2026 AI Skills Series

DAY 3

AI Research & Summarisation

From Information Overload to Instant Insight

Student eBook & Reference Guide

90-Minute Virtual Classroom | Complete with Workbook & Assignments

How to Use This eBook

Welcome to Day 3. In Days 1 and 2 you learned how to instruct AI and how to produce content with it. Today you unlock the third superpower: using AI as your personal research analyst. In 2026, the ability to rapidly read, analyse, and extract insights from large volumes of information is one of the most valued skills in any professional field — and AI makes it accessible to everyone.

📖 LEARN	🔍 RESEARCH	🎯 APPLY
Read before & during class	Practice all drills in your AI tool	Complete assignment after class

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Chapter 1: The Information Overload Crisis

1.1 The Reading Burden of the Modern Professional

The average knowledge worker receives 121 emails per day, is expected to stay current with industry news, read policy documents, review reports, watch training videos, and somehow find time to do actual work. The sheer volume of information in 2026 is staggering — and growing.

According to research from Microsoft's Work Trend Index (2024), professionals spend an average of 57% of their working hours on communication and coordination tasks — including reading and processing information — leaving less than half the day for focused, creative work.

> 📊 **The Reading Bottleneck in Numbers**
> 121 emails received per day (average professional, 2024) | 50-page reports that take 3+ hours to read | YouTube tutorials running 20-45 minutes | Dense contracts that require a lawyer to interpret | Technical manuals that seem written to confuse.

1.2 What AI Changes

AI research tools do not replace your judgment or expertise. What they do is eliminate the time spent on the lower-level cognitive tasks of reading, extracting, and organising information. Think of it this way:

- BEFORE AI: Read a 50-page industry report cover to cover (3-4 hours) to extract 5 key insights for your presentation.
- WITH AI: Upload the report, ask for the 5 most relevant insights for your presentation topic. Done in under 3 minutes.
- BEFORE AI: Watch a 45-minute YouTube tutorial to learn a new skill.
- WITH AI: Get a timestamped outline of every key point in the video in 30 seconds, then watch only the sections you need.

1.3 The 'Chief of Staff' Mental Model

The most useful way to think about AI research assistance is to imagine you have a very capable Chief of Staff — a highly intelligent analyst who can read anything, never forgets, and can give you a concise brief on any topic in seconds.

Like any good Chief of Staff, this assistant:

- Reads everything and gives you the highlights
- Answers specific questions about documents without you having to re-read them
- Identifies inconsistencies, risks, and unanswered questions
- Prepares you for meetings by summarising background materials
- Monitors topics and tells you what has changed

> ⚠️ **The Critical Limitation**
> Your AI Chief of Staff is brilliant but imperfect. It can confuse facts, invent citations, and misrepresent nuanced information — especially for very recent events. Chapter 6 covers how to protect yourself from AI hallucinations in research contexts.

Chapter 2: Your Research Toolkit

2.1 Choosing the Right Tool for the Job

Different research tasks require different tools. Understanding when to use each one will save you significant time and produce much better results.

Tool	Best Use Case	Key Advantage
Perplexity AI	Current events, live web research, industry trends	Provides cited sources with every answer; pulls real-time web data
ChatPDF / Humata	Reading & questioning specific PDF documents	Upload a PDF and ask it questions directly — no more reading cover to cover
Google Gemini	YouTube summaries, Google Docs, Gmail digests	Native integration with Google Drive; excellent video summarisation
ChatGPT (with browsing)	General research with web access	Broad knowledge base plus real-time web search capability
NotebookLM (Google)	Research synthesis from multiple documents	Upload multiple PDFs and ask cross-document questions — powerful for reports
Claude (Anthropic)	Analysing long documents, nuanced reasoning	Handles very long documents with strong analytical depth

2.2 Setting Up Perplexity AI (Your Research Engine)

Perplexity.ai is one of the most powerful beginner-friendly research tools available in 2026. It works like a search engine but gives you synthesised answers with citations, rather than a list of links.

1. Go to perplexity.ai in your browser.
2. No account is required for basic use. Create a free account for saved searches.
3. Type your research question in the search bar.
4. Review the answer AND the sources listed on the right side of the screen.
5. Click any source to verify the original information.

2.3 Setting Up ChatPDF

6. Go to chatpdf.com.
7. Drag and drop any PDF file into the upload area, or paste a PDF link.
8. Once uploaded, the AI reads the entire document automatically.
9. Type your questions about the document in the chat box below.

