

AI Prompting Workshop

From Basics to Brilliance

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Here are some important guidelines that keep us all safe and responsible when using these powerful tools as part of this session and beyond.

Keeping Our AI Use Ethical and Responsible

Let's make sure that as we use technology and AI, we do it in a way that's right and good for everyone. This means we all need to know and follow applicable ethical rules and other guidelines.

Being Careful with Our Personal Information

The significance of data privacy cannot be overstated. I strongly discourage the input of personal or sensitive data into AI applications, both during this workshop and in subsequent use. Protecting personal information is not only a regulatory obligation but also a cornerstone of digital citizenship. It's essential to recognize that once data is shared online, controlling its distribution and usage becomes significantly more complex.

Your Responsibility When Using Third-Party AI Apps

You are responsible for what you put into any third-party AI applications. This means thinking carefully about what you ask AI to do, the kind of information you share, and the impact of your actions.

Moving Forward Responsibly

Let's use generative AI with a sense of curiosity and a commitment to using these tools in a way that respects privacy and follows ethical guidelines. By sticking to the rules and being mindful of how we use AI, we can explore new areas in good ways that combine excitement and responsibility.

Introduction to Generative AI

Definition: Generative AI refers to artificial intelligence systems capable of generating content, such as text, images, and music, based on the data they have been trained on.

Understanding Large Language Models (LLMs)

Large Language Models, such as GPT-4, are advanced AI systems trained on vast datasets to generate text based on the input they receive based on probabilities. LLMs are designed to generate coherent and contextually appropriate text outputs. They can write essays, summarize texts, generate creative content, and even code. In the legal domain, for example, LLMs can draft documents, predict legal outcomes, and provide research and other assistance.

Tokens vs. Words

- **Tokens:** A token can be a word or part of a word. It's the smallest unit of text that an LLM processes.
- **Words:** A collection of characters forming a word as we understand it in language.
- **LLMs use tokens, not words.** Thinking of generative AI in terms of “predicting the next word” is not an accurate way to understand what is happening and can lead to confusion. Generative AI tools do not “understand” the answer they give you in any human sense.

Key Point: LLMs count and process input based on tokens, which means their capacity to interpret and generate text is framed by a token limit, affecting the length and detail of their outputs. They essentially are given you the most likely or “best fit” response for your question as it runs through the model, with some randomizing factors, guardrails, and other adjustments. AI expert Emily Bender refers to these tools as “synthetic text extrusion machines,” which I find a helpful analogy.

Temperature

The temperature setting in an AI model influences the randomness of its responses. A lower temperature results in more predictable and conservative outputs, while a higher temperature encourages creativity, generating more varied and sometimes unexpected results. For legal applications, a moderate temperature often balances reliability with insightful responses. Temperature has limited utility, and it is better to use prompting to achieve the results you want.

Prompting

Prompting is the art of crafting inputs for the AI to generate desired outputs. Effective prompts are clear, specific, and provide a context that guides the AI in producing relevant and accurate information. In legal work, prompting could range from asking for case law summaries to drafting specific legal arguments.

Applications in Law: From drafting legal documents to analyzing case law and predicting legal outcomes, generative AI can significantly **augment** the efficiency and effectiveness of law practice in many ways.

Benefits of GPT-4 Level LLMs

GPT-4 and similar high-level LLMs offer several advantages over earlier generations. The leap seen in GPT-4 caused the excitement at the end of November 2022.

- **Better Results:** There is a vast difference in performance and results between GPT-4 (able to get passing scores on bar exam and other professional exams) and earlier versions like GPT-3.5 and GPT-3.
- **Efficiency:** Quick generation of drafts, summaries, and research notes.
- **Flexibility:** Capability to tailor responses to specific legal questions or document formats.

Why Use a Paid Generative AI Product

Paid AI products provide:

- **Higher Quality Outputs:** Enhanced models (GPT-4 level) with more data and advanced training.
- **Reliability:** Consistent performance and accessibility, critical for professional use, with fewer limits on number of prompts in a given time period.
- **Improvement:** Continuing improvements, updates, and new features.

