



STUDY SMARTER WITH NOTEBOOKLM



Kee-Man Chuah



STUDY SMARTER WITH
NotebookLM
50 Study Tips for Students

Kee-Man Chuah

*This eBook was written for students, by someone who wishes this tool had existed
when he was studying. Use it well*

Study Smarter with NotebookLM

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Introduction

Dear students, if you're wondering how to maximise the use of NotebookLM to study smarter. This eBook is for you.

NotebookLM is a free research tool built by Google that works differently from most AI chatbots. Instead of pulling answers from the entire internet (and occasionally making things up), it stays grounded in the specific documents you upload. You give it your lecture slides, textbook chapters, journal articles, and YouTube videos. It gives you answers, summaries, podcasts, quizzes, flashcards, and more. All drawn from your actual course material.

That grounding is what makes it genuinely useful for studying, rather than just impressive as a party trick. When you ask NotebookLM a question, the answer comes from your sources, and it shows you exactly where. No hallucinated citations, no confidently wrong answers drawn from some random corner of the internet.

Since its launch, NotebookLM has evolved rapidly. As of March 2026, it runs on Gemini 3.1 Pro with a full 1-million-token context window. It can generate AI podcasts you can interrupt and join, create documentary-style videos from your notes, build structured data tables from messy text, produce infographics and slide decks, and even run autonomous research across the web. The free tier is surprisingly generous; the paid tiers add higher limits and premium features like Cinematic Video Overviews.

This eBook contains 50 practical tips organised around the things you actually do as a student: organising your materials, reading and understanding them, taking notes, revising for exams, writing essays, giving presentations, and building study habits that last beyond a single term. Each tip is specific, actionable, and based on features available in NotebookLM as of March 2026.

Note: You don't need to read these in order. Jump to the section that matches whatever you're dealing with right now. The tips are meant to be picked up and used, not memorised.

How to Use This Book

Each tip follows a consistent format. You get the tip itself. A clear explanation of what the feature does and why it matters for students. Then there's a "Try this" suggestion, which gives you a concrete way to put the tip into practice straight away. Many tips also include an "In practice" scenario: a short, realistic example of how a student might actually use the tip during their studies.

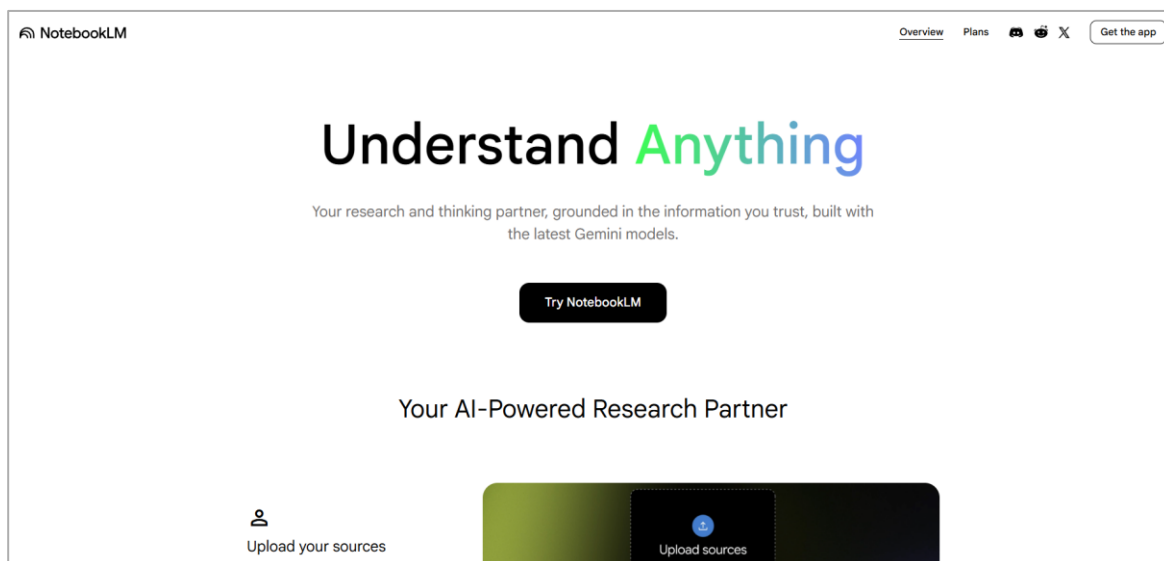
If you're brand new to NotebookLM, start with the Getting Started guide on the next page, then dip into whichever part matches your most pressing need. If you're already familiar with the tool, skip ahead to Part 4 or Part 5. That's where the more advanced workflows live.

What This Book Is Not

This is not a guide to getting AI to do your work for you. NotebookLM is a thinking tool, not a thinking replacement. Every tip in this book is designed to help you understand material better, organise your thoughts more clearly, and study more effectively. The goal is to spend less time on busywork and more time on the kind of deep engagement that actually produces learning. It's also not a comprehensive manual for every single feature. NotebookLM is updated frequently, and some details may have changed by the time you read this. The tips here are based on what's available as of March 2026.

Getting Started: A Quick Setup Guide

Before diving into the tips, here's how to get NotebookLM up and running. It takes about five minutes.



Step 1: Open NotebookLM

Go to <https://notebooklm.google.com> and sign in with your Google account. If you have a university Google Workspace account, use that, as it may give you access to additional features depending on your institution's setup. NotebookLM works in any modern web browser and is also available on mobile, though the web version currently has more features and provide better viewing experience.

Step 2: Create Your First Notebook

Click “New Notebook” and give it a clear name. Something like “Year 2 – Organic Chemistry” or “A-Level History – Cold War.” The name doesn't affect functionality, but it keeps your life organised as notebooks multiply. You'll probably end up with one notebook per course or per unit. You can also set your **preferred language for the output in the Settings page**. When you choose a specific output language, all sources will be automatically translated to that language. E.g., when you choose Malay, even if you uploaded English sources, the chat responses, or studio content output will be in Malay.

