UNDERSTANDING AI-POWERED DEEP RESEARCH TOOLS

A Primer for Legislative Staff

developed by

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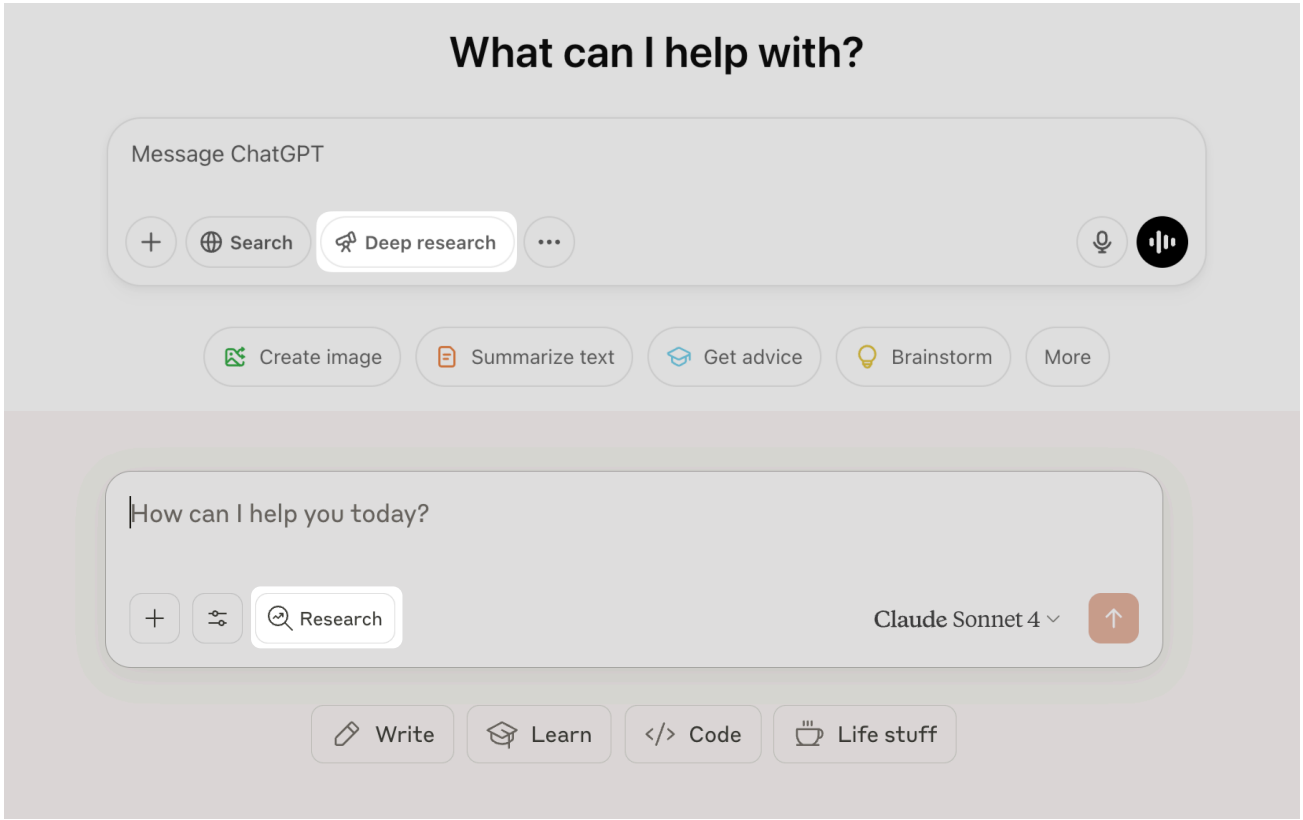
Introduction

In recent months, numerous commercially available large language models (LLMs), including Google's Gemini, OpenAI's ChatGPT, and Anthropic's Claude, have released Deep Research plugins on their interfaces. This brief guide presents an overview of what these capabilities can entail, how they differ from the more traditional approach to interacting with LLMs, sample use cases, and best practices.

What is Deep Research?

