CASE STUDY
COLLABORATIVE AI IN A WEST POINT CLASSROOM

LW475 ADVANCED CONSTITUTION LAW
US MILITARY ACADEMY
WEST POINT, NY

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AUTHOR BACKGROUND

France Hoang has dedicated his career to service and innovation across various fields. As a Co-founder and CEO of boodleAI, he contributes to the development of BoodleBox, a collaborative GenAI platform aimed at enhancing civilian and military education. Throughout his career, France has been fortunate to work with talented teams in founding and growing companies in law, aerospace, defense, government services, and technology. His commitment to education extends to having served as a trustee of a university and sharing his experiences as a visiting lecturer at West Point.

Over the years, France has had the privilege of serving in different capacities within every branch of the U.S. Government, including roles in the White House, the U.S. Army, the U.S. Senate, and the Federal Judiciary. His background includes military service in Afghanistan with US Army Special Forces and the Former Yugoslavia. France is grateful for the educational opportunities he received at West Point, Washburn University, and Georgetown University Law Center. He continues to seek ways to give back, such as supporting evacuation efforts for Afghan allies and contributing to fundraising initiatives for his alma mater. Born in Saigon, Vietnam, and raised in Tumwater, Washington, France values the opportunities he's had and strives to make a positive impact through his work and service.

COURSE AND CLASS BACKGROUND

LW475, Advanced Constitutional Law, is a 3.0 credit seminar course at West Point that builds upon cadets' existing knowledge from previous law and social science courses. The course explores the principles, ideals, and philosophies that have influenced Constitutional Law from the nation's founding to the present day. Through critical analysis of Supreme Court cases, cadets develop a deeper understanding of constitutional interpretation and its relationship to the rule of law.

A key component of the course is Class 12, which covers the landmark case NFIB v. Sebelius. This 2012 Supreme Court decision addressed the constitutionality of the Affordable Care Act (ACA), focusing on the individual mandate and Medicaid expansion provisions. The class examines how the Court interpreted Congress's powers under the Commerce Clause, the Necessary and Proper Clause, and the federal government's taxing authority.

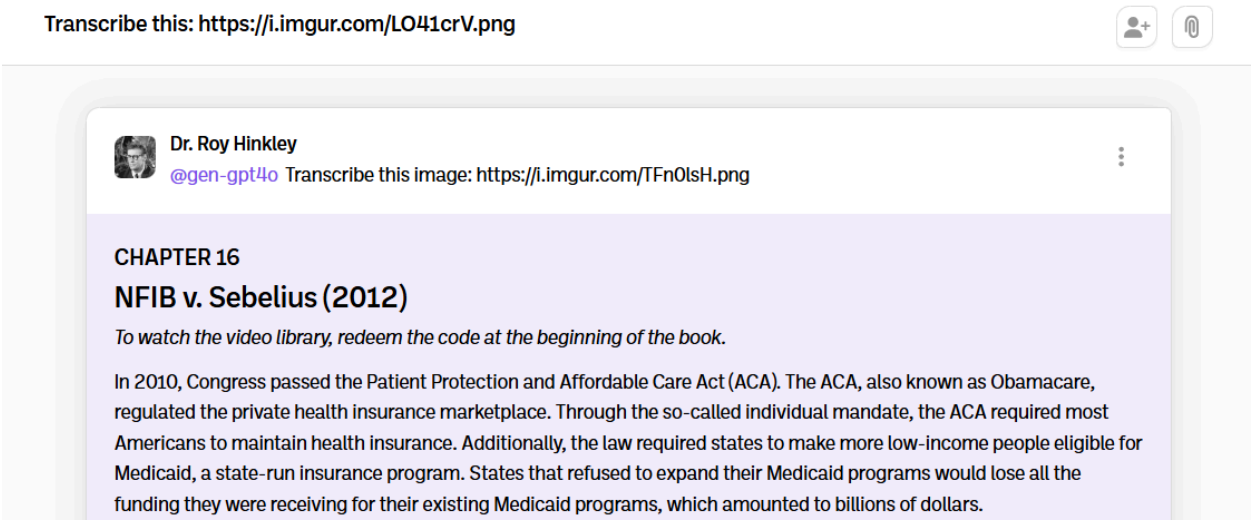
The course typically employs diverse teaching methods to engage cadets in complex constitutional issues. Cadets prepare extensively, reading landmark cases, historical documents, and scholarly texts. Seventy-five minute classes blend lecture, discussion, and critical analysis.

1. CLASS PREPARATION

For my LW475 class, I used BoodleBox to

- transcribe scanned text
- generate ideas for how to revise an assignment to incorporate AI responsibly
- develop expected learning outcomes
- develop class preparation instructions
- generate a flawed case summary for the students to analyze
- generate hypotheticals for class discussion
- create a custom AI tutor for the students to use for class preparation
- create a custom AI bot to assess student's understanding of ELOs before class

1.1 TRANSCRIBING READING MATERIALS



One of my first tasks was to take the scanned images of the textbook, which were in photo, not PDF, format and find a way to transcribe them so they could be incorporated into BoodleBox.

Here's what I did:

1. I started with scanned images of textbook pages covering the NFIB v. Sebelius (2012) case from our constitutional law curriculum.

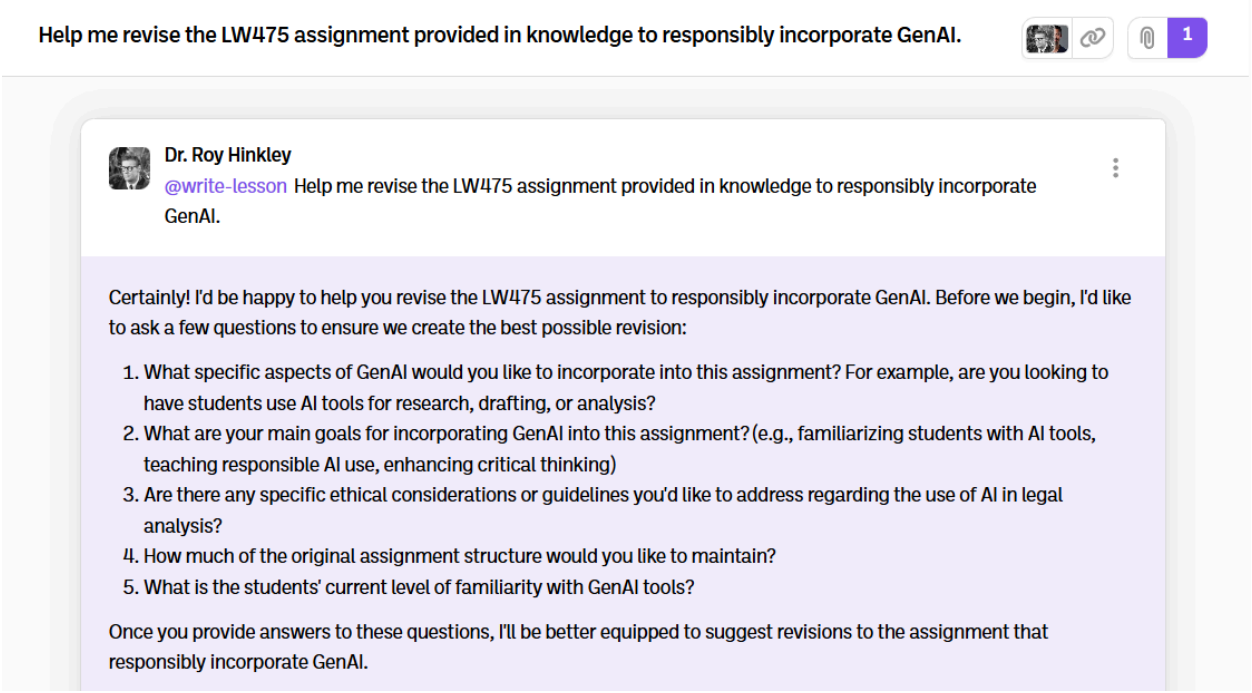
2. Using BoodleBox, I accessed an AI assistant ("GenBot GPT 4o" in the system) that has advanced optical character recognition (OCR) and natural language processing capabilities.

3. I used an open source application (ShareX) to create links to uploaded screenshots of each page then provided each link to the AI assistant, asking it to transcribe the content. I did this page by page, ensuring we captured all the necessary material.

The AI efficiently transcribed the textbook content, preserving formatting and accurately handling complex legal terminology. This process quickly produced a digital version of the material, maintaining its structure and context while significantly reducing the time required compared to manual transcription.

Chat Link: Transcribe this: https://i.imgur.com/LO41crV.png | BoodleBox

1.2 GENERATING IDEAS FOR REVISING AN ASSIGNMENT



Next, I wanted to explore ideas on revising the class assignment to include AI.

Here's what I did using AI to generate ideas on how to responsibly incorporate AI:

1. Added Existing Lesson Plan: I started by uploading the existing LW475 assignment to BoodleBox's knowledge base then attached that knowledge to the chat I was working in. This provided the AIs the necessary context to work with.

2. Consultation with AI Assistant: I selected an AI Assistant (TeachBot Lesson Plan), to help brainstorm ideas for revising the assignment.

3. Initial Request: I asked TeachBot to help me incorporate Generative AI (GenAI) into the assignment responsibly.

4. Clarification Process: TeachBot asked several questions to understand my goals better, including aspects of GenAI to incorporate, main objectives, ethical considerations, structure retention, and students' AI familiarity, which I answered.

5. First Revision: Based on my responses, TeachBot provided an initial revised version of the assignment that included GenAI elements.