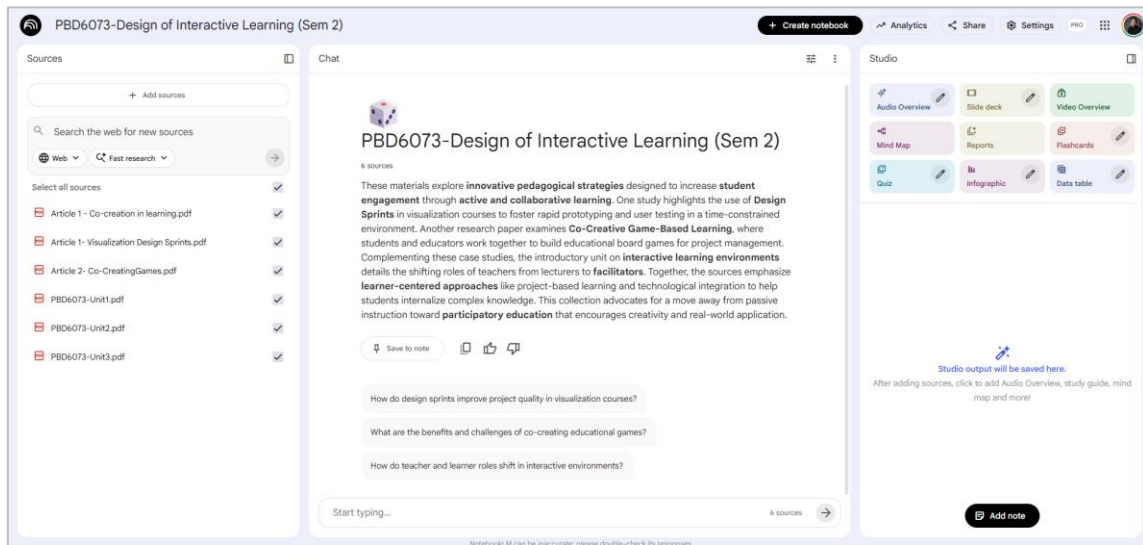
Step 3: Add Your Sources

Upload your materials: PDFs, Google Docs, text files, web links, YouTube URLs, images, or CSVs. You can also connect your Google Drive for direct imports. The AI will index everything and make it searchable. There's a limit of 50 sources per notebook on the free plan. The paid tiers expand these limits. The quality of everything NotebookLM produces depends on the quality of your sources. Spend a few extra minutes curating what you upload. **Good sources in, good outputs out.**

Step 4: Start Asking Questions

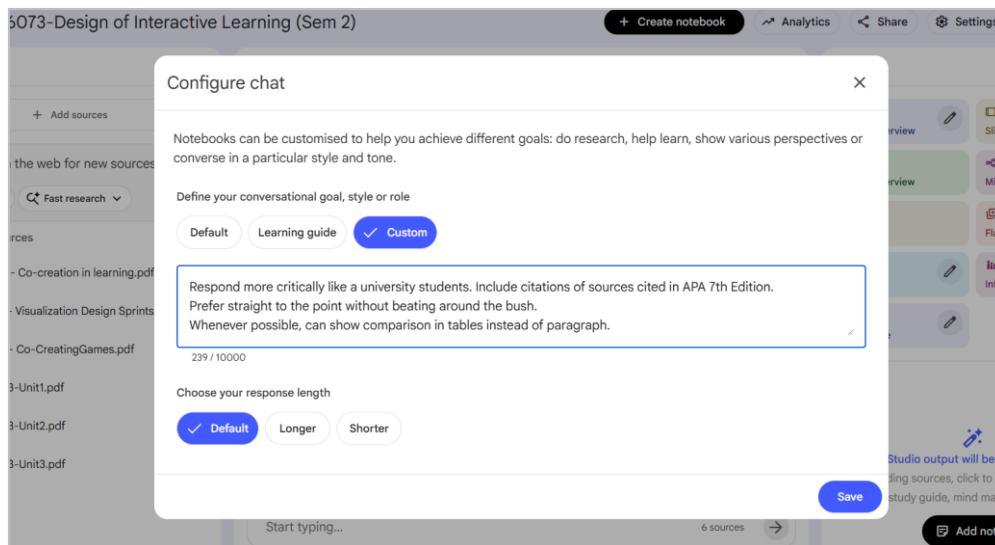
Type a question in the chat panel. The AI will answer using only the sources you've uploaded, citing exactly which document the information comes from. That's the core interaction. If you're not sure where to start, try: “Summarise the key points from all my sources” or “What are the main arguments in Source 1?”

Step 5: Explore the Studio Panel



On the right side of the screen, you'll find the Studio. This is where the output tools live. Audio Overviews, Video Overviews, Flashcards, Quizzes, Study Guides, Mind Maps, Infographics, Slide Decks, Data Tables, and more. Each one generates a different kind of output from your sources. We'll cover all of these in the tips that follow.

Step 6: Set a Custom Persona (Optional but Recommended)



Click the settings icon (configure chat) in the chat and you'll find the custom prompt field (up to 10,000 characters). This lets you tell the AI how to behave like what tone to use, what level of detail to aim for, and what role to adopt. Even a short instruction like "Respond critically like a university student" makes a noticeable difference to response quality. Follow the steps in Tip 7 for more information.

A note on honesty

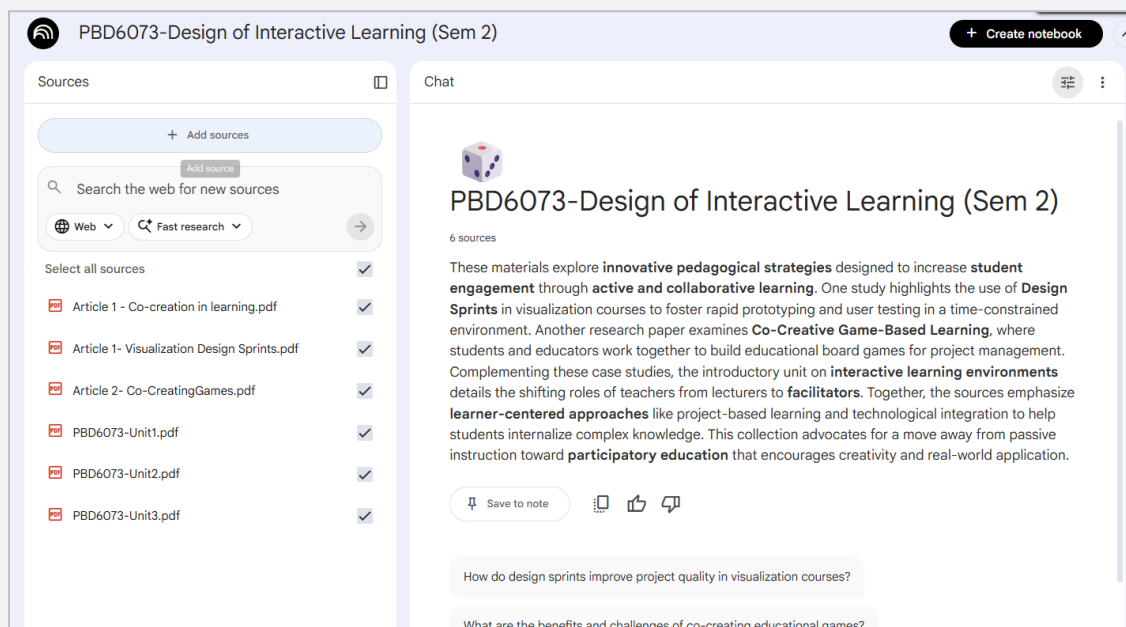
NotebookLM is a powerful tool, but it's not infallible. It can occasionally misinterpret a source, miss nuance, or oversimplify. Always treat its outputs as a starting point for your own thinking, not as a finished product. The students who get the most from it are the ones who use it to think more, not think less.

Part 1: Organising Your Study Life

Before you can study anything, you need to wrangle your materials into some kind of shape. These tips cover how to set up NotebookLM so it actually works for you — the right notebooks, the right sources, and the right setup.

Tip 1: Create One Notebook Per Subject or Module

Resist the temptation to dump everything into a single notebook. NotebookLM works best when each **notebook has a clear focus**. one per subject, module, or major project. This keeps the AI's answers sharp because it only draws from sources that actually belong together. When you mix, say, your psychology readings with your statistics homework, the AI has to wade through irrelevant material every time you ask a question.



