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Google SGE

A new way to search, teach, and resist

In May 2023, amidst the fanfare and outcries over ChatGPT, Google quietly rolled out early access to new features in Search Labs, a user-based experimental testing ground for Search Generative Experience (SGE).¹ Google pitches SGE as a new way of searching that uses generative artificial intelligence (AI) to "understand a topic faster, uncover new viewpoints and insights, and get things done more easily," but later adds that it also helps make "complex purchase decisions faster and much easier."² Interested users can simply tap the Labs icon in Google Chrome or a Google search on an Android device to sign up. Opting in gives Google the right to collect and analyze your usage, queries, and location for development and machine learning.

Being the curious librarian that I am, I clicked on the bubbling beaker icon that popped up on my Google Pixel one day in July and read about the new features. At first, I was hesitant to give Google even more of my data, but then again, I already give them so much. I thought about it for a few weeks and decided I might as well try it out, so others don't have to. Here's my experience so far and how I see Google SGE transforming information-seeking behavior, information literacy instruction, and privacy advocacy.

SGE test drive

Now, when I search Google, I get an option to generate an AI-powered overview. For my first search, I wanted to throw Google a curveball. As I was watching a YouTube video from one of my favorite amateur chemists, Nile Red, I asked Google "how can you turn paint thinner into cherry soda" (see figure 1). It quickly spit out four simple steps of questionable logic and safety, suggested a few ways I could make paint thinner at home, and linked to the YouTube video I had been watching. There's no way it could have broken down each meticulous step that the YouTuber detailed in the 45-minute-long video, nor the molecular background and expertise that he brings; however, it piqued my interest.

I continued testing SGE and marveled at what I was getting. After finishing a video game, I asked Google "what do girls think about the game It Takes Two?" I was given a balanced mix of positive and negative reviews from various review websites and forums. I was given links to a post from r/GamerGirls and an article from *Girlfriend Reviews*, but otherwise Google wasn't quite smart enough to narrow the search to only reviews by women. I tried other searches like "how do you make a Manhattan?", which gave me a pretty accurate recipe for a good cocktail. I tried "is RYZE good for my gut health?", which assured me

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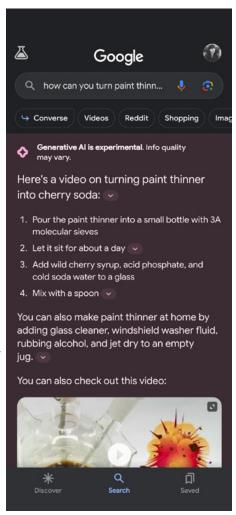
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that no, the mushroom coffee I had been getting Instagram ads for likely doesn't have the dramatic health benefits the company claims.

The information I was getting was incredibly relevant and saved me from reading long articles and forums that are getting even more overwhelming and clickbait-y as the internet expands. I was reminded of Carol Kuhlthau's theory of the Information Search Process, where searchers often experience uncertainty, anxiety, and/or disappointment when they don't immediately find what they think they need.³ Google SGE removes many of the barriers that make us doubt our search abilities. We already know that users rarely look past the first page of results or scroll past the fold of a webpage, but with SGE you get exactly what you think is "good enough." However, the more I searched the more disappointed I was that Google continued to serve up the same kinds of sources you usually find at the top of the algorithm, such as Wikipedia pages, blog posts, news, and popular media. The only disclaimer that SGE gives is "Info quality may vary."

Ways to teach

Another feature I tested was the ability to "converse" with SGE, either by asking your own follow-up or choosing one of the related autosuggestions. After a general search Figure 1. Google SGE search for "how can you for xenobots, I asked "what does peer reviewed research



turn paint thinner into cherry soda?"

say about xenobots?" I was given articles that discuss the research, but I would need to take that extra step to find the original studies. I was disappointed to find that SGE currently does not integrate Google Scholar or other journal websites that can sometimes come up in a general Google search. I can't claim to have the technical or proprietary knowledge to explain why, but there must be a good reason. This assured me that yes, librarians will still have a role to play in the years to come to teach important information literacy skills about finding and evaluating information.