Understanding AI Configuration

- **Temperature Adjustments:** Adjusting the "temperature" can affect the creativity and randomness of AI responses without the nuances that prompting can provide.
- **Priming/Grounding:** Providing context or "priming" the AI gives you more grounded and relevant responses than asking simple questions. Example: "Assume that you are a personal diet and fitness coach and that I walk 30 minutes three times a week. Given current nutritional guidelines and a focus on sustainable weight loss, what are five healthy ways to lose weight for the upcoming spring and summer?" This prompt primes the AI with specific criteria, leading to more tailored and relevant advice.
- **AI Memory:** Generative AI tools retains information in "short-term" memory during a conversation. Because the tool "remembers" the previous prompt(s) and answers, you can refine results by having a discussion or conversation with the tool. This is the essence of the "chat" interference.

Enhancing Conversational AI Interactions

- **Memory Refreshing:** The tools currently have a fairly short-term memory – maybe 5 or 6 prompts before it will start to "forget" previous answers and prompts. You can ask the tool to refresh its memory on what has come before or re-prompt it with important details to help get it back on track. Example: In a discussion about legal case analysis, first inform the AI about the case's background, key figures, and legal questions involved. Later, refer back to these details to see how the AI integrates this information into its analysis or recommendations. Example: "Recalling our discussion above on the Smith v. Jones case, how does the precedent set by Johnson v. Lee affect our argument?"
- **Conversational Styles:** You can personalize AI responses (formal, informal, technical, etc.) based on your preferences or the context of use. Example: "Explain this to me like I am a fifth grader."
- **Summarizing:** You can distill documents or discussions into key points and action steps.

Crafting Simple and Effective AI Prompts

- **Reading Levels:** Tailoring prompts to generate responses suitable for different comprehension levels. My experiments suggest that a twelfth-grade reading level produces good and readable results for legal work without becoming overly technical. That's the reading level of this handout.
- **Output Variations:** Explore different formats (bullet lists, outlines, tutorials, FAQs, multiple choice quizzes) and lengths (100 words, 250 words, 750 words) for AI-generated content.
- **Power Words and Style:** Incorporate impactful vocabulary and defining your unique style for more engaging and effective communication. Examples: "Refine this answer." "Provide more detail." "Generate more ideas."
- **Prompt Suggestions:** Generative AI tools can be prompted to create good prompts or improve your prompts. The tools provide examples of simple prompts that you might find useful and adapt to your own purpose. OpenAI is creating a marketplace for people to offer prompts (called GPTs) for others to obtain and use, with very mixed results.
- **Revisions vs. Recommendations:** I greatly prefer asking generative AI tools for a list of recommendations to improve a piece of writing I give it and almost never allow the tool to generate a revision for me.
 - **Revision Example:** "Rewrite this paragraph to make it more persuasive to a skeptical audience."
 - **Recommendation Example:** "Suggest improvements to strengthen the argument in this legal brief."

Simple Prompting: Practical Suggestions

Simple Prompt Analysis

- **Activity:** Inputs "5 best ways to lose extra weight for the spring and summer" into a generative AI tool several times or into different tools. Notice how the results will not be exactly the same. Understanding this unpredictability and inability to duplicate results exactly is a key to using generative AI well.
- **Variability:** Compare how different AI settings (e.g., temperature adjustments) or models produce different advice, ranging from diet and exercise to lifestyle changes.
- **Quality Assessment:** Evaluate the practicality, safety, and scientific basis of the advice. For instance, how does advice to "increase water intake" compare in terms of safety and effectiveness to "try a trendy diet"?

Crafting Effective Simple Prompts

- Start with clear, concise questions.
- Include relevant legal jurisdictions or specific areas of law.
- For more creative tasks, experiment with varying temperatures.

Suggestions for Simple Prompts

1. **Summarizing Judgments:** "Summarize the key points of the judgment in [Case Name], focusing on [specific legal principle]."
2. **Drafting Documents:** "Draft a letter of advice to a client about their rights in a [specific type of case], considering [jurisdiction]."

Experiments to Try

- **Comparative Analysis:** Ask the AI to compare legal principles across different jurisdictions. Observe how adjusting the temperature affects the breadth of comparison.
- **Case Outcome Prediction:** Based on a set of facts, ask the AI to predict possible outcomes. Compare its predictions with actual cases.