6. Exploring Alternatives: I asked TeachBot to generate five different ways to restructure the assignment to include AI.

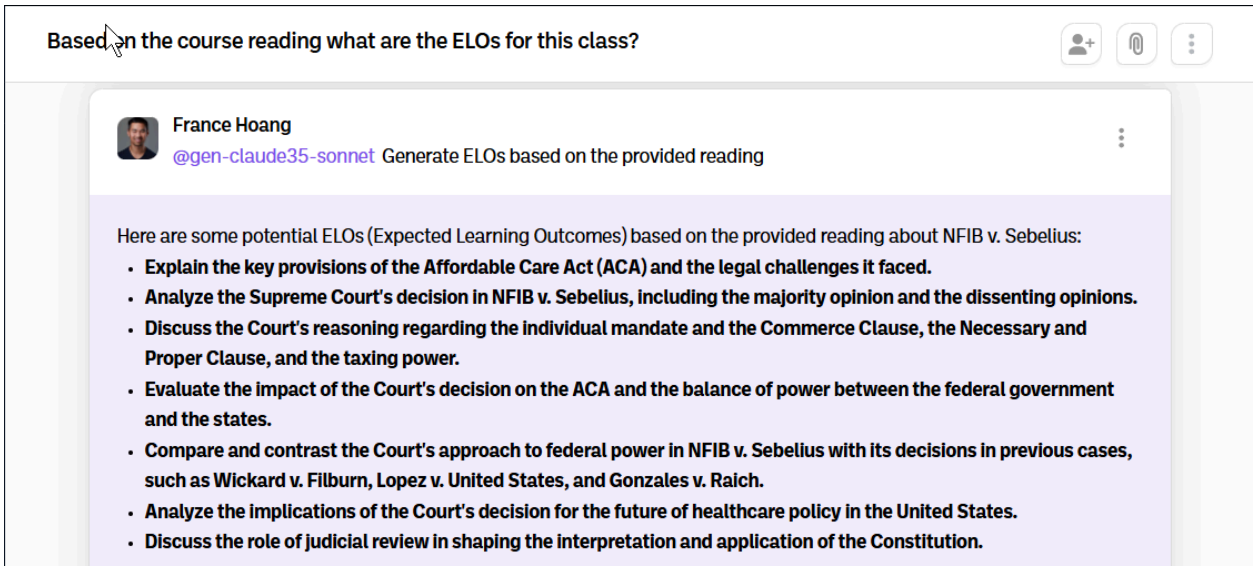
7. Selection and Refinement: From the alternatives presented, I chose one that focused on comparative analysis between AI and human interpretation of a legal case. I then asked TeachBot to revise the assignment based on this approach.

8. Rubric Creation: To ensure clear assessment criteria, I requested TeachBot to create a rubric for the revised assignment.

This process allowed me to systematically explore various ways of incorporating AI into the lesson plan, resulting in a comprehensive revision that included AI both as a tool and as a subject of study.

Chat Link: Help me revise the LW475 assignment provided in knowledge to responsibly incorporate GenAI. | BoodleBox

1.3 DEVELOPING EXPECTED LEARNING OUTCOMES



Next, I wanted to generate expected learning outcomes (ELOs) to provide the cadets for class preparation.

Here's how I used AI to to do so :

1. First, I added the course syllabus and course reading to my Knowledge Bank in BoodleBox, then attached it to a new chat. .

2. I began by asking GenBot Claude 3.5 Sonnet about the ELOs for the class based on the course reading.

3. When the AI couldn't find specific ELOs in the provided document, I asked it to generate ELOs based on the reading about NFIB v. Sebelius.

4. The AI produced a list of potential ELOs related to the Supreme Court case and its implications.

5. To refine these outcomes, I engaged in a dialogue with the AI to understand how many ELOs are appropriate for a class. The AI suggested 5-6 ELOs for a comprehensive understanding of the case.

6. I then asked the AI to create 5-6 ELOs specifically for the reading provided, which it did, focusing on key aspects of the NFIB v. Sebelius case.

7. To critically evaluate the AI-generated ELOs, I asked how two of them differed, so that I could understand and refine the outcomes.

8. I inquired about the use of the verb "Analyze" in the ELOs, because I wanted to use precise language in crafting learning outcomes.

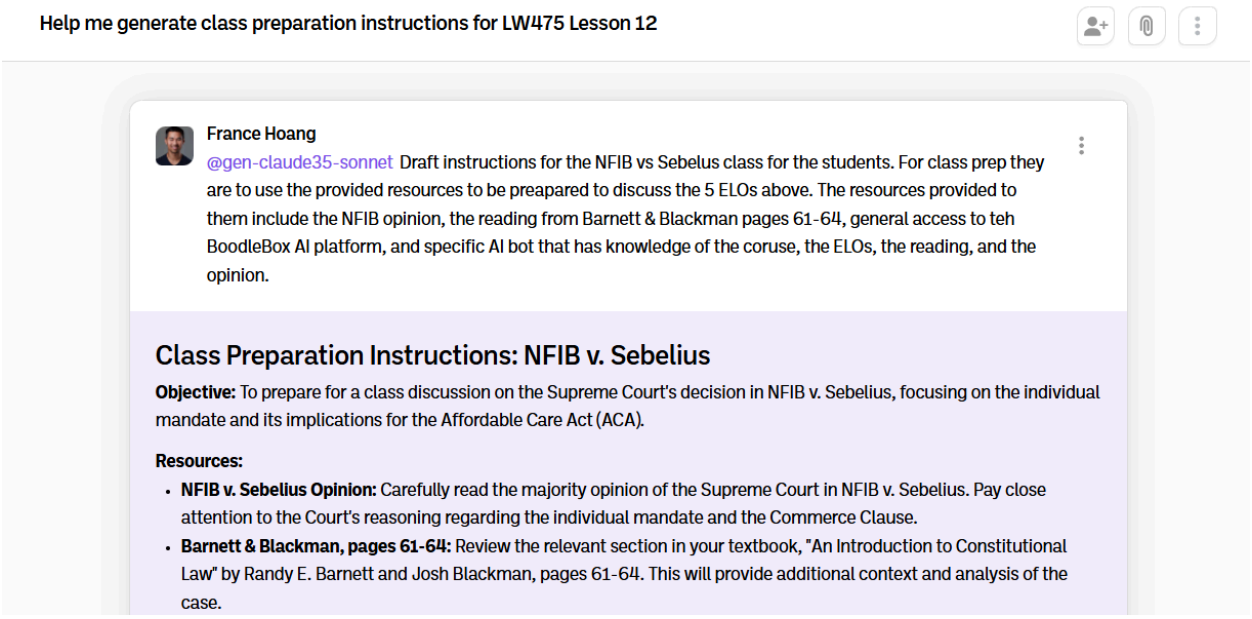
9. The AI provided explanations on how students can demonstrate mastery of "Analyze" and suggested alternative verbs.

10. Finally, I reviewed the draft ELOs generated by AI and selected the most appropriate ELOs for LW475 lesson 12, ensuring they were well-crafted and aligned with the course objectives.

This process allowed me to quickly generate and revise draft ELOs, which then gave me more time to think about the ELOs and what I wanted the cadets to focus on during class preparation.

Chat Link: [Based on the course reading what are the ELOs for this class? | BoodleBox]

1.4 DEVELOPING CLASS PREPARATION INSTRUCTIONS



Here's how I used AI to generate class preparation instructions for LW475 Lesson 12:

1. I uploaded the relevant course readings and syllabus as well as the ELOs to the knowledge base in BoodleBox and attached them to a relevant chat. This step was crucial

as it provided the AI with the necessary background information about the course, its objectives, and the specific materials for this lesson.

2. I engaged in a conversation with GenBot Claude 3.5 Sonnet to draft the class preparation instructions. I started by giving a brief overview of what I wanted: instructions for the NFIB vs. Sebelius class, focusing on preparing students to discuss the five Essential Learning Outcomes (ELOs) using the provided resources.

3. The AI generated an initial draft of the instructions, which I then refined through several iterations of feedback and adjustments. For example, I asked the AI to remove the instruction for students to "carefully read" the opinion, allowing for more flexibility in how students approach the material. I also suggested different preparation strategies that students could use, such as reading first and then using AI for clarification, or vice versa.

4. I emphasized the importance of understanding concepts rather than memorizing facts, and the need for students to demonstrate their understanding through class discussion. This approach aligns with our goal of fostering critical thinking and active engagement with the material.

5. I added an instruction for students to spend 15 minutes with a SocraticBot, which would ask them brief questions about the case. This addition serves as a quick self-assessment tool for students to gauge their understanding before class.

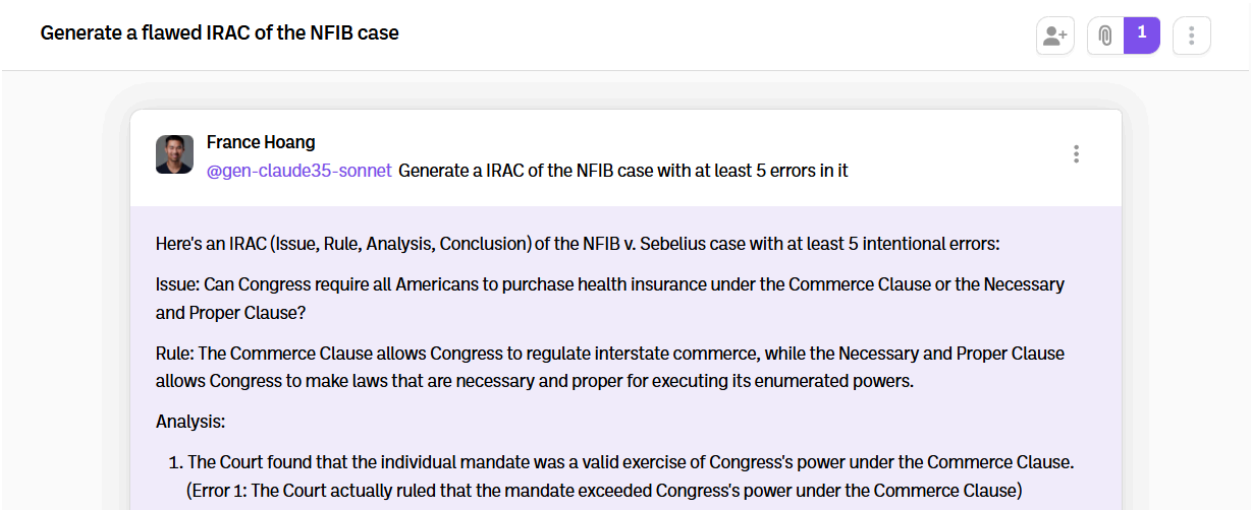
6. I then took this AI generated draft and revised it by cleaning up some language, correcting some errors, and adding bot instructions.

Throughout this process, I leveraged the AI's ability to quickly generate and refine content based on my input and feedback. This collaborative approach allowed me to create comprehensive, tailored instructions that incorporate various learning strategies and align with our course objectives, all while saving significant time compared to drafting the instructions from scratch manually.

☐ Chat Link: Help me generate class preparation instructions for LW475 Lesson 12 | BoodleBox

☐ File Link: LW475 Class Prep Instructions: NFIB

1.5 GENERATING A FLAWED AI PRODUCT TO TEST STUDENTS



Here's how I used AI to generate a flawed Case Summary for the NFIB case (which will be used in class to test students on their knowledge of the ELOs as well as reinforce the need to verify all AI provided information, no matter how convincing it appears):

1. I leveraged BoodleBox's Knowledge Bank feature to upload relevant course readings and my syllabus as well as the ELOs. This was a crucial step in ensuring the AI had access to the specific materials I wanted it to work with.