A good rule of thumb: if you wouldn't put two sets of notes in the same physical folder, don't put them in the same notebook.



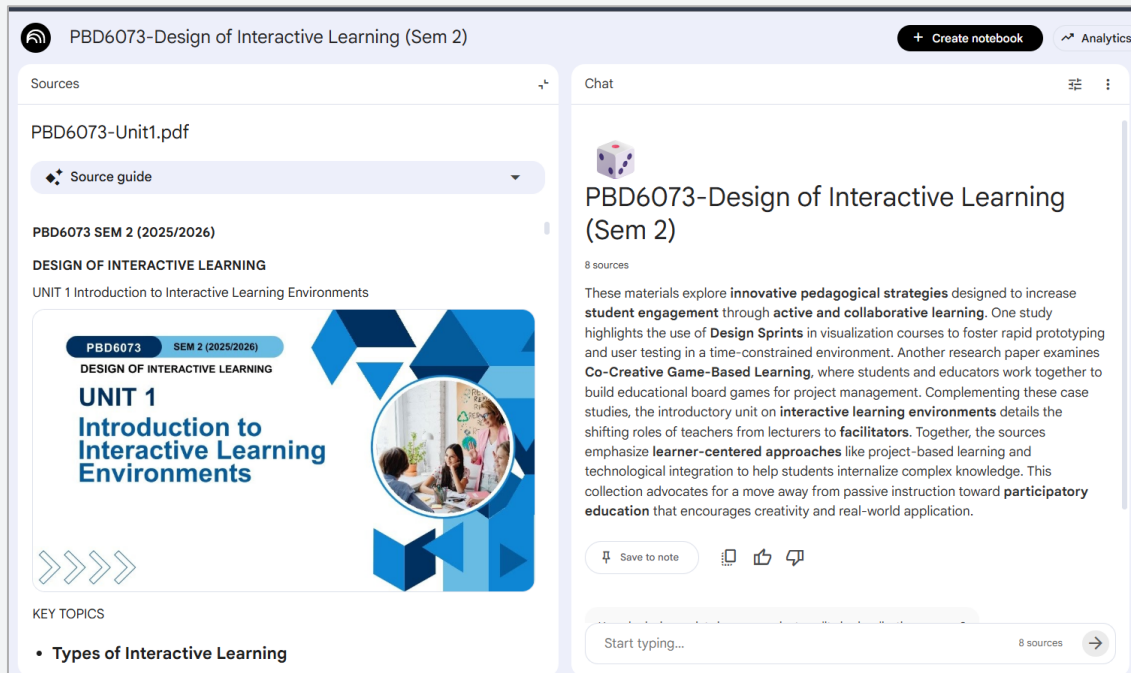
Try this: Name your notebooks clearly: “Y1 Biology – Ecology” beats “Bio stuff.” Future-you will thank present-you.



In practice: You're taking five modules this semester. Create five notebooks on day one, before you even have any materials. Then upload each lecture's slides to the right notebook immediately after class. It takes seconds and prevents a messy backlog.

Tip 2: Upload Lecture Slides and PDFs as Sources

The moment you get a set of lecture slides or a reading list PDF, upload it straight into the relevant notebook. NotebookLM indexes the full text, so you can ask questions about any detail without having to remember which slide it was on. It handles most common file formats, including Google Docs, PDFs, and plain text files. **Please note that NotebookLM does not support PPTX upload yet, so you will need to convert those to PDFs.**



This is the foundation of everything else in this book. The more complete your sources are, the better every other feature works from quizzes to audio overviews to essay outlines.



Try this: Upload your syllabus document (course outline or scheme of work provided by your lecturer/teacher). It gives the NotebookLM useful context about what topics matter and how they connect across the module.



In practice: Your lecturer posts 12 weeks of slides on the learning management system (LMS). Spend 15 minutes downloading and uploading them all at once onto NotebookLM. For the rest of the semester, you can ask the AI anything about any week's content and revise. You also do not have to worry whenever the LMS is down.

Tip 3: Add Video Lectures or Tutorials as Sources

NotebookLM can pull in the transcript of any YouTube video you paste as a source. If your lecturer records sessions or you follow channels like CrashCourse, Khan Academy, or 3Blue1Brown, this is incredibly handy. **Please note that you may not be able to add YouTube videos which are set to Unlisted as it cannot be directly accessed by NotebookLM.** Once all videos are uploaded, you can then search the transcript, ask questions about specific segments, or generate a study guide from the video content.

The screenshot shows the NotebookLM interface. On the left, a list of sources is displayed, including 'Article 1- Visualization Design Sprints.pdf', 'Article 2- Co-CreatingGames.pdf', 'Lecture Recording - Week 3', 'Lecture Recording - Week 5', and three PDFs for 'PBD6073-Unit1', 'PBD6073-Unit2', and 'PBD6073-Unit3'. The main area shows a video lecture titled 'PBD6073 - Design of Interactive Learning (Sem 2)' with a transcript. The transcript includes a 'Warming Up' section and a video player. The chat window on the right shows a conversation about the video content, with a 'Save to note' button and a 'Start typing...' prompt.

This is particularly useful for topics where the visual explanation in a video is supplemented by important spoken detail that you'd otherwise have to manually transcribe.



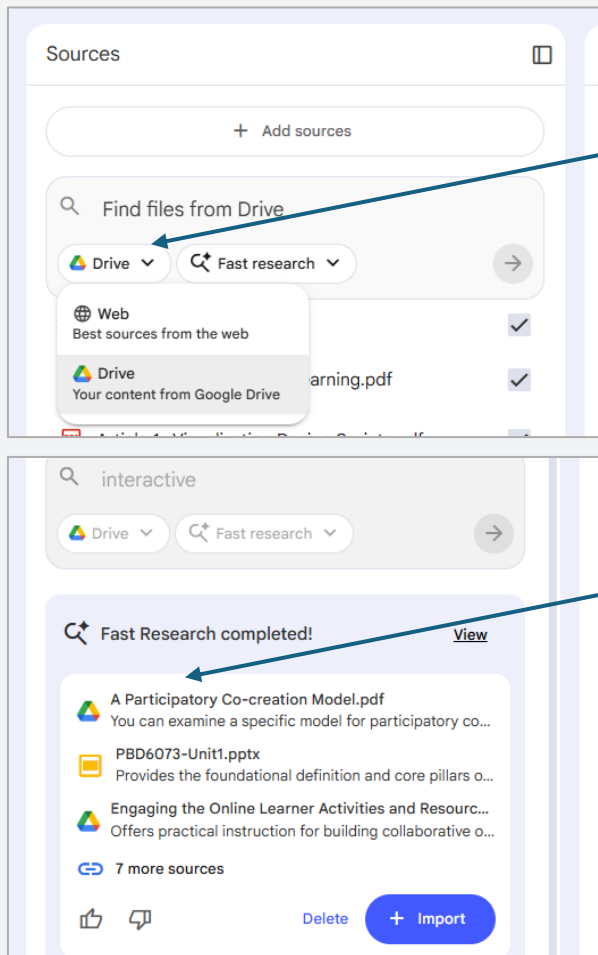
Try this: If a video covers multiple topics, pair it with the relevant textbook chapter in the same notebook for richer, cross-referenced answers.