Practical Legal Prompting Ideas (Simple)

- What are the legal precedents for copyright infringement in digital media?
- Analyze the strengths and weaknesses of the defense in a controlling precedent.
- Recommend ways to make my closing argument more persuasive.
- Given the following facts about a potential juror, list ten questions I should ask in voir dire.
- Draft a client letter explaining the potential outcomes of their case, using a compassionate yet professional tone.

Advanced Prompting

Four Approaches to Improving AI Results

1. Limiting the data LLM is trained on (e.g., restricting to legal sources only)
2. Improving prompting and using general LLMs
3. Retrieval-augmented Generation (“RAG”) – refine LLM results by connecting to curated data sources before returning answer (WestLaw Practical Law AI; connecting to Yelp results)
4. Hybrid approaches

Structured and Sophisticated Prompts

- You will reach a point where you feel that simple prompts give you the “most likely” or “average” results. At this point, you will want to try structured and sophisticated prompts to increase your odds of getting results that are much more fine-tuned and helpful than you can get with simple prompting.

Chain of Thought

- Chain of thought is an approach to conversational prompting that guides the AI to think through a problem step-by-step, mimicking human reasoning to enhance the depth and accuracy of its responses. Examples: Creating multi-step legal arguments or developing comprehensive business plans.

Hybrid Approaches

- Combining different prompting strategies to handle complex legal scenarios more effectively.

Introduction to the PCRO Approach

Dennis Kennedy's PCRO model for crafting effective AI prompts enhances the clarity, specificity, and relevance of AI-generated content.

Persona

Defining the Persona: Tailoring the AI's voice, expertise level, and style to fit the intended context or audience, such as a technical expert or a creative assistant.

- **Expert Prompt:** Crafting prompts that position the AI as an expert providing consultation on specific issues.
- **Megaexpert Prompt:** Elevating the expertise level to include focused expertise areas or multiple expertise areas.
- **EXAMPLE:** Expert prompt
“Assume that you are a seasoned expert in [a specific domain], drawing upon the wisdom from foundational books and guided by leading individuals in the field. Imagine yourself as a specialist with profound knowledge, having been trained using key techniques and principles. Now, analyze the provided text and, based on your expertise, generate 25 thoughtful and insightful recommendations:”

Context

Providing Context: Embedding well-defined context including sufficient background information, details of the problem, and other specific factual information that would be helpful to the persona working on your problem.

- **EXAMPLE: Dennis Kennedy Context – Sample**
“Assume that I have been a pioneer in the digital legal landscape since the 1990s. I wrote the technology column for the ABA Journal from 2007 to 2014, have chaired the ABA's Legal Technology Resource Center, and founded the Law Department Innovation Library (www.ldilibrary.com). I am a prolific author, with several influential books on legal innovation, collaboration, and social networking, and an accomplished podcast host with the long-running The Kennedy-Mighell Report on the Legal Talk Network. I teach AI and the Law, New Technologies and the Law, and Cybersecurity and Data Protection at Michigan State University College of Law and Legal Technology Literacy and Literacy at University of Michigan College of Law. I am a highly-regarded legal technology and innovation expert, educator, and keynote speaker, specializing in transformative innovation for law departments. I am currently the Director of the Center for Law, Technology & Innovation at Michigan State University College of Law after retiring as Senior Counsel for Digital Payments and Labs at Mastercard,

Request

Framing the Request: Articulating the task or question with precision to guide the AI towards the desired output. As a general rule, the more specific the question, the better. You want to clearly define what the AI is supposed to do for you. What task are you giving it?

Outcome / Output

Envisioning the Outcome or Output: Specifying the output, scope, and purpose of the AI-generated content clearly to achieve the desired format and detail level to meet precise needs

- Examples:
 - Provide a detailed list of 25 ideas, each with three sentences of explanation.
 - Provide a 500-word overview report evaluating the pros and cons of different legal strategies using bullet points and concluding with your assessment of the best and worst strategies.