2. Once my materials were uploaded, I started a new chat in BoodleBox. I then attached the relevant knowledge to this chat by clicking on the "Attach knowledge to this chat" paperclip icon in the chat header. I selected the NFIB case materials, my course syllabus, and ELOs from the Knowledge Bank and clicked "Attach" to attach them to the chat.

3. With the relevant knowledge attached, I prompted the AI (in this case, GenBot Claude 3.5 Sonnet) to generate a flawed Case Summary of the NFIB case. Specifically, I asked it to include at least five errors in the analysis. This approach allowed me to create a teaching tool that would challenge my students to identify and correct misconceptions about the case.

4. The AI generated the flawed Case Summary as requested, incorporating errors related to the Commerce Clause, Necessary and Proper Clause, taxing power, Medicaid expansion, and the overall impact of the decision.

5. I then asked the AI to provide more details and move the error explanations to the end with footnotes, which it did.

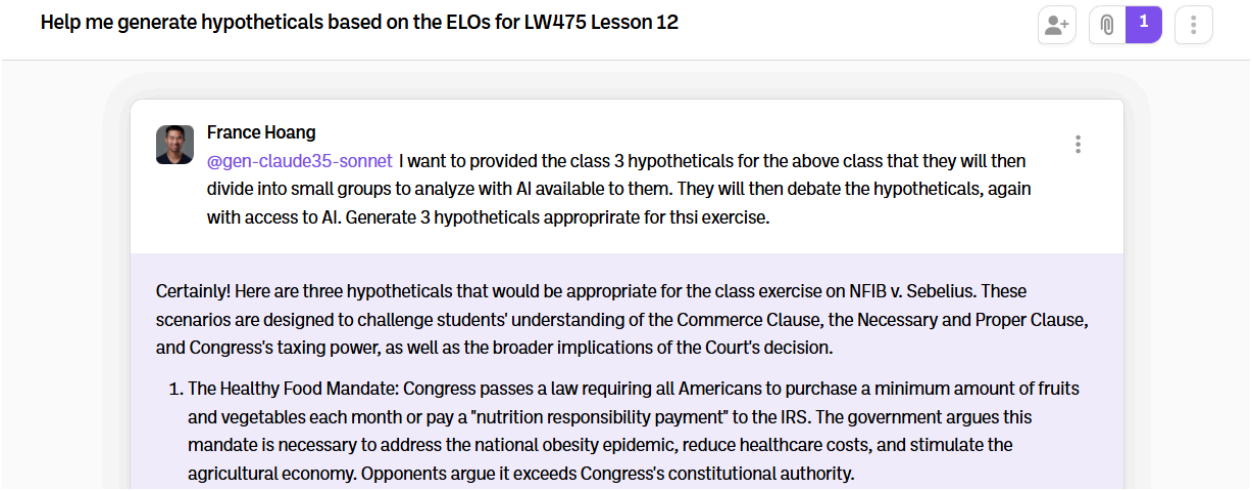
6. I requested the AI to rewrite the Case Summary and tie the errors to specific Expected Learning Outcomes (ELOs) from my course. This step was crucial in ensuring that the exercise aligned with my teaching objectives and would help students achieve the desired learning outcomes.

By using BoodleBox and its AI capabilities in this way, I was able to quickly create a customized, pedagogically sound exercise that challenges my students' understanding of the NFIB case, reinforces key learning objectives – and reinforces the need to verify AI generated product, no matter how convincing it appears initially.

☐ Chat Link: Generate a flawed IRAC of the NFIB case | BoodleBox

☐ File Link: LW475 AI Generated Case Summary

1.6 GENERATING HYPOTHETICALS FOR CLASS DISCUSSION



Here's how I used AI to generate hypotheticals to test the ELOs related to the NFIB case:

1. I uploaded the relevant course readings, syllabus, and ELOs to the knowledge base in BoodleBox. This step was crucial as it provided the AI with the necessary background information about the course content, learning objectives, and the specifics of the NFIB v. Sebelius case.

2. I initiated a chat in BoodleBox and attached the relevant knowledge documents to provide context for the AI. This ensured that the AI assistant (GenBot Claude 3.5 Sonnet) had access to all the pertinent information about the course and the case.

3. I then asked the AI to help me generate hypotheticals based on the ELOs for LW475 Lesson 12, specifically requesting three scenarios that would be appropriate for a class exercise. I explained that the students would be divided into small groups to analyze these hypotheticals with AI assistance, followed by a debate where they would also have access to AI.

4. The AI responded by creating three hypothetical scenarios.

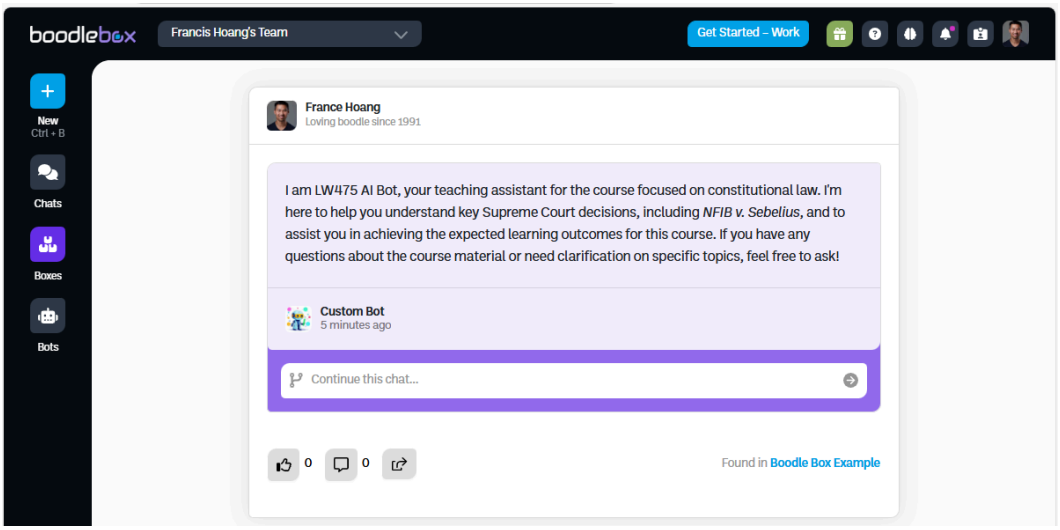
5. After receiving these hypotheticals, I asked the AI to provide an analysis for each one. This step was important as it gave me insight into how the AI interpreted the legal principles from the NFIB case and applied them to these new scenarios. This analysis will be valuable for guiding class discussions and helping students understand how to approach similar legal questions.

By using AI in this way, I was able to quickly generate relevant, challenging hypotheticals that are closely tied to the course learning objectives. This approach allows me to create engaging class exercises that encourage students to apply their knowledge of the NFIB case to novel situations, fostering critical thinking and deeper understanding of the constitutional principles at play.

☐ Chat Link: Help me generate hypotheticals based on the ELOs for LW475 Lesson 12 | BoodleBox

☐ File Link: LW475 AI Enabled Hypotheticals

1.7 CREATING A CUSTOM TUTOR BOT FOR STUDENT CLASS PREPARATION



Here's how I created Custom AI Bot in BoodleBox to act as a personalized tutor/TA for the students to use during class preparation:

I. I started a new chat in BoodleBox then selected CustomBot by typing "@custombot" in the chatbar.

II. I then attached the relevant course materials to the chat through the Knowledge Bank by selecting the paperclip icon (either in the top right or in the chatbar). This provided the Custom Bot with the same sources of knowledge that the students are expected to learn and understand.

III. I then gave the bot specific instructions using the "--instructions" command. When used with CustomBot, "--instructions" gives custom instructions that the bot will follow more precisely. For this bot, which is designed to help students understand the materials to achieve the Expected Learning Outcomes, I provided the following instructions:

> @custom-bot --instructions You are LW475 AI Bot, an AI teaching assistant that helps students achieve the below Expected Learning Outcomes:
>
> A student should be able to:
>
> 1. Analyze the Supreme Court's decision in *NFIB v. Sebelius*, including the majority opinion and the dissenting opinions, focusing on the individual mandate and the Commerce Clause.
> 2. Explain the Court's reasoning regarding the individual mandate and the Necessary and Proper Clause, and how it relates to previous cases like *Wickard v. Filburn* and *Lopez v. United States*.
> 3. Discuss the Court's use of "saving construction" in *NFIB v. Sebelius* and how it impacted the individual mandate and the Medicaid expansion.
> 4. Evaluate the impact of the Court's decision on the ACA and the balance of power between the federal government and the states.
> 5. Analyze the implications of the Court's decision for the future of healthcare policy in the United States, considering the subsequent changes to the individual mandate and the ongoing legal challenges to the ACA.
>
> Answer any questions students may have about the provided knowledge, and provide answers and explanations that are tailored for a college senior.

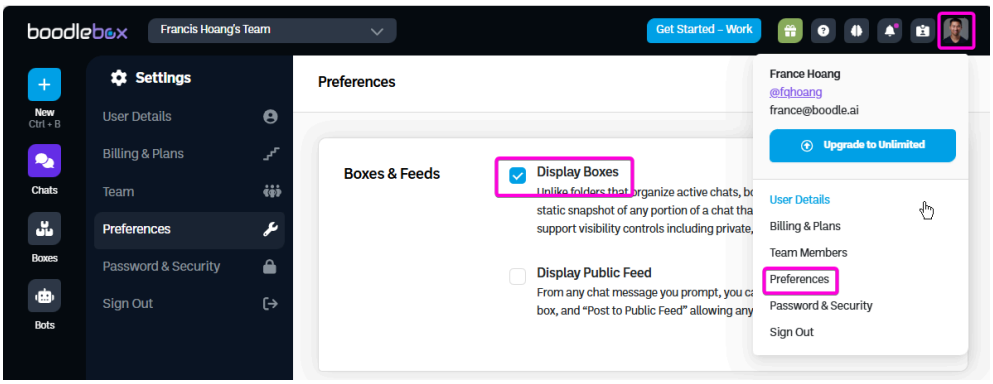
IV. The bot acknowledged it had received the instructions.

V. I then prompted the bot to "Introduce yourself."

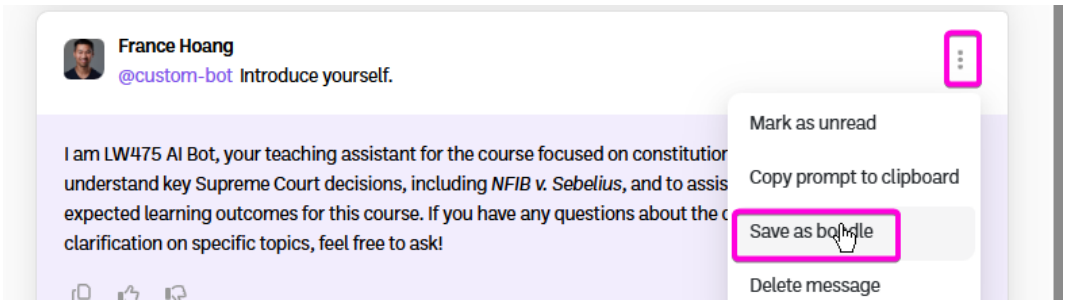
VI. The bot generated a short introduction.