10. The tool will answer and cite the specific page number where the answer appears.

Chapter 3: The Three Deep-Dive Research Techniques

3.1 Why Generic Summaries Fall Short

The most common mistake beginners make is asking AI for a generic 'summary.' A generic summary gives you a vague, general overview that may not address what you actually need to know. The three techniques in this chapter produce targeted, actionable research outputs instead.

3.2 Technique 1 — The Actionable Summary

Instead of asking for a summary, ask for a summary that is specifically relevant to YOUR role, decision, or challenge. This transforms a generic overview into a personalised intelligence briefing.

TECHNIQUE 1: The Actionable Summary

Summarise this article into 5 actionable bullet points that a [Your Job Title] needs to know.For each point, include:- What is happening- Why it matters to someone in my role- One action I should consider taking as a result

Examples of how to specify your role:

- "...that a small business owner in Lagos needs to know."
- "...that a secondary school teacher needs to know."
- "...that a supply chain manager in West Africa needs to know."
- "...that a first-time home buyer needs to know."

3.3 Technique 2 — The ELI5 (Explain Like I'm 5)

ELI5 is an internet abbreviation for 'Explain Like I'm 5 years old.' When you encounter dense technical, legal, medical, or financial language, this technique breaks it down into plain language that anyone can understand — without losing the essential meaning.

TECHNIQUE 2: The ELI5 Technique

Explain the key concepts in this document as if I have no technical background.Specifically:1. What is this document/article about in plain English?2. What are the 3 most important things I need to understand?3. Are there any terms or jargon I should look up further?Avoid all technical language in your explanation.

Apply ELI5 to:

- Legal contracts and Terms of Service agreements

- Medical research papers and health guidelines
- Technical product manuals or IT documentation
- Financial reports, audit findings, and tax documents
- Government policy documents and regulatory guidelines

3.4 Technique 3 — The Cross-Examination

The most sophisticated of the three techniques. Instead of asking what a document says, you ask AI to challenge it — to identify what is weak, what is missing, what assumptions are made, and what questions remain unanswered. This is how consultants, lawyers, and researchers think.

TECHNIQUE 3: The Cross-Examination

Read this document critically and answer the following:1. What are the 3 biggest weaknesses or limitations in this report?2. What key questions does this document leave unanswered?3. What assumptions does the author make that are not supported by evidence?4. If you were advising a decision-maker using this report, what cautions would you raise?

🎯 **When to Use Each Technique**

Use Actionable Summary for news articles, industry reports, and anything you need to act on. Use ELI5 for dense technical or legal documents you need to understand. Use Cross-Examination for reports, proposals, or research you need to evaluate critically before making a decision.

Chapter 4: Practice Drills

4.1 Drill 1 — The YouTube Shortcut

YouTube is one of the richest educational resources in the world — but long videos are a major time sink. Gemini and Perplexity can process YouTube videos and give you a structured breakdown in seconds.

DRILL 1 PROMPT: YouTube Video Analysis

Analyse this YouTube video: [paste the YouTube URL here]Provide:1. A timestamped outline of every major section and key argument2. The 3 most important takeaways from the entire video3. The single most important quote or statement made4. Any tools, books, or resources mentioned that I should explore further

How to find the YouTube URL: Open the video on YouTube, right-click the video, and select 'Copy Video URL.' Paste it directly into your prompt.

📍 **Which Tool to Use for YouTube**

Google Gemini is the most reliable tool for YouTube analysis because it is built by Google and has direct access to YouTube's transcript data. Paste the URL directly into Gemini. Perplexity also works but may not always access the full transcript.

4.2 Drill 2 — The Document Interrogator

This drill uses ChatPDF or Gemini to turn any static PDF into an interactive Q&A session. Instead of reading a document looking for information, you simply ask for exactly what you need.

DRILL 2 PROMPT: Interrogate Any Document

[After uploading your PDF to ChatPDF or Gemini]'Answer the following questions about this document:1. What is the main purpose or conclusion of this document?2. What action is required from me, and by when?3. Are there any risks, penalties, or obligations I should be aware of?4. What is the total financial commitment or obligation in this document?5. Is there anything in this document that seems unusual or worth questioning?'