Sample PCRO Prompts

Detailed Book Summary Prompt

Consider yourself a seasoned expert in summarizing the key points of non-fiction books in an accessible way based on the method used by getAbstract when preparing their summaries and enhanced as you deem appropriate, drawing upon the wisdom from foundational books and guided by leading individuals in the field. Imagine yourself as a specialist with profound knowledge, having been trained using key techniques and principles. Consider "[BOOK]," a non-fiction book by [AUTHOR], and prepare a 750-word summary in this style that includes these sections: Main Message (100 - 150 words); Key Insights (at least 10); a recommendation of 5 other books on closely-related topics (or by the same author) I should consider reading; and at least ten Key Action Steps. Then generate 6 tags I can use to help me categorize the book and its learnings. Finally, generate a list of 5 highly-important quotes from the book.

Bar Exam Preparation Prompt

Consider yourself a seasoned expert in bar exam preparation, personal productivity and planning, and coaching law school graduates to pass the bar exam on their first try, drawing upon the wisdom from foundational works and studies and guided by leading individuals in the field. Imagine yourself as a specialist with profound knowledge, having been trained using key techniques and principles.

I am a third-year law student who will taking the 2024 Michigan bar exam on July 30 and July 31. I want to start studying for the bar exam on May 10. and I want to optimize my chances of passing while reducing stress and maintaining a reasonable workload. My plan is the treat bar exam study as my primary fulltime job during this period and study 7- 8 hours a day on weekdays and 4 hours a day on weekends. I am taking a commercial bar review course to help me. I want to take at least four complete practice multiple choice exams with the first at the end of May and the last one week before the actual exam. After the last practice exam, I want to be very confident that I am at least 10 points above the passing score and can finish the exam with at least 15 minutes to spare. I also want to take a couple of practice essay exams and become comfortable with writing in the structured format I will need to use to score well in this portion of the exam. I want to focus on my health and wellness, and ideally give myself a full day off from studying after my last practice exam. I want to use the week before the actual exam to help me increase my stamina, health, and confidence about the exam.

Using your experience and expertise, create a detailed weekly calendar of an ideal study plan for me to successfully pass the Michigan bar exam on my first try.

Advanced Prompt Starter Examples for Lawyers

- As a seasoned financial analyst, provide three different calculations of financial damages in the following three scenarios and rank them in order of strength.
- As a seasoned and successful business litigator and negotiator, develop three litigation strategies for a business fraud case with an unsympathetic defendant.
- Given the 2023 FDA food safety regulations and as an expert in food safety compliance, summarize recommended practices for restaurant hygiene.
- Predict likely responses to different versions of deposition questions based on provided assumptions about a witness and facts of a case.
- Combine insights from urban development and sustainability metrics to create a proposal my client can make to recommend comprehensive city planning guidelines.
- Use conversational prompting to prepare for or practice client interactions, negotiation simulations, and training programs for associates. Example: Setting up mock negotiation scenarios or client advising sessions using AI-driven dialog.

Jobs to be Done

The "Jobs to be Done" (JTBD) theory is a framework for understanding customer needs, created and popularized by the late Harvard Business School professor Clayton M. Christensen, along with colleagues and other thought leaders. Its key principles and conclusions are as follows:

1. **Focus on the Job, Not the Customer:** Rather than targeting specific customer demographics or profiles, the JTBD theory encourages companies to focus on the "jobs" customers are trying to accomplish with a product or service. These jobs can be functional (performing specific tasks), social (gaining esteem from peers), or emotional (feeling good or secure).

2. **Customer Needs are Context-Dependent:** The "job" a customer needs to get done can change based on different circumstances. This concept emphasizes the importance of context in understanding customer behavior.
3. **Innovation Opportunity lies in Job Satisfaction:** Customers "hire" products or services to do these jobs. If a job isn't being done effectively or efficiently, it's an opportunity for innovation. Therefore, the theory encourages businesses to seek out these "underserved" jobs as a path to creating successful new products or services.

I like to think of JTBD as trying to answer the question, "What am I hiring this product or service to do?" The better I am at answering that question, the better decision I can make about it. What are **you** hiring generative AI to do for **you** and why? Also, what will you not be hiring it to do for you and why?