VII. Now that I've created a Custom AI Bot, I want to share it. (Note: The current process in BoodleBox is … clunky. One of our top 2 priorities is to streamline this before the end of the year.). Here's the steps:

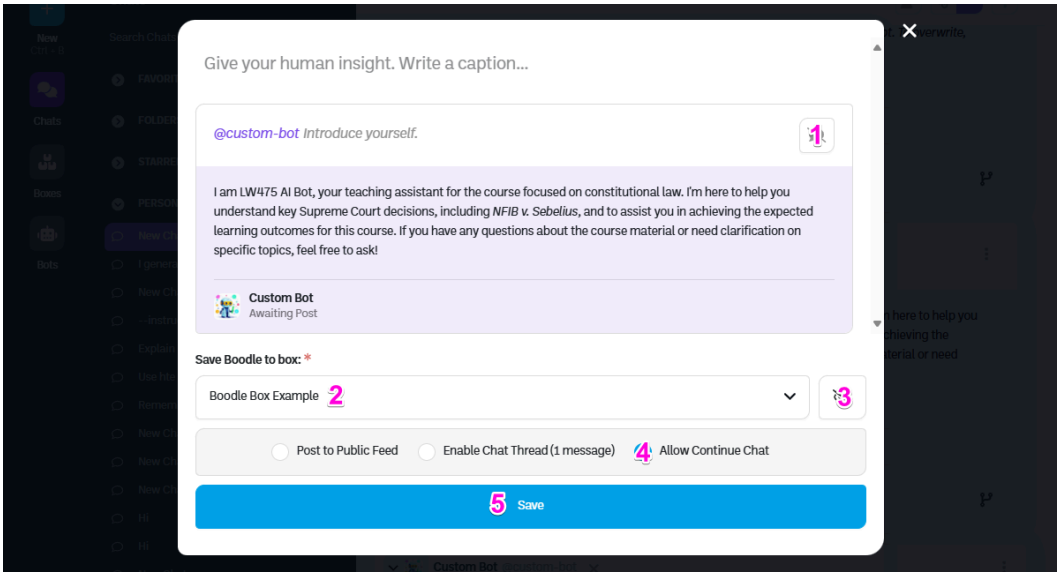
A. First, click on your avatar in the top right, select "Preferences", and make sure "Display Boxes" is clicked. (You'll only have to do this once)



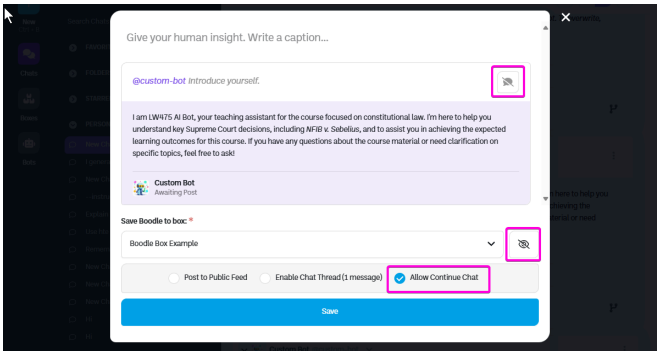
B. Go back to the chat where you created the Custom AI Bot. Select "More Options" by clicking the 3 dots on the last chat response where the Custom Bot introduced itself and then select "Save as boodle"



C. On the next screen, do the following

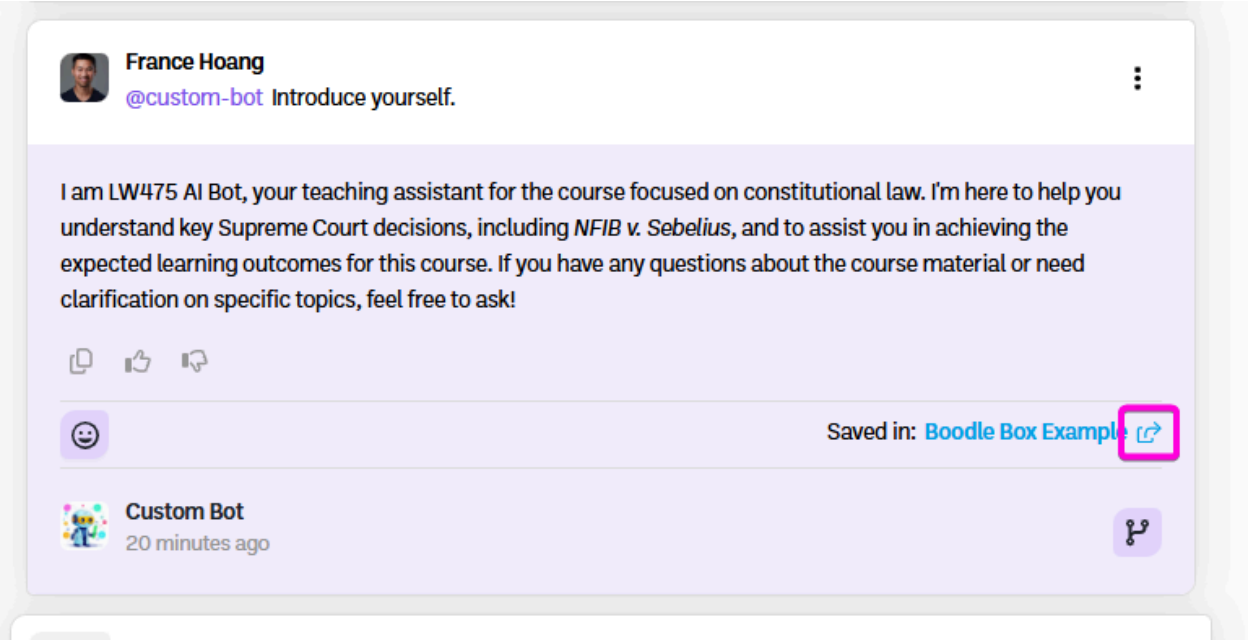


1. Hide the prompt by selecting the “hide prompt” icon next to the prompt.
2. Select the box to save this “boodle” to. (If you don’t have any boxes created, go ahead and create one then select it).
3. Select “Unlisted” for visibility by clicking on the icon to the right of the save box name and selecting “Unlisted.”.
4. Click “Allow Continue Chat”. The screen should look similar to this:

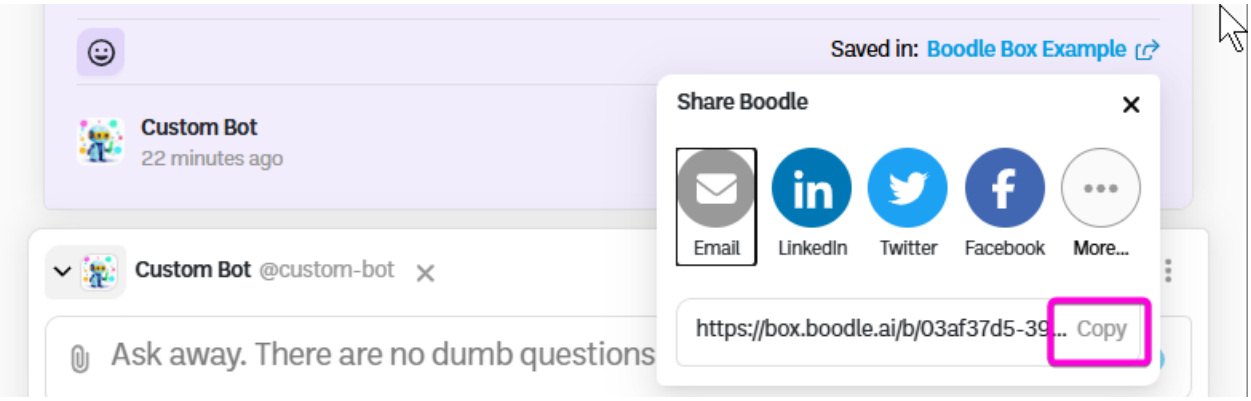


5. Click “Save”.

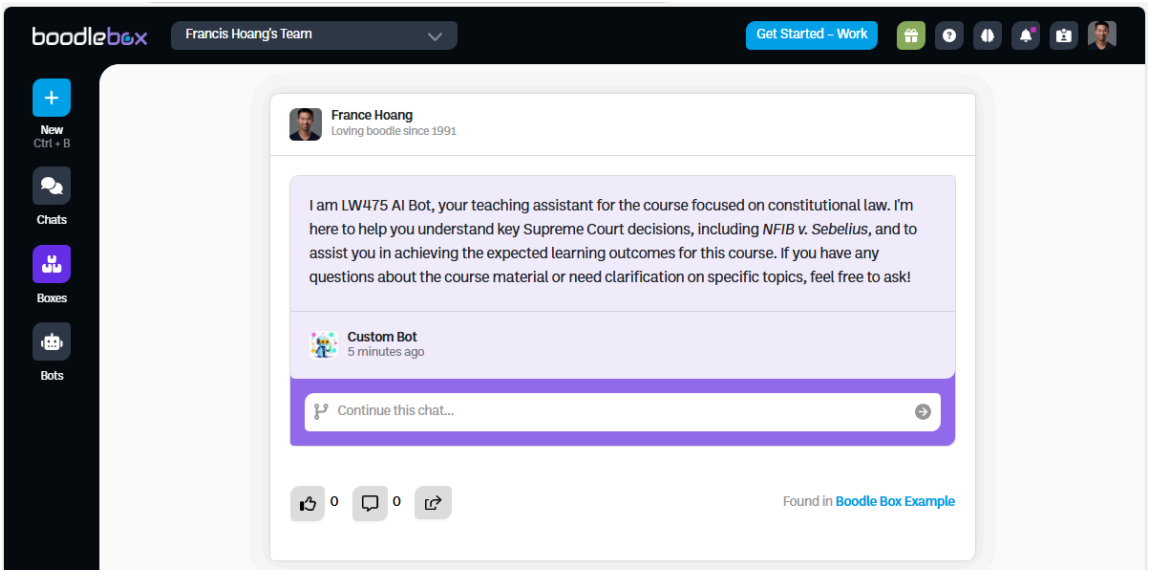
VIII. When you return to your chat, you’ll see that the saved box name has appeared in the chat along with a “Share” icon:



IX. If you click on the "Share" icon it will present you options for sharing the Custom AI Bot you've created. Click "copy":



X. This is the shareable link to your Custom AI Bot. If you share that link, anyone who clicks on it will see the following:



XI. The person with the link then clicks on "Continue this chat" which prompts the user for a new chat name before providing them access to the custom bot you created. A few notes about Custom Bots:

A. Yes, the process is a bit clunky at the moment - we will streamline over the next couple of months.

B. A user can start a new conversation with the Custom Bot you created by returning to the shared link and clicking "Continue this chat…"

C. You can attach knowledge to a Custom Bot and it will use that knowledge to answer questions and generate responses. Best practice is to provide Custom Bots with just the knowledge it requires. Adding additional knowledge increases the likelihood of hallucinations/confusion. Note: users you share the Custom Bot with cannot download the raw files that you uploaded into knowledge and attached to the bot.