Apply this drill to:

- Utility bills — understand charges and compare to previous months
- Insurance policies — identify what is and is not covered
- Employment contracts — extract key terms, notice periods, and obligations
- Property leases — find renewal terms, penalty clauses, and restrictions
- Service agreements — clarify your rights and the provider's obligations

4.3 Drill 3 — Fact-Checking with Perplexity

Perplexity AI is uniquely powerful for research because it always cites its sources. This makes it the safest AI tool to use when you need to verify information or research current trends.

DRILL 3 PROMPT: Industry Trend Research with Citations

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What are the top 3 most significant trends in [Your Industry] for 2026?For each trend:- Provide a brief explanation (2-3 sentences)- Cite the original source or report- Explain the specific implications for [describe your business/role]Provide links to the original sources where possible.
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🔗 **Always Check the Source Links**

When Perplexity gives you an answer with source links, click at least 2 of them to verify the information. AI can sometimes misquote or misrepresent sources even when it cites them. This 30-second habit protects your professional credibility.

Chapter 5: Advanced Document Analysis

5.1 The Executive Summary Technique

One of the most requested research outputs in any professional setting is the Executive Summary — a concise, high-impact overview written for a busy decision-maker who needs the essential information without reading the full document.

EXECUTIVE SUMMARY PROMPT: For Any Long Document

Read the document I have uploaded/pasted below. Write a 200-word Executive Summary for a busy senior manager.Structure:- Opening: What this document is about and why it matters (2 sentences)- Key Findings: 3 most important points as bullet points- Risk or Challenge: 1 significant concern or limitation- Recommended Next Step: 1 clear, specific action the reader should takeUse professional but plain language. No jargon.

5.2 The Comparison Technique

When you have two documents, two viewpoints, or two options to evaluate, the comparison prompt produces a structured, objective analysis table far faster than any manual approach.

COMPARISON PROMPT: Side-by-Side Analysis

I am going to give you two documents/perspectives to compare.[Paste Document/Text 1 here][Paste Document/Text 2 here]Create a comparison table with the following columns:- Key Point- Document 1 Position- Document 2 Position- Agreement or Conflict?After the table, write a 3-sentence conclusion: which perspective is better supported by evidence, and why?

5.3 The 'What Should I Do Next?' Prompt

After receiving a summary or analysis, always follow up with an action-oriented prompt. This converts information into decisions — the ultimate goal of any research.

ACTION PROMPT: Turn Insight into Next Steps

Based on the summary and analysis above, what should my next steps be?Consider that:- My role is: [describe your role]- My main goal is: [describe your goal]- My constraints are: [time, budget, authority, etc.]Provide 3 specific, realistic next steps ranked by priority.For each step, include: What to do, Why it matters, and How long it should take.

5.4 Monitoring Ongoing Topics with Perplexity

Perplexity allows you to set up ongoing research queries on any topic. Use these prompt patterns to stay current in your field without spending hours reading every day:

- "What has happened in [your industry] in the last 30 days? Focus on regulatory changes and major business news."
- "What are the most discussed topics at [major industry conference] this year? Summarise the key themes."
- "Are there any new laws or policies affecting [your sector] in Nigeria/West Africa in 2026? Provide links."

Chapter 6: Source Verification and Avoiding Hallucinations

6.1 What Is AI Hallucination?

AI hallucination refers to the phenomenon where an AI confidently states something that is factually incorrect, invents citations that do not exist, or misrepresents information from a real source. It is not lying in the human sense — the AI is simply pattern-matching in a way that produces a plausible-sounding but inaccurate result.

Hallucinations are more common when:

- The topic is very recent (after the AI's training data cutoff)
- The topic is highly specific (detailed statistics, obscure facts)
- The AI is asked to cite specific studies, papers, or quotes
- The question involves rapidly changing information (stock prices, election results, breaking news)

6.2 The Three-Layer Verification Protocol

Layer	What to Check	How to Check
Layer 1Source Check	Does the cited source actually exist?	Click the link (if provided). Google the title of the article/report. If you cannot find it, the citation may be fabricated.
Layer 2Fact Check	Does the specific statistic or claim appear in the source?	Open the source and use Ctrl+F to search for the key number or quote. Do not assume the AI quoted it correctly.
Layer 3Recency Check	Is this information current?	Check the date of the source. For fast-changing topics, always verify with a current news search on Perplexity or Google.

6.3 The Self-Verification Prompt

Build this into your research workflow as a standard step:

SELF-VERIFICATION: Ask AI to Flag Its Own Uncertainties

Before I use this research, please review it and:1. Flag any specific statistic or fact that you are not fully certain about with [VERIFY]2. Identify any claims that rely on data from before 2024 that may be outdated3. Note any topics in this response where I should seek a specialist's opinion rather than relying on AIBe honest about the limits of your knowledge on this topic.

