outputs (summaries, briefs, reports) collaboratively with GenAI while maintaining human authorial oversight

Lesson 1- Data collection: Conducting sector-relevant desk research

Overview

This session introduces AI-assisted desk research and evidence gathering for non-profits. Learners will explore Scite and Connected Papers for literature searches and learn how to prompt ChatGPT as a research assistant. The focus is on building a systematic approach to finding and evaluating sources relevant to an organization's mission.

Objectives

In this lesson, participants will learn to:

- Narrow research questions and define scope notes and search strings
- Create inclusion/exclusion criteria to structure search strategies
- Evaluate the potential limitations and biases of AI-assisted sources
- Develop criteria for evidence quality and apply strategies for fact-checking

Lesson 2- Co-Writing with AI

Overview

This session focuses on using AI tools to co-write and refine scholarly or policy texts while maintaining authorial integrity. Participants will use NotebookLM to extract key insights from uploaded documents, support evidence-based drafting, and verify content accuracy. The session emphasizes the *ethical integration* of AI through the SHARE framework (Sutherland-Harris 2024) to ensure clarity, coherence, and credibility in AI-assisted writing.

Objectives

By the end of this lesson, participants will be able to:

- Summarize academic or policy documents and extract key insights using NotebookLM
- Apply research rigor through the SHARE framework to maintain authenticity and clarity
- Refine arguments by removing redundancy and improving structure

- Identify and address counterarguments
- Fact-check content and ensure it reflects the author's intended message
- Add accurate references and citations to all claims

Required resources

- Sutherland-Harris (2024). SHARE Framework for Scholarly Co-Writing with Generative AI.

Use cases

- SHARE Framework in Practice: 5 Teaching Use-Cases

Lesson 3 - From Research to Insight: AI for Data Cleaning and Visualisation

Overview

This session extends AI-assisted desk research by showing how to transform quantitative data gathered from evidence searches or surveys into clear, communicable insights. Participants will learn how AI can assist in basic data cleaning, exploratory analysis, and creating visualisations that support research narratives or impact reporting.

Objectives

By the end of this session, participants will be able to:

- Use AI tools (e.g., ChatGPT, Excel Copilot, Google Sheets with Gemini, or Power BI Copilot) to help with basic cleaning (e.g., remove duplicates, fix categories, handle missing values)
- Perform simple AI prompts in Excel and Google Sheets
- Use AI tools to generate ideas and concepts for data visualisations
- Connect visuals back to evidence narratives for policy or funding use

Resources

- Ai Prompt Engineering tips for data analysis.
- Ai prompts for data analysis
- Ai function in Google sheets

- Whats is Generative BI
- Data Analysis with ChatGPT
- Claude Analysis Tool
- Claude Ai Capabilities - Tim's tool of choice

Hands on activity: Applying AI to Evidence-Based Research

In this activity, participants will apply the tools and techniques covered in both lessons to move through a **mini research workflow**. You will use ChatGPT to narrow a research question and define its scope, Scite or Connected Papers to identify credible sources, and NotebookLM to summarize findings. Using these outputs, you'll draft a short, evidence-based paragraph for a mock grant proposal, policy brief, or impact report, applying the SHARE framework to refine clarity and coherence.

Optional resources

- Bicknell-Holmes et al. (2024). Verifying facts in the age of AI- librarians offer 5 strategies. The Conversation. 30 July.
- Mollick and Mollick (2023). Assigning AI: Seven Approaches for Students with Prompts. The Wharton School Research Paper.
- Trust Insights. (July 2023). Instant Insights: How to Write an Effective ChatGPT Prompt.
- Mihálka, R., Paschke, M., & Sudau M. (2024). Cases for Research Integrity: Generative AI. ETH Zurich, A. Zurich-Basel Plant Science Center.
- Annapureddy, R. et al. (2025). Generative AI Literacy: Twelve Defining Competencies. Digital Government: Research and Practice, 6 (1), pp. 1-21.
- Islam, G. and Greenwood, M. (2024). Generative Artificial Intelligence as Hypercommons: Ethics of Authorship and Ownership. Journal of Business Ethics. Volume 192, pp. 659-663.