

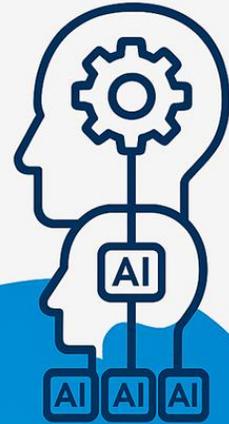


الجمهورية الجزائرية الديمقراطية الشعبية
Algerian Democratic Republic and Populaire
وزارة التعليم العالي والبحث العلمي
Ministry of Higher Education and Scientific Research



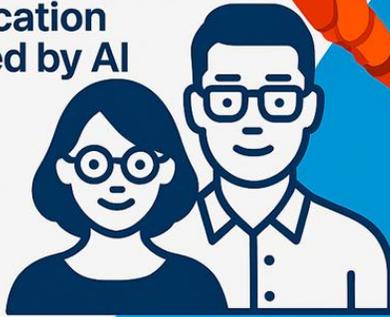
اللجنة الوطنية للإشراف ومتابعة تنفيذ برنامج تدعيم التكوين الأولي
في الطور الثالث في مؤسسات التعليم العالي- 2025-

Initial Training of Doctoral Students AI Techniques and Tools Subject



AXIS II: Learning and
Communication
Augmented by AI

AI



AI Tools at the
Service of the
Researcher

Workshop 2– Strengthening Research Skills through AI-Assisted Literature Review

1- 🕒 Duration

2 hours 30 minutes.

2- 🛠️ Tools Used

- Elicit
- Semantic Scholar
- Scite
- Zotero

3- 🎯 Learning Objectives

This workshop aims to introduce first-year PhD students (class of 2024/2025) to an effective and structured methodology for conducting academic literature reviews. Participants will learn to leverage digital and AI-based tools to:

- Efficiently explore scientific literature
- Critically analyze academic publications
- Organize and manage bibliographic references
- Properly cite sources in academic writing

4- 📦 Required Equipment

- Laptop or desktop computer with Internet access
- Registered accounts on Elicit, Semantic Scholar, and Scite
- Zotero installed with browser extension configured

5- 🌀 Workshop Outline

Step 1 – Defining the Research Question

- Formulate a clear, focused, and relevant research question
- Identify core concepts and relevant keywords

Step 2 – Initial Exploration with Elicit

Objective: Quickly identify relevant publications based on the research question

- **Exercise:** Enter a question such as *"What are the key papers addressing [topic]?"*

- **Expected Outcome:** A curated list of articles with summaries, methods, and results relevant to the topic

Step 3 – Cross-Verification and Deep Dive with Semantic Scholar

Objective: Identify highly cited articles and explore citation networks and authorship

- **Exercise:** Search titles or DOIs of key articles found via Elicit
- **Analysis:** Number of citations, relationships with other publications, article versions, and research domains

Step 4 – Critical Evaluation via Scite

Objective: Assess the reliability and academic reception of selected articles

- **Exercise:** Look up an article in Scite, interpret citation types: *Supporting*, *Contradicting*, *Mentioning*
- **Discussion:** Is there a scientific consensus on the article? Are its findings contested?

Step 5 – Organizing and Managing References with Zotero

Objective: Store, organize, annotate, and cite references efficiently

- **Exercise:**
 - Import selected references into Zotero
 - Create thematic folders
 - Add notes or summaries for each source
- **Practice:** Generate an automatically formatted bibliography in a chosen citation style (APA, IEEE, Chicago, etc.)

6- **Practical Example** (*Investigating the Use of ChatGPT in Doctoral Research*)

Given the growing presence of ChatGPT in academic settings, PhD students are encouraged to reflect on its role in their own research practices. The following prompts, designed for use in Elicit, target three different disciplines:

◆ **History**

Prompt:

"What are the key papers discussing the use of ChatGPT by doctoral students in history, especially regarding its benefits and limitations for academic writing, primary source analysis, and historical argumentation?"

◆ **Biology**

Prompt:

"What are the main studies on the use of ChatGPT by biology PhD students, particularly concerning data analysis, scientific writing, and interpretation of results?"

◆ **Software Development**

Prompt:

"What research has been done on the use of ChatGPT by doctoral students in software development, with a focus on its impact on code generation, debugging, and understanding complex systems?"

These questions can be entered directly into Elicit to retrieve relevant papers, compare research findings, or identify research gaps. They serve as structured entry points for exploring the impact of generative AI on doctoral research practices across disciplines.

7- Expected Outcomes

By the end of the workshop, participants will be able to:

- Implement an effective AI-assisted literature review workflow
- Identify, assess, and organize relevant academic sources
- Use Zotero to manage references and generate bibliographies
- Develop a critical perspective on scientific publications and their evaluation through AI tools