⭐ **The Golden Rule of AI Research**

> Use AI to find and summarise information quickly. Use your own judgment and independent verification to confirm what matters most. AI is your research assistant, not your research authority.

Chapter 7: Advanced Research Prompts and Frameworks

7.1 The SWOT Analysis Prompt

SWOT (Strengths, Weaknesses, Opportunities, Threats) is a classic strategic analysis framework. AI can generate a SWOT analysis for any topic, company, industry, or idea in seconds.

SWOT PROMPT: Strategic Analysis Framework

Conduct a SWOT analysis for [your company/idea/industry/topic].Context: [brief description of your situation or role]Present the results in a clearly formatted table.For each point, provide a 1-sentence explanation of why it matters.Conclude with: Based on this SWOT, what is the single most important strategic priority right now?

7.2 The Competitor Research Prompt

For business owners and professionals, understanding your competitive landscape is critical. Use this with Perplexity for live web data:

COMPETITOR PROMPT: Competitive Intelligence

Research [Competitor Name] and provide:1. Their core products/services and target market2. Their apparent pricing strategy3. Their strongest value proposition (what makes them different)4. Any publicly known weaknesses or customer complaints5. Recent news about their strategy or directionProvide sources for each point.

7.3 The Policy and Regulation Scanner

For professionals in regulated industries — finance, healthcare, education, construction — staying current on regulatory changes is critical and time-consuming. Use this prompt with Perplexity:

REGULATION PROMPT: Stay Current on Compliance

Search for any regulatory updates or policy changes affecting [your industry] in [your country/region] in the last 6 months.For each update:- What changed?- Who is affected?- What is the deadline or effective date?- What action do businesses in this sector need to take?Cite the government or regulatory body source for each item.

Chapter 8: Building Your Personal Knowledge System with AI

8.1 The 'Second Brain' Concept

The most productive professionals in 2026 are using AI not just for one-off research tasks, but to build an ongoing personal knowledge system — a 'Second Brain' that stores, connects, and retrieves insights across all their reading and research.

The basic principle is simple: after every piece of research you conduct with AI, capture the key insights in a structured personal note. Over time, this creates a powerful reference library that you can query with AI.

8.2 The Daily Intelligence Brief

Use this prompt every morning to stay current with your field in 5-10 minutes instead of an hour:

DAILY BRIEF PROMPT: Your Morning Intelligence Briefing

Act as my personal research analyst. Give me today's briefing on the following topics:1. [Topic/industry 1] — What is the most important development in the last 24 hours?2. [Topic/industry 2] — Any new research, reports, or news I should know about?3. [Your country/region] business environment — Any news affecting small businesses or [your sector]?Keep each section to 3 bullet points maximum.Flag anything that requires immediate action from me.Provide source links for every point.

8.3 The Meeting Preparation Prompt

MEETING PREP PROMPT: Prepare for Any Meeting in 3 Minutes

I have a meeting in [X] minutes with [name/organisation] about [topic].Based on what you know, prepare me with:1. A 2-sentence summary of [organisation's] background and current situation2. The 3 most important questions I should ask in this meeting3. Any recent news about this organisation/person I should be aware of4. My key talking points based on [my role and goal]5. Any potential objections and how to respond to them

8.4 The Learning Accelerator Prompt

Use AI to master any new topic in record time:

LEARNING PROMPT: Master Any New Subject Quickly

I want to understand [topic] well enough to [your goal — e.g., present to clients, make a decision, teach others].Create a learning roadmap for me:1. The 5 core concepts I must understand (in plain English)2. The single best free resource to start with3. The 3 questions an expert would ask to test my

> *understanding4. Common misconceptions about this topic that I should avoid5. How long it would realistically take to reach a working-level understanding*

Chapter 9: Workbook — In-Session Exercises

Complete these exercises during the live session. You will need your AI tool open.

Exercise 1: The Three Techniques in Practice

Find a news article or report on a topic relevant to your work or business. Apply all three Deep-Dive techniques and record your observations.