In practice: If your lecturer is not sharing video recording, you might want to use your phone to record as audio and upload the audio file. NotebookLM supports most audio files format.

Tip 4: Use Google Drive Integration to Pull Files In

Rather than downloading files and re-uploading them, connect your Google Drive and import documents directly. This is especially useful if your university shares materials through Google Workspace. You can also apply Fast Research directly to files already sitting in your Drive, which saves a step.



The screenshot shows the 'Sources' panel in NotebookLM. At the top, there's a '+ Add sources' button. Below it is a search bar 'Find files from Drive'. A dropdown menu is open, showing options: 'Drive' (selected), 'Web' (Best sources from the web), and 'Drive' (Your content from Google Drive). Below the search bar, there's a 'Fast Research completed!' message. A list of search results is shown, including 'A Participatory Co-creation Model.pdf', 'PBD6073-Unit1.pptx', and 'Engaging the Online Learner Activities and Resourc...'. At the bottom, there's a 'Delete' button and a blue '+ Import' button.

Click here to switch to Drive

Review the search results and select what you need before hitting "import"

To use this feature, you must signed in to the same Google Account for your Drive. NotebookLM will search through your files and add them here directly. This is particularly useful if you're doing projects that require a lot of scholarly citations. You can find all articles and save them on your Drive folder first before linking to NotebookLM.



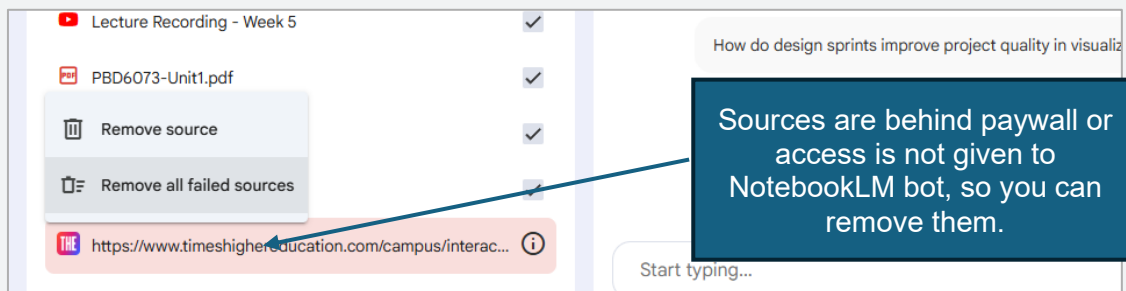
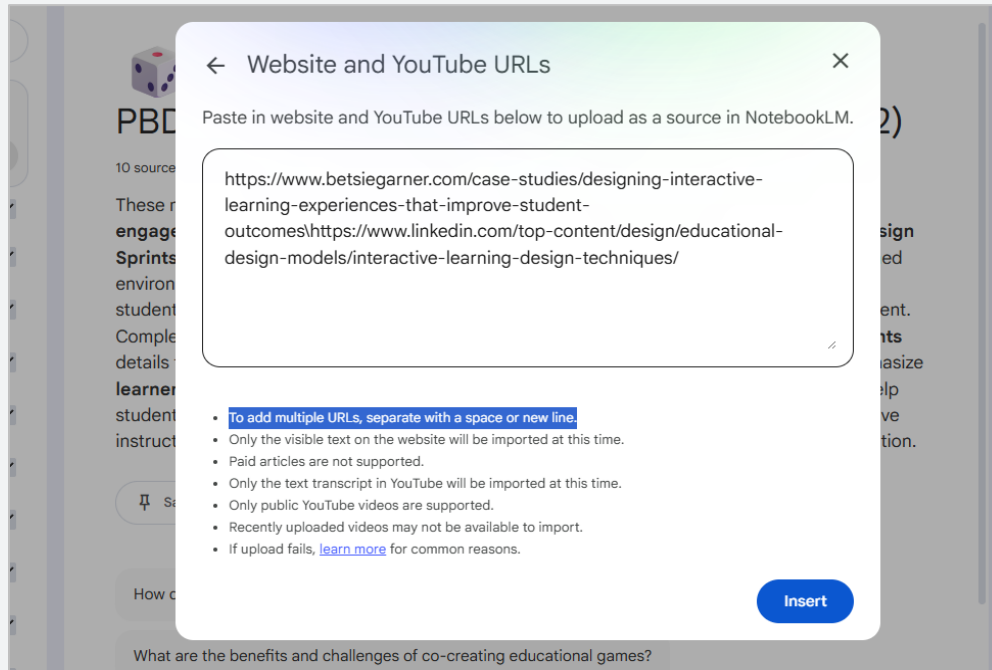
Try this: Keep a tidy Drive folder per module so you can quickly select the right files during import. This will also speed up the search process.



In practice: Your group project has a shared Drive folder with 20 documents. Instead of downloading and re-uploading, connect Drive and import them in one go. The notebook is ready for analysis in under a minute.

Tip 5: Import Web Articles and Links for Supplementary Reading

Found a useful blog post, news article, or open-access paper? Paste the URL into NotebookLM as a source. The tool will fetch the content and add it to your notebook's knowledge base, so it can be cross-referenced alongside your lecture materials. If the materials are behind a paywall or copyrighted, they will be marked in red, and you can remove them.



This is a simple habit that makes your notebooks richer over time. Every interesting article you come across becomes part of your searchable study system.



Try this: Before an essay, import three or four quality web sources alongside your core readings. It gives the AI a broader evidence base when you ask for help structuring arguments.



In practice: Avoid reliance on unverified web sources. It is always good to download academic articles and upload. Links are useful for sources that are constantly updated like online newspapers

Tip 6: Work with Images (OCR Support)

NotebookLM now supports image uploads with OCR (optical character recognition). That means you can upload photos of handwritten notes, scanned textbook pages, or data spreadsheets and have them become searchable sources within your notebook.

The OCR isn't perfect with messy handwriting, but for printed text and reasonably neat notes, it works well enough to save you from retyping.

whiteboard snap-lecture 2

Source guide

This presentation argues that traditional keyword ranking reports are obsolete because they overlook the majority of search traffic and fail to align with **actual business objectives**. To gain a more accurate view of digital performance, marketers should shift their focus toward a **Keyword Index** that captures long-tail trends and overall **organic reach** across various traffic channels. Furthermore, the lecture highlights the importance of tracking **external endorsements**, such as press mentions and social authority, alongside concrete **Key Performance Indicators** like conversions and revenue. Ultimately, the framework encourages a holistic approach to SEO that prioritizes **meaningful growth metrics** over the narrow, fluctuating positions of individual search terms.

Keyword Ranking Rep...

Keyword In...

Organic Traffic Re...

Endorsements and Backli...

Business K...



Try this: Snap a photo of a whiteboard diagram after class and upload it. The OCR will extract any text, and you can ask the AI to explain or expand on what was written.



In practice: Your statistics lecturer writes worked examples on the whiteboard. Snap them, upload to your notebook, and later ask: "Walk me through the method used in the whiteboard example for Source 7."

Tip 7: Create a Custom Persona with the 10,000-Character Prompt

NotebookLM's chat customisation field (Configure notebook) now supports up to 10,000 characters. That's enough room to build a detailed persona. It tells the AI to behave like a strict A-Level examiner, a patient biology tutor, or a Socratic philosophy lecturer. You can specify tone, response length, format preferences, and even the level of complexity.