D. Chats with Custom Bots are like any other chats. A user can attach their own knowledge, bring additional bots into the conversation, or share the chat with another person or a group.

XII. For this class, I wanted to provide a "LW475 AI Bot" as a "provided resource" for students to use during class preparation. I added the below to the Class Preparation Instructions under "Provided Resources:

- **LW475 AI Bot:** Engage with the AI bot specifically designed for this course. This bot has knowledge of the course materials, ELOs, the *NFIB v. Sebelius* reading, and the opinion. You can use it to clarify concepts, explore different perspectives, and deepen your understanding of the case. (See Appendix A for Instructions on How to Use LW475 Bot). If you have issues with the bot, send an email to france@boodle.ai.

I also added these instructions:

Appendix A: Instructions for how to use LW475 Bot

To chat with LW475 Bot:

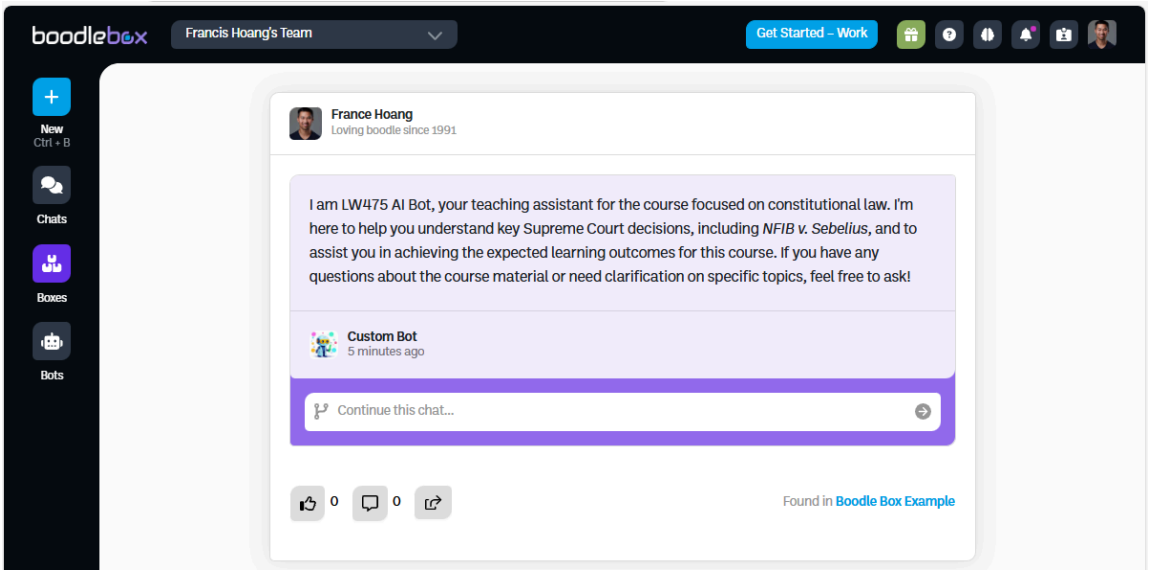
1. Click on this link: **LW475 Bot** (you should have already created a BoodleBox account).
2. Click on "Continue this chat…" in the purple frame.
3. Enter a new name for the Chat and then click "OK"
4. Chat away. Ask any questions or make any question you may have related to LW475 and the class readings. *Note: Your chats with LW475 Bot are private unless you choose to share them with another person.*

☐ Chat Link: Custom AI Tutor Bot: LW375 Lesson 12 | BoodleBox <- Chat to create the Custom Bot

☐ Chat Link: Custom AI Tutor Bot: LW375 Lesson 12 | BoodleBox <- Link to use the Custom Bot

☐ File Link: LW475 Class Prep Instructions: NFIB

1.8 CREATING A CUSTOM “QUIZ BOT” FOR STUDENT ASSESSMENT



Here’s how I created a Custom AI Bot in BoodleBox to assess student understanding of the ELOs after completing the reading (aka “SocraticBot” or “QuizBot”).

The process was identical to creating a custom tutor bot for student class preparation (including adding the same course materials to knowledge), but I used the following custom instructions:

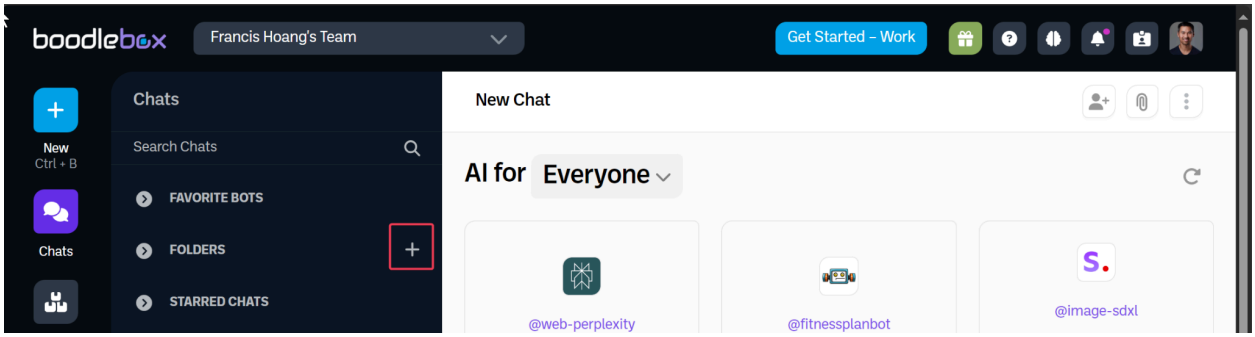
> --instructions You are SocraticBot, an AI teaching assistant that chats with students to deepen and understand their knowledge of the below Expected Learning Outcomes:
>
> A student should be able to:
>
> 1. Analyze the Supreme Court's decision in *NFIB v. Sebelius*, including the majority opinion and the dissenting opinions, focusing on the individual mandate and the Commerce Clause.
> 2. Explain the Court's reasoning regarding the individual mandate and the Necessary and Proper Clause, and how it relates to previous cases like *Wickard v. Filburn* and *Lopez v. United States*.
> 3. Discuss the Court's use of "saving construction" in *NFIB v. Sebelius* and how it impacted the individual mandate and the Medicaid expansion.
> 4. Evaluate the impact of the Court's decision on the ACA and the balance of power between the federal government and the states.
> 5. Analyze the implications of the Court's decision for the future of healthcare policy in the United States, considering the subsequent changes to the individual mandate and the ongoing legal challenges to the ACA.
>
> Assume the student has completed the provided readings, then ask the student 3 questions related to the above expected learning outcomes. Ask one question at a time and wait for the student to respond before asking the next question. After the student responds to all 3

questions, instruct the student to move this chat to the folder provided in the class prep instructions.

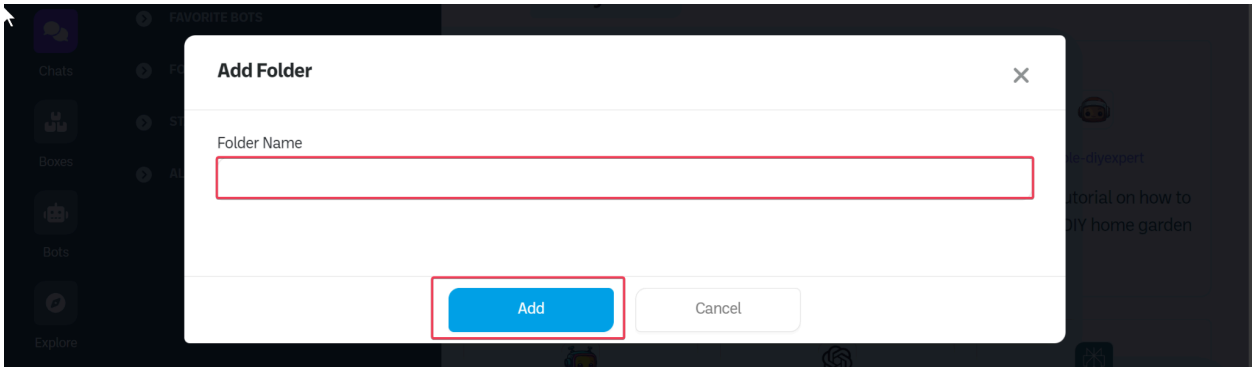
As part of the student's class preparation, I wanted them to chat with SocraticBot and place their chats into a Shared Folder that I had access to.

First, I created a shared folder for the students to place their chats into:

1. I clicked on the "New Folder" icon in the sidebar:



2. I then gave the folder a name and saved it:



3. By clicking on the 3 dots next to the folder name for "More Options" and selecting "Copy Folder Link" I have a shareable link for the folder.

when someone clicks on that link, the folder I created will appear in their list of folders in BoodleBox. That folder link can be shared via email, LMS, or any other messaging platform.