1	**ACTIONABLE SUMMARY — What were the 3 most relevant bullet points for your role?** Your answer: _____
2	**ELI5 — Was there any concept in the document that the ELI5 technique significantly clarified? What was it?** Your answer: _____
3	**CROSS-EXAMINATION — What weakness or unanswered question did AI identify that you had not noticed?** Your answer: _____

Exercise 2: The Document Interrogator

Upload or paste a document you need to process (a contract, report, policy, or long email). Ask the 5 Document Interrogator questions and record the most important answer below.

A	**What was the most important thing the Document Interrogator revealed that you might have missed by skimming?** Your answer: _____

B	**How long would it have taken you to extract this information manually? How long did the AI approach take?** Your answer: _____

Exercise 3: Fact-Checking Practice

Run the Perplexity industry trend research prompt for your field. Then verify at least 2 of the sources it provides.

A	**Industry/topic you researched:** Your answer: _____
B	**Were the sources cited by Perplexity accurate and accessible when you clicked them?** Your answer: _____
C	**Did you find any information in the answer that seemed questionable or unverifiable?** Your answer: _____

Chapter 10: Day 3 Assignment

> 🔍 **Your Executive Summary Challenge**
>
> *Due before Day 4. Estimated time: 20-30 minutes.*

The Task

Find a long document, article, or piece of content that you have been avoiding because it is too long, too dense, or too technical to engage with. Use your AI research toolkit to produce a professional Executive Summary and an action plan from it.

Step-by-Step Instructions

11. Find your document — choose something real: a Terms of Service agreement, a dense industry report, a long policy document, a contract, or a complex news article.
    - Aim for something at least 2-3 pages long. The more intimidating, the more impressive your output will be.
12. Apply the Actionable Summary technique: 'Summarise into 5 bullet points a [your role] needs to know.'
13. Apply ELI5 to the 2-3 most confusing or technical sections.
14. Apply Cross-Examination: What are the 3 biggest weaknesses or unanswered questions?
15. Write the Executive Summary using the prompt in Chapter 5.1.
16. Run the What Should I Do Next? prompt from Chapter 5.3.
17. Verify at least 2 key facts from your summary using Perplexity with source citations.

What to Submit

- Your original document (title and source)
- Your complete Executive Summary (200 words)
- Your 3 recommended Next Steps
- Evidence of source verification (screenshot or note of what you checked)
- Reflection: What would have taken you the longest to find/understand without AI?

Reflection Questions

1	**Which of the three research techniques (Actionable, ELI5, Cross-Exam) did you find most useful for this task and why?** Your answer: _____

2	**Did AI identify any risk or weakness in the document that changed how you think about it?** Your answer: _____

3	**How will you use AI research tools in your daily professional routine going forward?** Your answer: _____

Chapter 11: References & Further Learning

11.1 Core References

- Microsoft Work Trend Index Annual Report (2024). Microsoft Corporation. Available at: microsoft.com/en-us/worklab/work-trend-index
- Stanford HAI (Human-Centred AI). AI Index Report 2024. Stanford University. Available at: aiindex.stanford.edu
- McKinsey Global Institute. (2023). The Economic Potential of Generative AI: The Next Productivity Frontier. Available at: mckinsey.com
- Petroni, F. et al. (2020). Language Models as Knowledge Bases? EMNLP 2020. Available at: arxiv.org/abs/1909.01066 (foundational paper on AI knowledge limitations)
- Maynez, J. et al. (2020). On Faithfulness and Factuality in Abstractive Summarization. ACL 2020. Available at: aclanthology.org (on AI summarisation accuracy)
- Wired Magazine. (2024). The Problem with AI Hallucinations — and What We Can Do About It. Available at: wired.com

11.2 Research Tools to Explore

- Perplexity AI — perplexity.ai (best AI search with citations)
- Google NotebookLM — notebooklm.google.com (multi-document research synthesis)
- ChatPDF — chatpdf.com (PDF interrogation)
- Humata — humata.ai (enterprise PDF analysis)
- Elicit — elicit.com (academic paper research assistant)
- Consensus — consensus.app (AI search of peer-reviewed research)

11.3 Fact-Checking and Verification Resources

- Snopes — snopes.com (fact-checking for viral claims)
- FullFact — fullfact.org (independent fact-checking, includes Africa coverage)
- Africa Check — africacheck.org (Africa-specific fact-checking organisation)
- PolitiFact — politifact.com (political and policy fact-checking)

End of Day 3 eBook

Day 4 — AI for Productivity & Automation: Let AI Do the Repetitive Work!

2026 AI Learning Roadmap | Created for beginners, designed for results.