This transforms NotebookLM from a generic question-answering tool into something that feels tailored to your specific needs. The difference in response quality between a default prompt and a well-crafted persona is significant.

Design of Interactive Learning (Sem 2)

Research emphasizes the transition from passive instruction to **interactive** that foster student engagement through **collaboration and technology**. that **co-creating educational tools**, such as board games, allows

Notebooks can be customised to help you achieve different goals: do research, help learn, show various perspectives or converse in a particular style and tone.

Define your conversational goal, style or role

Default Learning guide **Custom**

You are a university-level chemistry lecturer. Keep answers concise. Always include a worked example. Flag common misconceptions. Use UK English.

145 / 10000

Choose your response length

Default Longer Shorter

Save



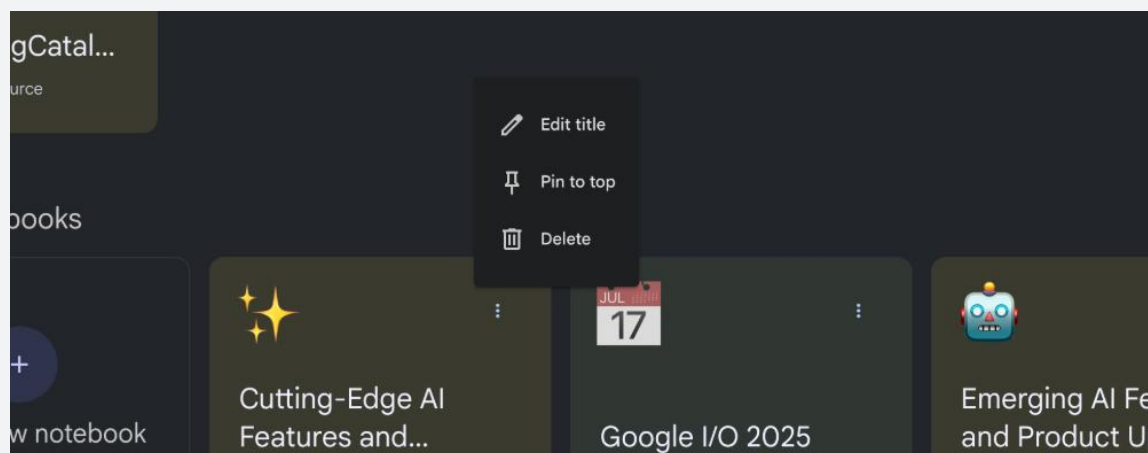
Try this: Write something like: “You are a university-level chemistry lecturer. Keep answers concise. Always include a worked example. Flag common misconceptions. Use UK English.” Note that configuration is only applicable to each notebook.



In practice: You're revising for a history essay. Set the persona to: “You are a demanding but fair A-Level history examiner. When I give you an argument, tell me what mark band it would fall in and how to improve it. Be specific.”

Tip 8: Pin and Search Your Notebooks as They Multiply

Once you've got dozens of notebooks across multiple semesters, finding the right one gets tricky. NotebookLM is rolling out a search function on the home screen and the ability to pin your most-used notebooks to the top. Use both to keep things navigable.



(Source: testingcatalog)



Try this: At the start of each term, pin your active modules and unpin last term's. It takes thirty seconds and saves real frustration later.

Part 2: Understanding Course Material

You've got a mountain of readings and a limited number of hours. These tips are about using NotebookLM to make sense of dense, unfamiliar, or just plain long source material without drowning in it. You can ask questions in **any language that you prefer** although NotebookLM respond better in English.

Tip 9: Ask NotebookLM to Summarise Dense Material in Plain Language

Upload a long chapter or journal article and simply ask: "Summarise this in straightforward language a first-year student would understand." The Gemini AI in NotebookLM (the chat part) draws only from your uploaded source, which means less risk of hallucinated information compared to a general chatbot.

The screenshot shows the NotebookLM chat interface. At the top, the document title is "PBD6073-Design of Interactive Learning (Sem 2)". There is a "Create notebook" button and a user icon labeled "Ana". The chat area shows a user prompt: "What are the three things I absolutely need to remember from this?". The AI response provides a structured summary:

- 1. Move from Passive Instruction to Active Co-Creation** Traditional "one-size-fits-all" teaching and passive lecturing frequently lead to classroom alienation and student disengagement [1] [2]. Instead, education should be a shared endeavor where students actively participate in shaping their learning [3] [4]. By adopting approaches like **whole-class co-creation**, where educators negotiate the learning process with the entire student body, inclusivity and positive student-teacher relationships are vastly improved [5] [6]. Applying active methods—such as having students co-design educational board games or treating a sociology class like a "lab science" where students collect and analyze real data—shifts the focus from chasing grades to hands-on problem solving, granting students greater ownership and significantly improving their academic outcomes [7] ...
- 2. Purposefully Integrate Technology for Interactivity and Personalization** Educational technology should not be used merely for convenience; it must actively enhance engagement, collaboration, and tailored feedback [10] [11]. Digital tools powered by **AI and multimedia** (such as the Snorkl app, Curipod, or immersive VR/AR learning systems for children) allow for real-time authentic assessment, personalized learning paths, and immediate feedback that adapts to a student's unique cognitive needs [12] ... Furthermore, "technology" extends to the physical space. The design of physical learning environments, utilizing smart furniture like

This doesn't replace reading the original, but it gives you a map before you enter the territory. Knowing the shape of an argument before you read it in full makes the reading itself much more productive.



Try this: Follow up with "*What are the three things I absolutely need to remember from this?*" to distil the summary even further.



In practice: You've been assigned a 40-page journal article for next week's seminar. Upload it, get a two-paragraph summary, then read the full article with a clearer sense of what the author is actually arguing.

Tip 10: Get the Chat to Explain Jargon and Technical Terms

Highlight or reference a term you don't understand and ask the chat to explain it using only your sources as context. Because NotebookLM stays grounded in your documents, the explanation will be relevant to the way the term is actually used in your module — not some generic dictionary definition.

This is particularly useful in fields like law, medicine, and philosophy, where the same word can mean very different things depending on context. A grounded explanation beats a Wikipedia page every time.

Explain the term co-creation in Article 2 and give me an analogy.

In Article 2, "co-creation" refers to an educational approach where teachers invite students to actively participate in the design process of the curriculum ¹. This method shifts the traditional dynamic by treating students as active stakeholders in their education rather than passive customers ¹. Co-creation promotes a more democratic learning environment where knowledge is negotiated collaboratively between students and educators, which enhances student participation, engagement, and feelings of ownership over the learning material ¹ ². In the specific context of the article, this concept is applied through Co-creative Game-Based Learning, where students collaborate to design their own educational board games rather than just playing games designed entirely by the instructors ² ³.

Analogy (Note: This analogy is an illustrative example and is not drawn from your sources): Imagine going to a restaurant. Traditional education is like sitting at a table and eating exactly what the chef decided to put on a set menu—you are a passive consumer. Co-creation is like the chef inviting you into the kitchen to help write the recipe, pick the ingredients, and cook the meal together. Because you share ideas and make decisions as partners, you not only get a meal that better suits your needs, but you also gain a deeper understanding of exactly how the dish was made.

