

Here is a two-page summary of the seminar session.

Summary: Further Experiments in Artificial Intelligence (Session 2)

Date: October 22, 2025

Audience: Osher Lifelong Learning Institute (OLLI) Mature Learners

Seminar Focus: This 90-minute session moved beyond high-level news about AI's market value to focus on the practical, personal applications of modern AI tools, specifically demonstrating the paid version of Google Gemini and its integration into the Google Workspace suite¹¹¹.

Part 1: Core Concepts and Initial Demonstrations

The instructor (Speaker 1) began by directing participants to his website, talkswithCrows.com, which serves as a resource hub for seminar materials, handouts, and prompt-collection templates²²²²²²²²²²²²²²²²²².

Key Concepts: Spoken vs. Written Communication

A central theme was the difference between how humans process spoken versus written information, which has implications for how we interact with AI³.

- **Spoken:** Communication is quicker and carries far more information through nuance, tone of voice, and body language⁴.
- **Written:** Text is much easier to store and retrieve. Humans tend to remember information they've *read* more readily than information they've *heard*⁵.

The instructor also briefly reviewed key AI vocabulary, including **inference** (the AI's statistical output) ⁶, **AGI** (Artificial General Intelligence) ⁷, **RAG** (Retrieval-Augmented Generation) ⁸, and **"enthusiastic affirmation"** (the default, supportive personality of most AIs)⁹⁹⁹⁹.

Live Demonstration 1: Google Gemini (Web Interface)

The instructor demonstrated the capabilities of the paid Gemini subscription (\$20/month) to show its interface and creative power¹⁰.

1. **Product Roadmap:** Using a pre-written prompt, he generated a comprehensive 3-month product roadmap for "Mature Learner Seminars," which the AI formatted with timelines and objectives¹¹¹¹¹¹¹¹.
2. **Slogan Generator:** A prompt for slogans yielded 10 catchy phrases, such as "Learn for the best of your life," "Lifelong learning refreshed," and "Where experience meets discovery"¹²¹²¹²¹².
3. **Video Generation:** He showcased a new feature by successfully prompting the AI to create a short video illustrating the "Dirac equation in motion"¹³.

4. **Chat History:** He emphasized that all past conversations are saved, allowing a user to return to a topic (like "singularities and dark holes") days or weeks later¹⁴¹⁴¹⁴¹⁴¹⁴¹⁴¹⁴¹⁴.

Live Demonstration 2: Spoken Conversation (iPad)

The instructor engaged in a real-time voice conversation with the Gemini app on his iPad to illustrate the difference from typing¹⁵.

- **On Processing:** He asked the AI to explain the difference between print and audio processing. The AI responded that reading is a *linear* process, while spoken language is *dynamic* and processed using rhythm and intonation¹⁶¹⁶¹⁶¹⁶.
- **On Emotional Content:** The instructor asked, "Are you able to determine the emotional content of my speech... or are you just looking at the text itself?"¹⁷. Gemini claimed it could analyze *both* the words and the *tone*, picking up on "the emotional tone in your voice"¹⁸.
- **Privacy Implications:** This led to a brief discussion about the serious privacy concerns if state actors could use this technology to monitor not just *what* citizens say, but the *emotional intent* behind it¹⁹¹⁹¹⁹¹⁹.

Part 2: AI Integration and Group Discussion

The second half of the seminar focused on how AI is being embedded directly into existing applications, followed by an in-depth group discussion.

Live Demonstration 3: AI in Google Workspace ("Help me write")

The instructor demonstrated how the paid Gemini subscription activates AI features within Google Docs and Gmail²⁰²⁰²⁰. A participant (Speaker 3) confirmed these features are not free and require the subscription²¹²¹²¹²¹²¹²¹²¹²¹.

- **Google Docs:** By clicking the "Help me write" button in a new document, the instructor generated and inserted text for a "new training facility" directly onto the page²²²²²²²²²²²²²²²².
- **Gmail:** The "Help me write" feature was used to compose a new email²³. More significantly, he showed how the AI can **summarize a long e-mail thread**²⁴²⁴²⁴²⁴ and **generate a reply** based on the context of the thread²⁵²⁵²⁵²⁵²⁵²⁵²⁵²⁵. The instructor referred to the potential overuse of this as "AI slop"²⁶.

Discussion Theme 1: The AI Business Model

A participant (Speaker 2) posed a key question: If all AI interfaces are becoming similar, how will companies differentiate themselves and justify their trillion-dollar valuations?²⁷. The group identified several revenue streams:

- **Productivity & Headcount:** Companies will save billions by using AI to reduce clerical, support, and junior-level staff²⁸²⁸²⁸²⁸.
- **Targeted Advertising:** Google and Meta will use AI to make their core business of advertising hyper-effective²⁹.
- **Enterprise Subscriptions:** The main profit center may be selling integrated AI suites (like the one demonstrated) to businesses for a monthly, per-user fee³⁰³⁰³⁰³⁰³⁰³⁰³⁰³⁰³⁰³⁰.
- **Hardware:** Companies like Nvidia (valued at \$4 trillion) are selling the essential chips (GPUs) needed to run all AI systems³¹³¹³¹³¹.
- **State Actors:** A participant noted a major (and "scary") revenue stream will be governments using AI to generate sophisticated propaganda and manipulate public opinion³²³²³²³². The instructor agreed, citing "sentiment analysis" as a key tool for this³³.

Discussion Theme 2: Cognitive Impact on Humans

A participant (Speaker 6) raised a concern from a *Guardian* article: AI may be "dumbing down" humans³⁴.

- **"AI Slop" and Learning:** The group discussed "AI slop"³⁵—content generated without human cognitive effort. The instructor argued that the *product* of education is not the term paper itself, but the *integration of knowledge* into the human's mind, a process AI bypasses³⁶³⁶³⁶³⁶³⁶³⁶³⁶³⁶.
- **Loss of Kinesthetics:** A participant (Speaker 3) added that AI skips the *kinesthetic* learning circuit—the physical, motor-memory act of handwriting that helps "ingrain the thinking in your head"³⁷.
- **The Workplace:** This cognitive dependency could harm the workplace, as new employees may not gain deep experience "the hard way"³⁸³⁸³⁸³⁸. A counter-point was raised that this will make experienced specialists ("old gray hairs") *more* valuable, as they possess the expertise to find the exceptions and errors in the AI's "common denominator" answers³⁹.

Discussion Theme 3: Personal AI and Data Privacy

A participant (Speaker 3) asked about "on-device processing," with the goal of running an AI on her 6 terabytes of personal photos and diaries *locally* for 100% privacy⁴⁰.

- The instructor clarified that "on-device" currently refers to **Small Language Models (SLMs)** running on a phone for specific, limited tasks⁴¹⁴¹⁴¹⁴¹.

- He explained that the *compute* (processing power) needed to *train* a model on 6TB of data is massive, far more than the compute needed to *ask* a question (an "inference")⁴²⁴²⁴²⁴².
- The underlying data structure for this is not a simple database but a "multi-dimensional array," or **tensor**⁴³⁴³⁴³⁴³⁴³⁴³⁴³⁴³.

Conclusion and Next Session

The instructor concluded by noting that the participant's question about analyzing personal data was the perfect lead-in to the next seminar, which will focus on **Google Notebook LM**, a tool designed specifically for that purpose⁴⁴⁴⁴⁴⁴⁴⁴.