As I was preparing for an information literacy session for a class that would debate a controversial environmental issue, I asked the example research question I was going to give them: "can cocoa be produced ethically and sustainable?" I noticed filters below the search bar that you normally get like images and videos, but this time the first suggestion was "perspectives" (see figure 2). I read more about this new filter, 4 which really does seem like an antidote to filter bubbles and a great resource for undergraduate English composition and communication classes. I showed it to the instructor, and while she thought it was interesting, we decided not to spend much time in class talking about it at this point.

Google Labs continued to surprise me with new and exciting features. Science is a new liaison area for me, but of course Google knows that. I've been spending a lot of timeconsuming algorithm-recommended videos and articles from popular science outlets. I was browsing an article from Phys.org and suddenly a box peaked up from the bottom of

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my phone screen with a sparkling information icon. I now had instant access to "related insights," an AI summary of the article I was reading. Better yet, the next tab gave me information about the website (see figure 3). I frequently teach students how to read laterally,⁵ and now Google was helping me do just that. I got snippets and links to the Wikipedia page for Phys.org, the publication's about page, and media bias from AllSlides. I couldn't wait to show this in my classes and workshops.

Ways to resist

Although these new features excite me about the possibility of helping students succeed and critically evaluate the information they consume, I would be remiss to not reflect on some of the limitations I see of this new way of searching. As a consumer, I like that Google SGE helped me pick out a good-quality, responsibly priced espresso machine, but Google is also great about making sponsored content seamlessly integrated and subtle on their search platforms. In a recent interview, the co-founder of Google's AI division laid out a vision of the not-toodistant future where AI assistants are "intimately familiar with your personal information" and "completely aligned with your interests," all in the aid of helping you make decisions.⁶ But let's not forget that Google is in the business of advertising and selling users' data. We are given a brief disclaimer on SGE's privacy and data sharing policies, but will the average user read the fine print and understand how Google will use their data for development and profit?

SGE makes decisions about what you see and what you don't see, and if you think you've already found the answer or heard all the perspectives on a topic, why dig any deeper? As of now, SGE's algorithms and natural language models are not transparent. Fortunately, the Senate unanimously passed the Filter Bubble Transparency Act that will require companies like Google to disclose more information about the use of algorithms to consumers and give them the option to see more of what they want to see. It remains to be seen how Google will respond to the enforcement of this act as they develop this new way of searching. However, it will be up to you as a user to make that decision to give up some convenience of personalized search and take control of your settings to protect your data and resist Google's exploitative business practices.

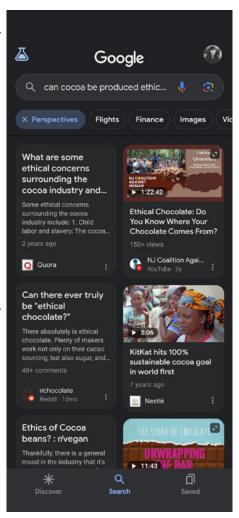


Figure 2. Google SGE search using the Perspectives filter for the search, "can cocoa be produced ethically and sustainable?"

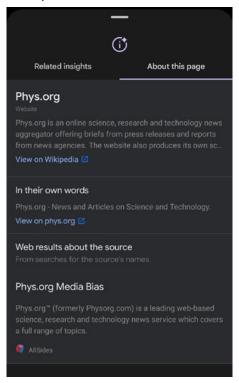


Figure 3. Google SGE "About this page" for Phys.org.

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Conclusion

For now, I did my part by providing feedback to Google Labs asking some of these important questions, but who knows if they'll ever be read. As librarians, we have a responsibility to help our communities understand the changing landscape of search and how big companies like Google are exploiting them. I have a love-hate relationship with Google, but I think it's telling that they continue to fire their lead ethicists⁹ and suppress voices of dissent, especially women of color. My understanding is that Search Labs will close at the end of this year. I'll be interested to see what happens next. Will SGE continue to be optional, or will it simply become the way we search? We can participate in Google's experiments and share our experiences, but we need more people, especially librarians, to push back against corporations that do not have our best interests in mind as they change our world. **

Notes

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