You can also ask the AI to generate a list of technical terms or glossary for your easier reference. Prompt: *Create a glossary of top 100 words in these sources.*



Try this: Try asking: *"Explain the term 'epistemic closure' as it's used in Source 3, and give me an analogy."* You may also tick only the source you want to reference before asking any question. This helps to make your search more specific.



In practice: You're reading a sociology paper and it keeps using the phrase 'cultural capital.' You've heard it before but you're not sure what it means in this specific context. Ask NotebookLM: "How is 'cultural capital' defined and used in my sources?" The AI gives you a definition grounded in your actual readings, not a generic one.

Tip 11: Generate Mind Maps to Visualise How Concepts Connect

The interactive Mind Map feature scans your sources and builds a visual web of connected ideas. If you're studying something with lots of moving parts. For example, an ecosystem in biology or the causes of a historical event, the mind map can reveal links you might have missed during a straight read-through.

The screenshot shows the 'Studio' interface with a grid of tools: Audio Overview, Slide deck, Video Overview, Mind Map, Reports, Flashcards, a button to 'Generate an AI mind map based on your sources', Infographic, and Data table. Below the grid, a status bar indicates 'Generating mind map... based on 11 sources'.

The generated mind map is centered on 'Interactive Learning Environments'. It branches into five main categories: Design Methodologies, Core Learning Theories, HCI Learning Systems, Collaborative Space Elements, and Roles & Engagement. The 'Core Learning Theories' branch further connects to four specific theories: Social Constructivism (Vygotsky), Experiential Learning (Kolb), Situated Learning (Lave & Wenger), and Connectivism (Siemens & Downes).

Mind maps are especially useful at the start of revision, when you need to see the big picture before diving into details. They're also handy for spotting connections between topics that could form the basis of an essay argument.



Try this: Use the mind map as a revision starter: look at it before re-reading your notes, and see which branches feel unfamiliar. Those are your weak spots.



In practice: Generate the mind map for each lecture slides or unit. This helps you get the bird's eye views of what's covered. Click on each branch to ask AI to elaborate more.

Tip 12: Use Multi-Angle Exploration for Deeper Insight

NotebookLM's chat now automatically explores your sources from multiple angles, going beyond your initial prompt. It synthesises findings into a more layered response. This is especially useful for large notebooks where the answer to your question might be scattered across several documents.

Which of these sources disagree with each other?"

While the provided sources broadly agree on the value of interactive, student-centered learning, they reveal distinct disagreements regarding the practical execution of these methods. The primary areas of conflict center on the level of structure needed, the ideal group size for collaboration, and who should be included in co-creation initiatives.

1. Open-Ended Freedom vs. Structured Guidance There is a clear tension across the sources regarding how much freedom students should be given when co-creating or collaborating:

- **Advocating for Unstructured Freedom:** Catherine Bovill highlights successful whole-class co-creation efforts that rely heavily on unpredictability ¹ ². She cites a successful ecology course that progressed organically by "moving together" with the deliberate "absence of a predetermined plan of action for every stage of the course" ¹.
- **The Need for Rigid Structure:** Conversely, Gkogkidis and Dacre found that giving students complete freedom to design an educational game caused frustration ³ ⁴. Participants in their study explicitly requested a "more rigid structure" and a "more specific focus," noting

You can ask AI to arrange these in table format too. Just by following up with the prompt "do this in table".

Do this in table

Here is the breakdown of how the sources disagree with one another regarding the practical execution of interactive learning, presented in a table format:

Area of Disagreement	Viewpoint A: Unstructured / Small / Dyads	Viewpoint B: Structured / Whole-Class / Larger Groups
Level of Structure & Guidance	Open-Ended Freedom: Catherine Bovill highlights that successful whole-class co-creation relies on "moving together" with the deliberate "absence of a predetermined plan of action" ¹ . Similarly, some educators leave the course study guide blank to plan it entirely with the	Rigid Structure: Gkogkidis and Dacre found that complete freedom caused frustration, with students requesting a "more rigid structure" and a "more specific focus" ³ . Betsie Garner also noted that unstructured group work led to students becoming distracted by personal opinions, requiring her to implement highly guided "lab science" assignments ⁴ ⁵ . Beyer et al. emphasize that clear, structured processes are needed to steer students

With the expanded **1-million-token context window**, the AI can now handle very large document collections without losing track of earlier material.



Try this: After getting a multi-angle response, ask: "*Which of these sources disagree with each other?*" This is gold for essay preparation.



In practice: Doing this helps you to understand a concept from different perspective before deciding which one to use. You get to evaluate which source is more relevant to your assignment or project too. Don't just take everything blindly though, do read through the main source.

Tip 13: Compare Two Sources Side by Side

Upload two competing textbook chapters, two journal articles, or two historians' interpretations and ask NotebookLM to compare their arguments. The AI will draw only from those sources, giving you a focused, evidence-based comparison without the noise of the open internet.

Where do Source 1 and Source 2 agree, and where do they contradict each other?

Based on the provided sources, Behaviorism and Connectivism differ significantly in their approaches to learning, but they also share a foundational similarity regarding where learning and knowledge reside.

Here is a breakdown of where the two theories agree and where they contradict each other:

Where They Agree (Shared Perspectives)

- **Emphasis on the External Environment:** Both theories look outside the internal mind to explain learning and behavior. Behaviorism asserts that the sources of behavior are external (in the environment) rather than internal (in the mind or head) ¹. Similarly, Connectivism argues that the "processing" of information does not just happen inside the mind, but occurs outside the brain across devices and networks ².
- **Kinship with the "Extended Mind":** Connectivism proposes that learning involves accessing a network of external "nodes" (such as databases, websites, and other people), meaning our capacity to access the network is more valuable than the knowledge currently held in our heads ³ ⁴. Interestingly, Source 1 notes that fans of the "Extended Mind Hypothesis"—which posits that mental representation spills out from the brain into the world—share a kinship with behaviorist B.F. Skinner, who similarly had misgivings about confining representational power purely to the inner brain ⁵.

Where They Contradict

- **Linear vs. Networked Learning:** Source 2 explicitly contrasts the two theories, noting that Connectivism rejects Behaviorism's "linear approach" ². Behaviorism focuses on learning

When you click on the numbers in the circle you get to view the actual source as well. This helps you to verify before using any sources.



Try this: Ask: *"Where do Source 1 and Source 2 agree, and where do they contradict each other?"* It's a quick way to build a 'compare and contrast' essay plan.



In practice: You're writing about economic inequality. Upload Piketty's chapter alongside a critique from a different economist. Ask NotebookLM to map the disagreements. You've got the skeleton of a strong essay in minutes.

Tip 14: Create Data Table to Extract Structured Information

The Data Table feature (in Studio Panel) can pull structured information out of messy, text-heavy sources. Upload several case studies or research papers and ask NotebookLM to generate a comparison table with columns you define — for instance, author, date, key argument, methodology, and findings.