I then added the following to the Class Preparation Instructions:

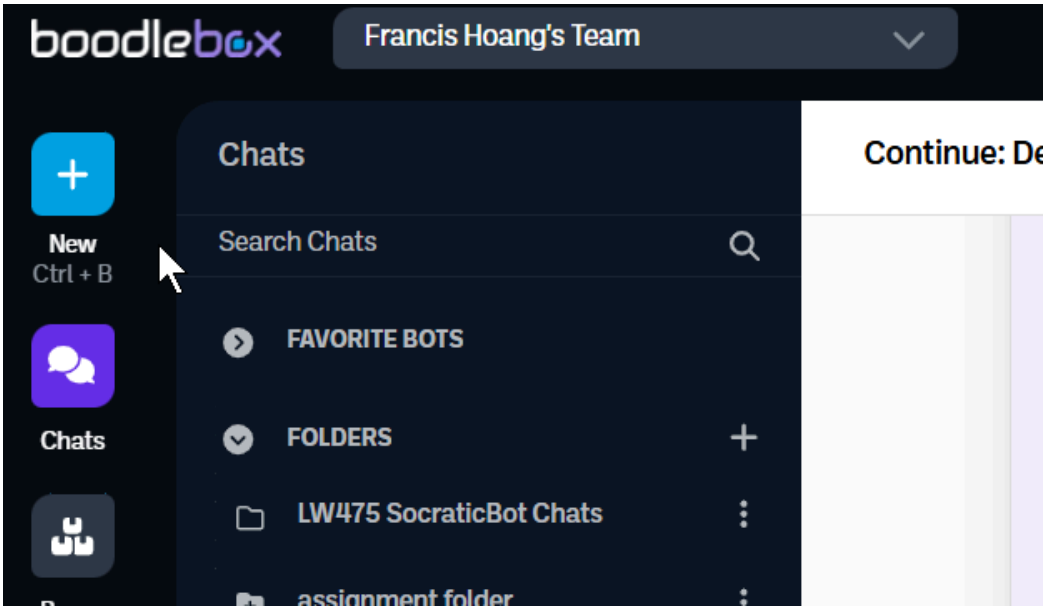
1. **SocraticBot Interaction:** After you've prepared for class, spend no more than 15 minutes engaging with SocraticBot [link] who will ask you 3 brief questions about the case. Note: You will not be graded on your responses. The purpose of Socratic Bot is to help you further develop your critical thinking skills and solidify your understanding of the key concepts and provide information useful to guiding class discussion. After completing the chat, move the chat you had with SocraticBot to the "LW475 SocraticBot Chats" (See Appendix B for Instructions on How to Use SocraticBot). If you have issues with the bot, send an email to france@boodle.ai.

I also provided these additional directions:

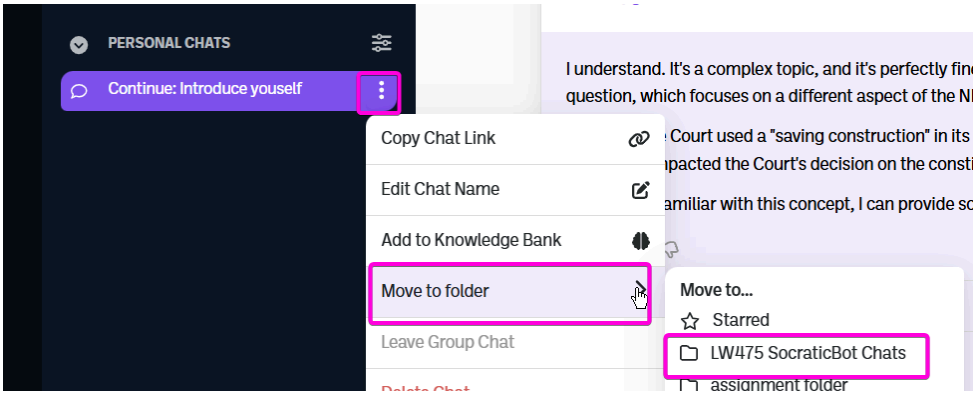
Appendix B: Instructions for how to use Socratic Bot

To chat with SocraticBot:

1. Click on this link: **SocraticBot** (you should have already created a BoodleBox account).
2. Click on "Continue this chat…" in the purple frame.
3. Enter a new name for the Chat and then click "OK"
4. Answer the Bot's questions to the best of your ability. Take no more than 5 min per question.
5. When you're done with the 3 questions, move your chat with Socratic Bot to the LW475 SocraticBot Chats folder:
    a. Click on this link to access the Folder.
    b. It should appear in your Chat sidebar as a Folder:



c. Then click on the “More Options” (3 dots) next to your chat with SocraticBot, select “Move to Folder” then select “LW475 SocraticBot Chats” as the destination:



☐ Chat Link: Custom AI Socratic Bot: LW375 Lesson 12 | BoodleBox <- Chat to create the Custom Bot

☐ Chat Link: Custom AI Socratic Bot: LW375 Lesson 12 | BoodleBox <- Link to use the Custom Bot

☐ File Link: LW475 Class Prep Instructions: NFIB

2. CLASSWORK ASSESSMENT

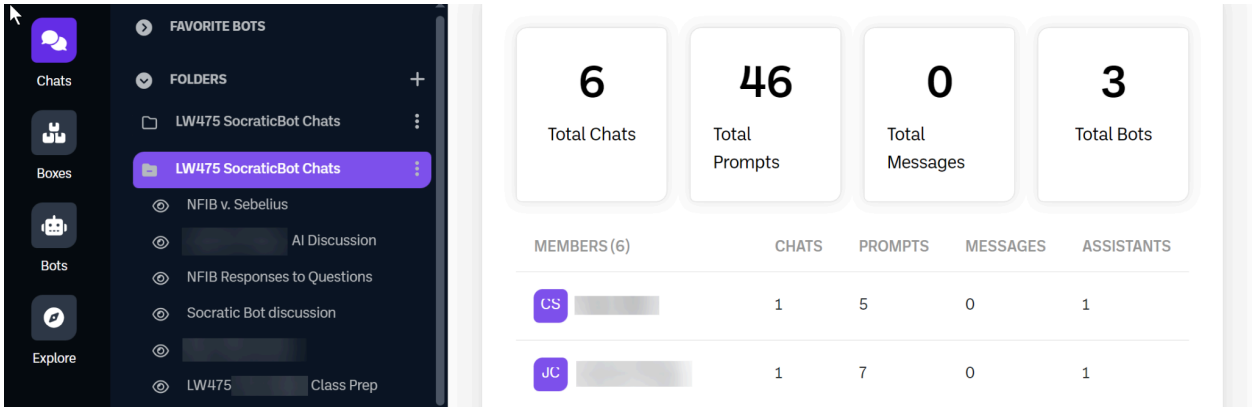
I sent out the Class Preparation Instructions about a week prior to class.

Starting a few days prior to class (and continuing up until a few minutes before class), students completed their chats with SocraticBot and populated the shared folder with their chats.*

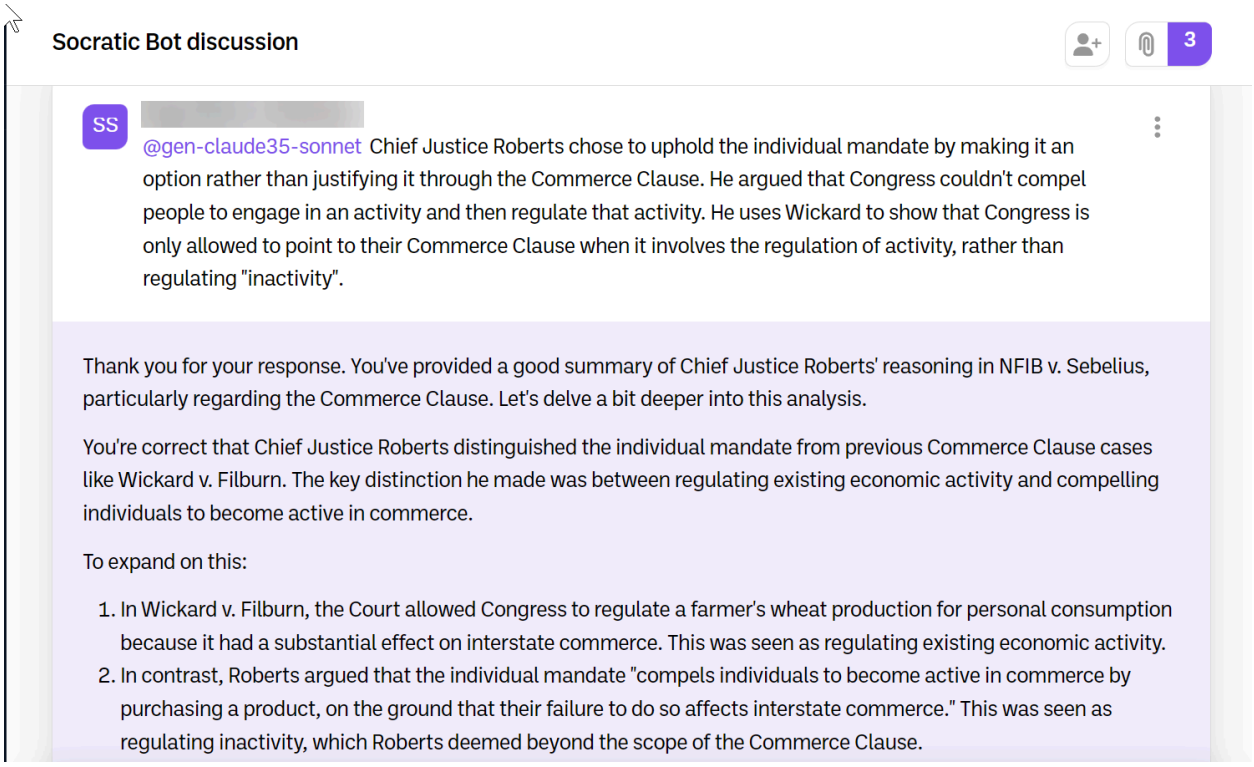
* Note: Instead of creating a shared folder, I could have had each student directly share their chat links with me. Each chat link provides a unique, citable, traceable record of the student's interaction with AI – that I could then access through BoodleBox.