Next Steps and Parting Shots

- Identify where AI can be most effective **for you**.
- Can you use AI in ways that minimize the dangers of hallucinations while AI companies keep working on the hallucination problem.
- Think of AI as "augmented intelligence."
- Current generative AI tools are best thought of as personal assistants or interns (enthusiastic, tireless, but not experienced or savvy). You must check their work.
- Keep the human in the loop, at the right points.
- At the moment, I tend not to use AI tools connected to the Internet through search engines (e.g., Bing CoPilot, Google Gemini), but your mileage may vary.
- Watch for developments in ethical regulation and realize that they are likely to lag where generative AI really is at.
- Lawyers have a duty of technology competence. What does that mean with generative AI?
- Pay the \$20 a month for GPT-4 tools like ChatGPT 4 or Clause 3, or use Bing CoPilot (currently free)!

Useful Resources

1. Mollick, Ethan, *Co-Intelligence: Living and Working with AI*. The newest plain language and practical overview of generative AI from A Wharton business professor has been pioneering practical experiments.
2. Melanie, Mitchell, *Artificial Intelligence: A Guide for Thinking Humans*. An excellent plain language discussion of AI that I use as a foundation book for my AI and the Law Class at Michigan State University College of Law. I'll be switching to the Mollick book above next year.
3. Ethan Mollick, One Useful Thing (<https://www.oneusefulthing.org/>), articles, resources, and email newsletter from one of the premier writers and thinkers on practical uses of generative AI.
4. Jennifer Wondracek, "Introducing AI Prompt Worksheets for the Legal Profession," <https://www.llrx.com/2024/01/introducing-ai-prompt-worksheets-for-the-legal-profession/>. Excellent resource to help you design prompts in advance before actually using them, with checklists and worksheets.
5. **ABA Model Rules of Professional Conduct** - The American Bar Association's guide on ethical rules.
6. **The State Bar Of California Standing Committee On Professional Responsibility And Conduct Practical Guidance For The Use Of Generative Artificial Intelligence In The Practice Of Law** - <https://www.calbar.ca.gov/Portals/0/documents/ethics/Generative-AI->

[Practical-Guidance.pdf](#). While not a model of clarity and difficult to determine how to apply in practical setting, I expect these guidelines to become the starting point for most bar associations.

7. **Legal Talk Network** - Featuring various podcasts, including The Kennedy-Mighell Report, which discusses the intersection of law and technology, especially the episode “The Current State of Generative AI in Legal” (<https://legaltalknetwork.com/podcasts/kennedy-mighell-report/2023/07/the-current-state-of-generative-ai-in-legal/>).
8. **IAPP Artificial Intelligence Governance Professional Certification** - <https://iapp.org/certify/aigp/> - The International Association of Privacy Professionals, known for its CIPP data privacy certifications, has jumped into AI certifications geared especially for AI governance professionals, including lawyers. It’s a little early to determine how value the certificate will be, but the CIPP data privacy certificates have become very important.
9. Dennis Kennedy.Blog – <http://www.denniskennedy.com> – I blog about AI from time to time on my blog.
10. Michigan State University Center for Law, Technology & Innovation website - <https://www.law.msu.edu/lawtech/index.html> - We’re working on building out a set of AI resources.

Disclaimer

This material is intended for educational purposes and should be used as a guide to improve your skills in AI prompting. This educational material is intended to supplement professional expertise and should not replace individual judgment. It is not legal advice. Always consider professional and ethical standards when integrating AI tools into your work. Be mindful of privacy and data protection when inputting information into AI systems. You are responsible for the inputs you provide to third-party AI applications and must consider the accuracy, reliability, and appropriateness of the AI-generated content in your legal work.

* Dennis Kennedy is the Director of the Michigan State University Center for Law, Technology & Innovation, the author of the book, *Successful Innovation Outcomes in Law*, and the founder of the Law Department Innovation Library (www.ldilibrary.com). He writes and speaks frequently on legal innovation and technology topics, including AI, focusing on law departments. He has co-hosted The Kennedy-Mighell Report podcast on legal technology with Tom Mighell since 2006. LinkedIn: <https://www.linkedin.com/in/dennismkennedy> Email: kenne514@msu.edu or dmk@denniskennedy.com