Deep Research is an advanced AI capability that goes far beyond a single prompt-and-response interaction. Unlike typing a question and receiving one answer, Deep Research tools conduct multi-step investigations — automatically searching multiple sources, cross-referencing information, and synthesizing findings into comprehensive reports. These tools can be configured to prioritize specific types of sources, such as academic databases, government repositories, or curated document collections, rather than conducting broad internet searches.

Think of it as the difference between asking a research assistant one quick question versus assigning them a complex research project that requires consulting numerous sources, analyzing trends, and preparing a detailed briefing.



How Deep Research Differs from Standard Prompts

Standard Prompt

- Single question → Single answer
- Uses AI's existing knowledge
- Immediate response (seconds)
- Limited to one perspective
- Basic fact-checking

Deep Research

- Complex query → Multi-step investigation
- Actively searches current sources
- Extended research process (10-20 minutes)
- Cross-references multiple viewpoints
- Comprehensive source verification

When to Use Deep Research

The use of Deep Research might be helpful for:

- Complex policy analysis requiring multiple data sources
- Comprehensive background research on emerging issues
- Competitive landscape analysis of legislation or programs
- Trend analysis across multiple time periods or jurisdictions
- Multi-stakeholder perspective gathering

The use of an LLM's standard tool offering is helpful for:

- Quick fact-checking
- Summarization of a particular resource
- Simple definitions or explanations
- Draft writing assistance
- Basic Q&A

Legislative Staff Use Cases

The following hypothetical use cases showcase the difference in approach of querying an LLM's default functionality compared to using Deep Research functionality. Before any use of an LLM, consult your institution's guidance regarding authorized and appropriate use on official devices.

Oversight Preparation

Standard Prompt: "What is the Department of Education's budget for Title I programs?"

Deep Research: "Conduct comprehensive analysis of Title I funding trends, implementation challenges, and outcomes across states over the past five years, including GAO reports, state audits, and academic studies."

Policy Position Development

Standard Prompt: "What are the arguments for renewable energy tax credits?"

Deep Research: "Analyze the effectiveness of federal renewable energy incentives, comparing approaches across different technologies, examining economic impacts in various districts, and reviewing recent policy proposals from think tanks and industry groups."

Legislative Comparison

Standard Prompt: "How does our introduced healthcare bill compare to similar legislation?"

Deep Research: "Compare pending healthcare legislation across all states, analyzing key provisions, stakeholder positions, implementation timelines, and projected outcomes, with focus on bipartisan elements and potential federal implications."

Best Practices for Legislative Offices

Before Starting Deep Research

- **Review institutional guidance** - Ensure that your use of the LLM is authorized and that you've reviewed all best practices to ensure responsible and safe use
- **Define your scope clearly** - The more specific your research question, the better the results
- **Identify key stakeholders** you want perspectives from
- **Set realistic timeframes** - Deep research takes 10-20 minutes
- **Consider sensitivity** - Do not include confidential or non-public information in research queries

During the Research Process

- **Monitor progress** - Most tools show real-time research steps
- **Prepare for refinement** - You may need to narrow or expand scope based on initial findings
- **Stay available** - Some tools may ask clarifying questions mid-process

After Research Completion

- **Verify claims** - Always fact-check information through official sources
- **Cross-reference findings** - Compare results with your office's existing research
- **Adapt tone and perspective** - Remember that any work produced and used is done so at your discretion. You are responsible for the quality of the final product.
- **Cite appropriately** - Use (and verify) provided sources

Security and Compliance Considerations

- **Follow institutional guidance** from House Information Resources or Senate Sergeant at Arms
- **Never input personally identifiable information**, information that is classified, or information that is not publicly available
- **Review outputs carefully** before using in an official capacity
- **Maintain awareness** that research queries may be logged by AI providers

Getting Started

1. **Check approved tools** - Verify your institution and office has approved for use specific platforms with Deep Research capabilities
2. **Start small** - Begin with non-pressing research topics to learn the interface
3. **Practice scoping** - Experiment with different levels of detail in your research questions
4. **Build templates** - Develop standard research question formats for common use cases
5. **Share learnings** - Help us understand how you and your team are using Deep Research in a legislative setting and the best practices that you've uncovered!

Have questions about implementing Deep Research tools in your office? Contact us at info@popvox.org.