Customise data table

Choose language

English

Describe the data table that you want to create

Compare the two theories in terms of learning emphasis, teacher's role, students' role, key principles

Generate

Comparison of Major Educational and Psychological Learning Theories

Based on 2 sources

Theory Name	Key Proponents	Primary Focus	Core Mechanism	View on Internal Processing	Historical Roots or Context	Common Critiques	Modern Applications	Source
Psychological Behaviorism	Ivan Pavlov, Edward Thorndike, B. F. Skinner, John Watson	Explaining human and animal behavior through learning histories and reinforcement.	Conditioning; associations between physical stimuli, responses, and reinforcements.	Associationism without appeal to inner mental events; introspection is amenable to behavioral analysis.	Classical associationism of British Empiricists (Locke, Hume).	Inadequacy in explaining language acquisition; inability to account for behavioral competence outstripping learning history.	Behavior therapy; laboratory-based animal learning theory; animal modeling in addiction research.	[1]
Radical Behaviorism	B. F. Skinner	Functional analysis of the behavior of organisms in relation to their environment.	Schedules of reinforcement and frequency effects among stimuli; operant conditioning.	Covert behavior exists but is treated the same as overt behavior; rejects internal processing as an explanatory cause to avoid circularity.	Mid-20th century (c. 1930s–1950s) prior to the cognitive revolution.	Extreme aversion to innerness; neglect of innate rules; socio-political vision seen as vague or incomplete.	Behavior management (autism); token economies (schizophrenia); neuroeconomics.	[1]

Comparison of Major Educational and Psychological Learning Theories

2 sources · 1m ago

Rename

Export to Sheets

Delete

The tables can be exported to Google Sheets, which makes them easy to sort, filter, and share. For literature reviews, this is a massive time-saver.



Try this: For a literature review, ask: “Build a table from my sources with columns for Author, Year, Research Question, Method, and Key Finding.” Then export it to Sheets.

Tip 15: Set a Reading-Level Persona So Explanations Match You

If the default responses feel either too basic or too dense, use the custom prompt (configure chat) to set a reading level. You might write: “Explain things at the level of a second-year biochemistry student” or “Keep language simple. I’m new to this subject.” The AI will adjust its vocabulary and depth accordingly.



Try this: Change the persona as you progress through a module. Early on, set it simpler. By revision season, ramp it up to exam-level complexity.

Tip 16: Use Saved Chat History to Pick Up Where You Left Off

Tip 16: Use Saved Notes as Your Source

NotebookLM now saves your conversation history, so you don’t lose your thread when you close the tab. With the expanded context window (now the full 1-million-token Gemini window) and sixfold longer conversation memory, you can have extended, multi-session study conversations without losing coherence.

This means you can treat a chat like an ongoing tutorial. Come back to it day after day, and the AI remembers what you’ve already covered, what confused you, and where you left off.



Try this: At the end of a study session, ask the chat to summarise what you covered. Save that as a note so you have a quick refresher next time.

Part 3: Taking and Refining Notes

Raw lecture notes are rarely useful in their original form. These tips cover how to turn messy, incomplete notes into something you can actually revise from — and how to build a system that gets better over time.

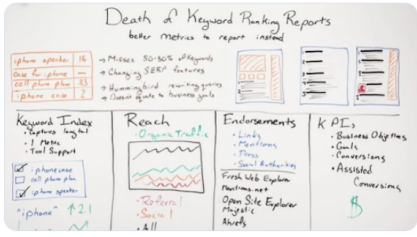
Tip 17: Upload Rough Lecture Notes and Ask NotebookLM to Restructure Them

Typed messy, half-finished notes during a lecture? Upload them and ask the AI to reorganise them into a logical structure with proper headings. Because it's grounded in your actual notes (and any other sources in the notebook), the restructured version will reflect what was actually taught, not generic information from the web. If you're using handwritten notes, you can also upload the snapped version of the notes.

Sources

whiteboard snap-lecture 2

Source guide



Chat

3. Endorsements

- **Purpose:** Tracks off-site signals of authority and brand reputation 1.
- **Metrics to Track:** Links, brand mentions, press coverage, and social authorities 1.
- **Tools to Use:** Fresh Web Explorer, Mentions.net, Open Site Explorer, Majestic, and Ahrefs 1.

4. KPIs (Key Performance Indicators)

- **Purpose:** Ties SEO efforts directly to the bottom line and actual revenue (represented by a "\$") 1.
- **Metrics to Track:** Business Objectives, Goals, Conversions, and Assisted Conversions 1.

► **Flagged Items: Unclear or Incomplete Information**

Based strictly on the whiteboard notes, the following items are incomplete or require more context to be fully understood:

- **Flag - "Hummingbird":** The notes mention "Hummingbird rewriting queries" 1. Without external SEO knowledge, it is unclear what Hummingbird is (it refers to a major Google search algorithm update, but the notes do not explicitly define this).
- **Flag - "1 Metric" Calculation:** Under the "Keyword Index" section, it lists "1 Metric" as a bullet point 1. It is unclear how one calculates or aggregates a massive list of long-tail keywords into a single, unified index metric.

In this example you can see how your notes are also “flagged” for incomplete info. So you can work on those parts by reading up and complete the gap.



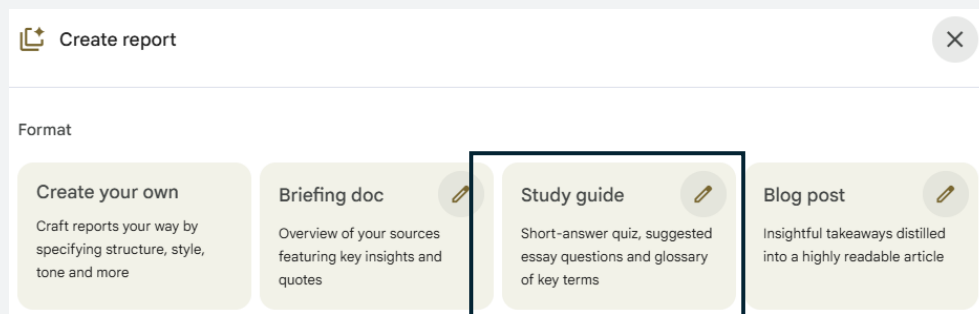
Try this: Ask: “Reorganise these notes into sections with clear headings. Flag anything that seems incomplete or unclear.”



In practice: You rushed through a two-hour lecture and your notes are a jumble of bullet points with no structure. Upload them, and the AI returns a cleanly organised version with headings like “Key Definitions,” “Main Argument,” and “Examples Discussed.” It also flags one section where your notes trail off mid-sentence.

Tip 18: Generate a Study Guide from Your Sources with One Click

In the Studio panel, you can generate a Study Guide (under Reports) instantly. It creates a comprehensive outline or briefing document drawn from all the sources in your notebook. It's a solid starting point for revision, not a replacement for doing the work, but a way to see the full picture quickly.



You can click on the pencil icon to also customise how you want the study guide to be like. For example, using plain English or use more analogies, etc. Tweak this to enhance your understanding any content.

Study Guide: Design of Interactive Learning

This study guide provides a comprehensive overview of the fundamental concepts, theories, and technological applications within interactive learning environments. It is based on the curriculum for "Design of Interactive Learning," covering introductory principles and the evolving role of technology in educational settings.

Part 1: Comprehensive Quiz

Instructions: Answer the following ten questions in 2 to 3 sentences, ensuring your responses are based on the provided course context.