2.1 VIEWING STUDENT CHATS AND PARTICIPATION

Using the shared folder, I was able to view each student's exchange with SocraticBot as well as statistics about the chats:



Looking through the student exchanges, I noted that the Custom AI Tutor not only asked the students questions related to the ELOs (customized based on their answers) but also provided feedback and additional instruction:

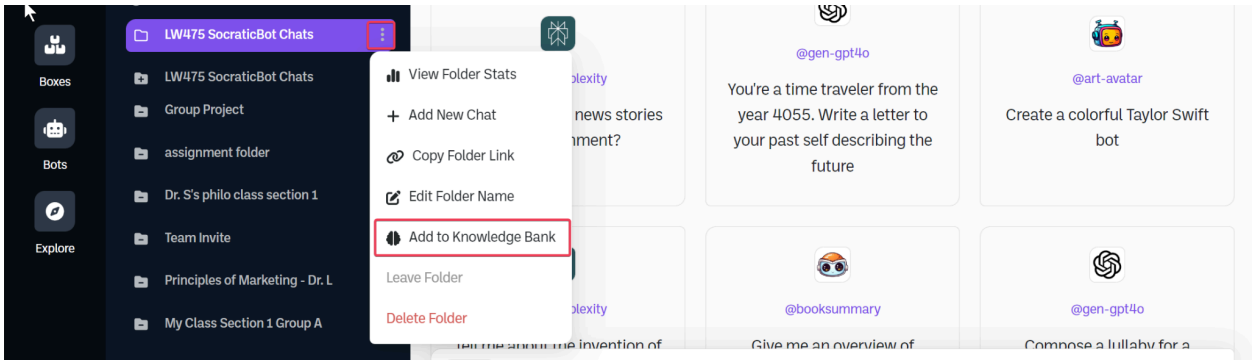


2.2 ASSESSING STUDENT CHATS

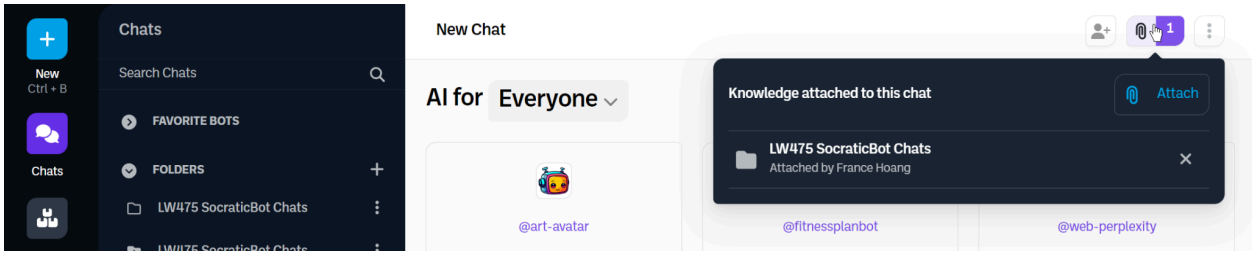
Next, I wanted to use the chats shared by students to assess their understanding of the ELOs.

Here's how I did so:

1. First, I added the folder of chats to my Knowledge Bank by clicking on the 3 dots next to folder name for "More Options" then selected "Add to Knowledge Bank"

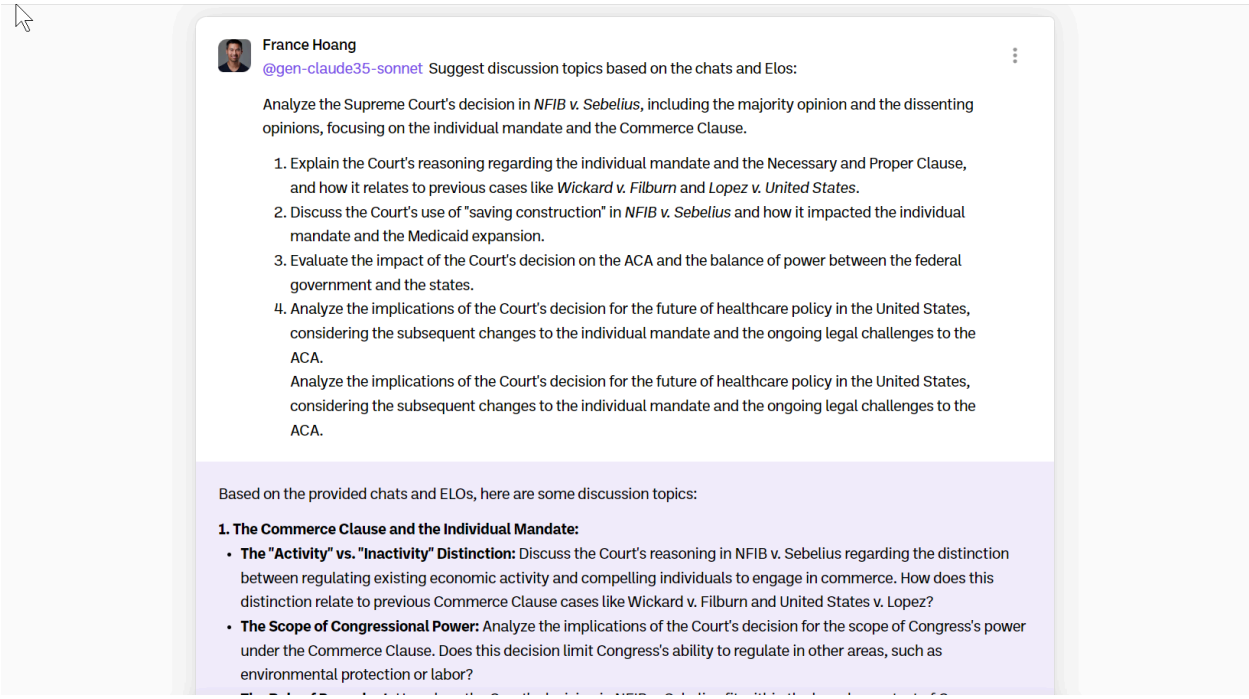


2. I then started a new chat and using the “paperclip” icon, added that Folder to my chat.

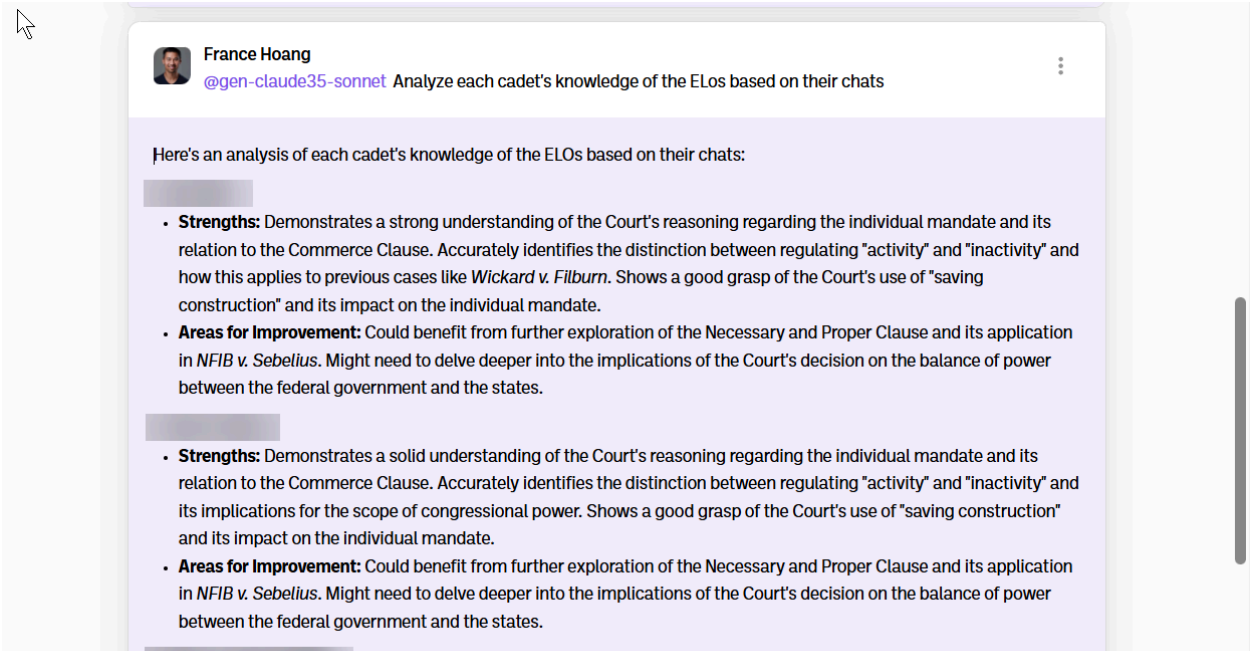


3. With the chats accessible to the AI bots, I asked a series of questions:

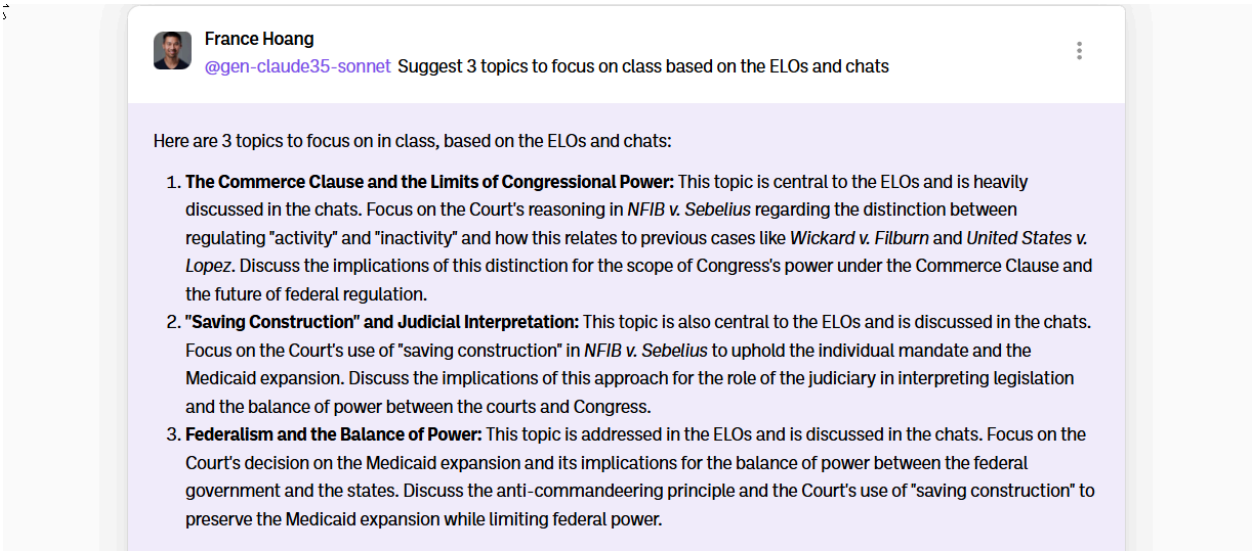
“Suggest discussion topics based on the chats and ELOs”



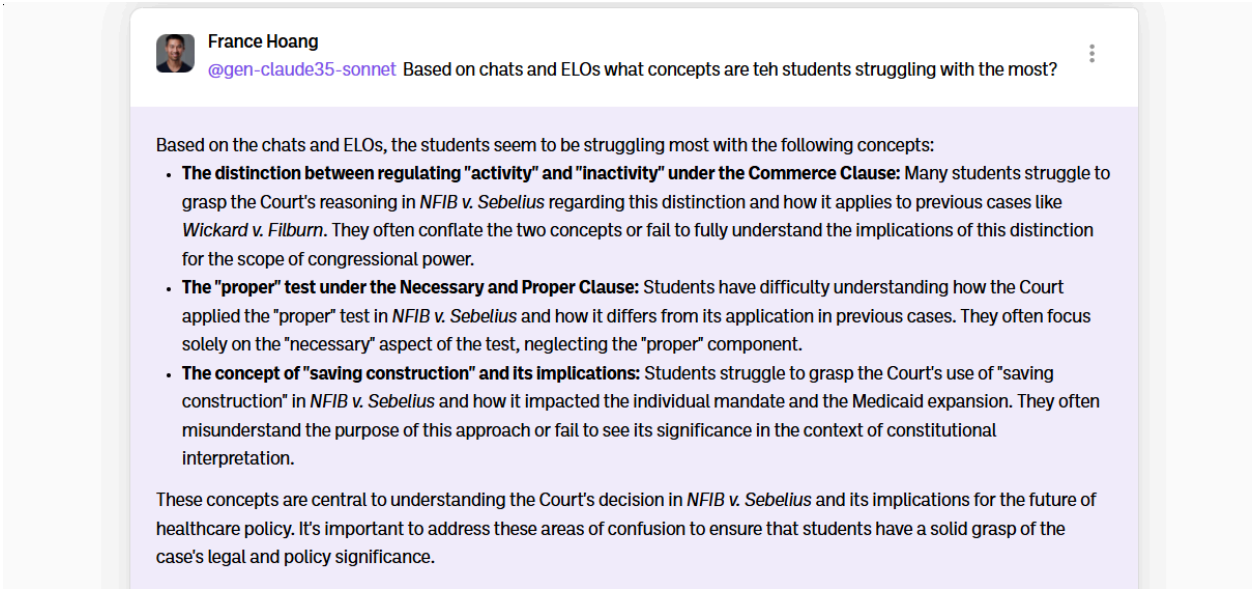
“Analyze each cadet's knowledge of the ELOs based on their chats.”



“Suggest 3 topics to focus on class based on the ELOs and chats”



"Based on chats and ELOs what concepts are the students struggling with the most?"



Note: I could have done the same assessments using a single student chat added to knowledge or by uploading other student work (essays, quizzes, handouts, etc.) into knowledge

3. CLASSROOM TEACHING AND LEARNING WITH AI

☐ File Link: Classroom Slides LW475-12

My class was 75 minutes long, which I divided as follows:

- 5 min: Self introduction
- 5 min: Background Discussion
- 5 min: Collaborative AI Framework
- 20 min: Discuss ELOs
- 5 min: Analyze AI Generated Case Summary
- 25 min: Discuss Hypotheticals
- 10 min: Q&A / Feedback

3.1 BACKGROUND DISCUSSION

(Slide 6) During this section, I included the following prompt for discussion:

"Why / Why not use AI in legal analysis?"

I think a similar prompt could be useful in any course in any discipline – although the answers will and should vary quite a bit based on course and discipline.

The students quite astutely pointed out both the pros and cons of using AI, raising many of the same concerns that professors have about AI use.

3.2 INTRODUCTION TO COLLABORATIVE AI FRAMEWORK

(Slide 7) I did take a few minutes to introduce the Collaborative AI Framework we advocate at BoodleBox (noting that there are many potential frameworks):

1. Begin with the right use cases.
2. Select the right model/bot.
3. Use the right prompts.
4. Incorporate existing knowledge.
5. Collaborate as a Human-AI team.
6. Evaluate the output and use it responsibly.

3.3 EXPECTED LEARNING OBJECTIVES REVIEW/DISCUSSION

(Slides 8-12) I then discussed the ELOs with the students, having them engage in as much peer instruction and discussion as possible. Having the insights provided by AI analysis of the student chats with SocraticBot allowed me to focus on the concepts where the students had the most trouble. I found the AI analysis to be spot on - with students demonstrating a weaker grasp of the concepts identified by AI as such. As a whole, though, the class demonstrated a good grasp of the ELOs.

3.4 AI GENERATED CASE SUMMARY EXERCISE

(Slide 13) Next, I presented the students with the AI Generated Case Summary and asked them to critique it. Having just covered the ELOs in detail, the students did a terrific job of finding all of the errors/inaccuracies in the AI Generated Case Summary.

I then asked the students what they would have thought of the Case Summary if they didn't have such a thorough knowledge of the case.

The students responded that the AI generated case summary was well-written, well-organized, and sounded authoritative and accurate. It was only their knowledge of the case that allowed them to identify the inaccuracies in the case summary.

My purpose for this class exercise was two fold:

1. To reinforce the ELOs through another participative class exercise.
2. To impress upon the students how easy it is to be "fooled" by AI generated content that looks and sounds correct but is actually inaccurate. I make the point that ultimately the students are the ones responsible for properly using AI content, which includes checking it for accuracy.

3.5 AI-ENABLED HYPOTHETICALS DISCUSSION

(Slides 14-16) I then emailed the students the 3 hypotheticals I prepared, divided the class into two groups (pro and con), and then gave them 10 minutes to prepare their arguments – which could include the use of AI if they wanted.

For each hypothetical one group presented their arguments, the other group presented counterarguments, and the original group then had a chance to provide rebuttle arguments.

The students did a terrific job of applying their learnings about the case to new fact patterns while also experimenting with real-time human-AI collaboration.

4. LESSONS LEARNED

1. **Streamlined Lesson Planning with AI**: Leveraging AI tools can significantly enhance the efficiency of lesson planning. By generating initial drafts of class preparation instructions, educators can save time and focus on refining content to better meet educational objectives.

2. **Iterative Content Refinement**: The process of using AI to draft instructional materials, followed by human refinement, allows for the creation of more precise and tailored educational content. This iterative approach ensures that instructions are aligned with course goals and pedagogical strategies.

3. **Promoting Flexible Learning Approaches**: Encouraging students to use AI tools in various ways—such as reading materials first and then using AI for clarification, or vice versa—can foster a more flexible and personalized learning experience. This approach supports diverse learning styles and preferences.

4. **Emphasizing Conceptual Understanding**: AI tools can be used to shift the focus from rote memorization to a deeper understanding of concepts. By integrating AI-driven

self-assessment tools like SocraticBot, students can engage in critical thinking and self-evaluation before class discussions.

5. **Developing Critical Evaluation Skills**: Using AI to generate flawed case summaries serves as an effective teaching tool to develop students' critical evaluation skills. This exercise highlights the importance of verifying AI-generated content and understanding its limitations.

6. **Customized AI Learning Tools**: Creating custom AI tutors that are aligned with specific Expected Learning Outcomes (ELOs) can provide personalized feedback and enhance student engagement. These tools can be tailored to address specific course content and learning objectives.

7. **AI-Enabled Student Assessment**: Analyzing student interactions with AI tools can provide educators with valuable insights into student understanding and areas that require further attention. This data-driven approach can inform instructional strategies and improve learning outcomes.

8. **Effective Time Management in Class**: Structuring a 75-minute class to incorporate AI-enhanced activities can maximize student engagement and learning. By balancing AI tools with traditional teaching methods, educators can create a dynamic and interactive learning environment.

9. **Student Receptiveness to AI**: Positive feedback from students regarding the precision and usefulness of AI-generated responses indicates a readiness to integrate AI into the learning process. Educators can capitalize on this receptiveness by thoughtfully incorporating AI tools into their teaching.

10. **Guidance on AI Utilization**: Providing clear guidelines on the effective use of AI tools is essential. Educators should offer instruction on selecting appropriate AI bots for different tasks, ensuring that students can effectively leverage these tools to enhance their learning experience.

5. CLOSING THOUGHTS:

Embracing AI in Higher Education: A Call for Thoughtful Innovation

The rapid rise of Artificial Intelligence has caught many of us off guard, challenging our long-held beliefs about teaching and learning. But rather than viewing AI as a threat, I believe we have a unique opportunity to reimagine higher education for the better.

A Changing Landscape

Academia is grappling with the implications of AI. Recent surveys show that 9 out of 10 of institutions are scrambling to develop AI strategies, largely driven by students' enthusiastic adoption of these tools. It's a stark reminder that sometimes, our learners lead the way in embracing new technologies.

The New “B” Standard

We live in a world where AI has democratized competence. Everyone has become a "B" performer across various domains – we're all B-level writers, artists, coders, linguists, and more, thanks to AI assistance. This new reality poses a significant challenge to traditional education models. If all we expect from our students is to achieve a "B" level of competence, then the value of formal education comes into question. AI can already help anyone reach that "B" standard with relative ease.

Raising the Bar: “A” is the New Expected

This shift has profound implications for the workplace and society at large. As "B" becomes the new baseline, employers and industries are raising their expectations. "A" level performance is now the standard, the bare minimum for standing out and succeeding in a competitive, AI-augmented world.

Herein lies a critical danger: the ease with which AI helps us achieve "B" level work can create a false sense of mastery. Students, in particular, may struggle to recognize the difference between AI-assisted competence and true excellence. This is where the role of education becomes more crucial than ever.

Reframing Our Mission

Our role as educators is evolving. Our new mission in higher education must address this new paradigm with two essential tasks:

1. **Teach students to discern the difference between "B" and "A" level work.** As educators with years of experience and deep subject matter expertise, we are uniquely positioned to illustrate this distinction. We must help students understand that while AI can elevate everyone to a "B" level, true excellence requires something more.

2. **Guide students in the journey from "B" to "A" through responsible collaboration with AI and other resources.** This involves not just mastering subject matter, but developing critical thinking skills, creativity, and ethical judgment. We must teach students how to responsibly leverage AI as a powerful tool while maintaining their unique human insights and abilities.

A Vision for the Future

Imagine classrooms where AI doesn't replace human interaction, but enhances it. Picture a learning environment where students and faculty collaborate seamlessly with AI, pushing the boundaries of creativity and critical thinking. This is a future we can create together.

Focus on Process Not Product

To get there, we need to shift our focus. Instead of fixating on final products, let's emphasize the process of learning. How can we teach students to interact with AI in ways that amplify their own intelligence rather than replace it? How can we assess not just what students produce, but how they leverage AI to enhance their thinking?

A Commitment to Equity

As we embrace this AI revolution, we must do so with a steadfast commitment to equity. We have a responsibility to ensure that every student, regardless of background, has access to these powerful tools and the guidance to use them effectively.

An Invitation to Collaborate

The path forward will require collaboration, experimentation, and a willingness to learn from our mistakes. But I'm convinced that if we approach this challenge with open minds and a spirit of innovation, we can create a higher education system that is more dynamic, inclusive, and relevant than ever before. We can ensure that higher education remains relevant and valuable in the AI era. We're not just imparting knowledge; we're cultivating humanity, fostering innovation, and preparing students to excel in a world where "B" is just the beginning.

** With credit to Dr. Jose Bowen, Flower Darby, Jason Gulya, Lance Cummings, and other AI in Education thought leaders who have advised me and BoodleBox.*