1. How is "Interactive Learning" defined in the context of modern pedagogy?
2. What are the five primary characteristics of an interactive learning environment?
3. Briefly explain the difference between Collaborative Learning and Experiential Learning as types of interactive learning.
4. How does "Connectivism" differ from traditional learning theories regarding the source and nature of knowledge?
5. What are the five phases of the ADDIE instructional design model?
6. Describe the role of the teacher in an interactive environment as opposed to a traditional one.

Think of it as scaffolding. It shows you the structure of the topic so you know what you're building before you start laying bricks.



Try this: Generate one at the start of a revision block to map out what you need to cover, then use it as a checklist.



In practice: You could do a study guide by topic and use it as a revision source. This helps for spaced repetition and enhance your understanding of the topic.

Tip 19: Convert Your Saved Chat Notes into Sources

Here's a powerful workflow: after a productive chat session, save the key answers as notes. Then convert those notes into sources. This means your synthesised insights become part of the notebook's knowledge base, and the AI can draw on them in future conversations. You're building on your own thinking, not starting from scratch each time.

Over a semester, this creates a compounding effect. Each conversation adds to the notebook's intelligence, and later conversations benefit from everything that came before.

creation is heavily praised for its inclusivity, the sources acknowledge that implementing this in large higher-education classes (e.g., large lecture halls) poses a "very real challenge" ²⁹ ³⁰ . The specific mechanics of *how* to scale deep co-creation to classes of 100+ students are missing or incomplete in the current notes ³¹ .

- **Flag - Long-Term Knowledge Retention Data is Thin:** Several experimental interventions (like the children's HCI system and the project management board game workshops) note that their evaluation periods were relatively short ³¹ ³² . Therefore, the *long-term* effects and sustained impact of these interactive technologies on student memory and behavior remain unclear and require longitudinal studies ³² .

Save to note

Pin this message to

Save the chat to note



Architecture of Interactive Learning and Student Co-...

1m ago



Beyond the Rank: Modern SEO

1m ago



Convert to source

Click the 3 Dots and
Choose Convert to
Source

Now the chat/notes can be used as a source. You untick all other sources and use only this source to create your other materials.



Try this: Think of it as compounding interest for your understanding. Each conversation makes the next one richer.



In practice: Chat to get the essential points you need from the sources first, save it as notes, then convert the notes into sources. This helps you to also use the source to create better slides and infographic.

Tip 20: Ask NotebookLM to Identify Gaps in Your Notes vs. the Syllabus

Upload both your notes and your syllabus as sources. Then ask: “Compare my notes against the syllabus. What topics are missing or underdeveloped?” The AI will flag areas where your notes are thin, giving you a targeted revision plan rather than a vague sense of unease.



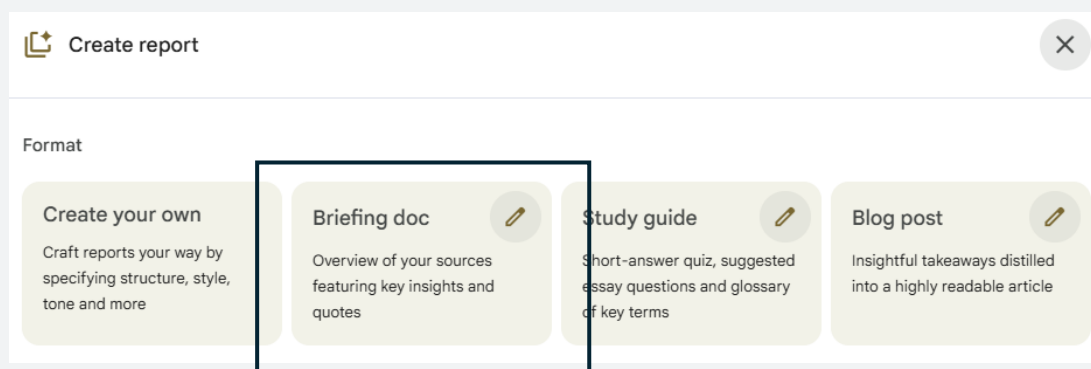
Try this: Do this a few weeks before exams. It turns an overwhelming revision period into a concrete to-do list.



In practice: You upload your revision notes and the module handbook. The AI tells you that you’ve covered four out of six learning outcomes well, but your notes on “research ethics” and “sampling methods” are minimal. Now you know exactly where to focus.

Tip 21: Use the Briefing Doc Output for Quick Topic Summaries

The Briefing Doc is a Studio output (inside Report) that condenses your sources into a concise overview. It’s less detailed than a full study guide but perfect when you need to get up to speed on a topic fast. For example, before a tutorial or seminar where you haven’t done all the reading.



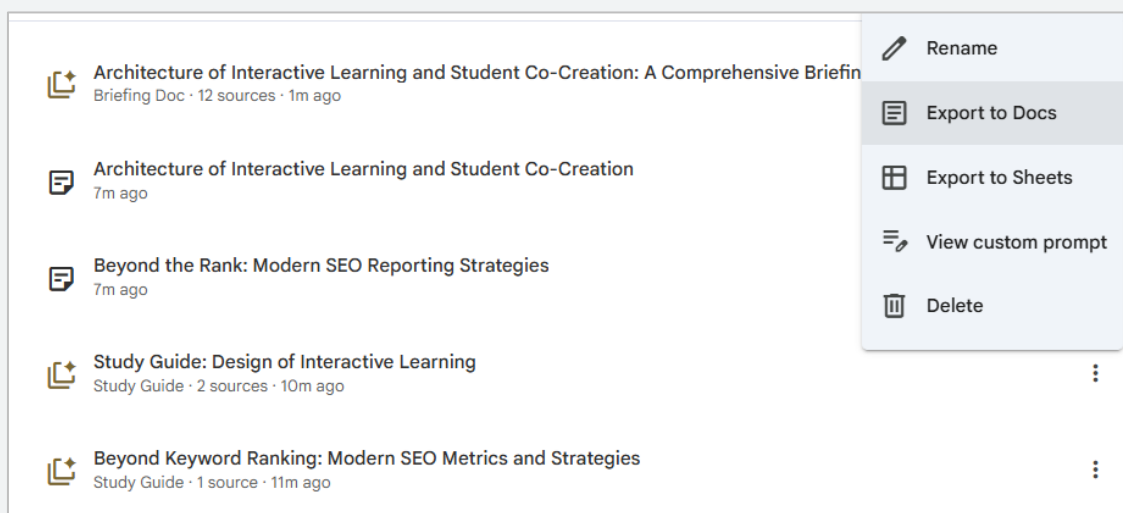
Try this: Generate a briefing doc before each discussion. Even a quick skim will put you ahead of walking in cold.



In practice: The Briefing Doc feature is also a good way to decide which source to be kept and which to be removed. You can quickly scan through sources that are not relevant to your topic.

Tip 22: Export Notes to Google Docs for Further Editing

NotebookLM lets you export notes and outputs to Google Docs, where you can edit, format, and share them more freely. This is useful when you want to turn AI-generated summaries into your own polished revision notes, or when you need to submit something in a specific format.



The export step is also a learning opportunity in disguise. Rewriting AI-generated content in your own words forces you to process and internalise the material, which is itself a proven revision technique.



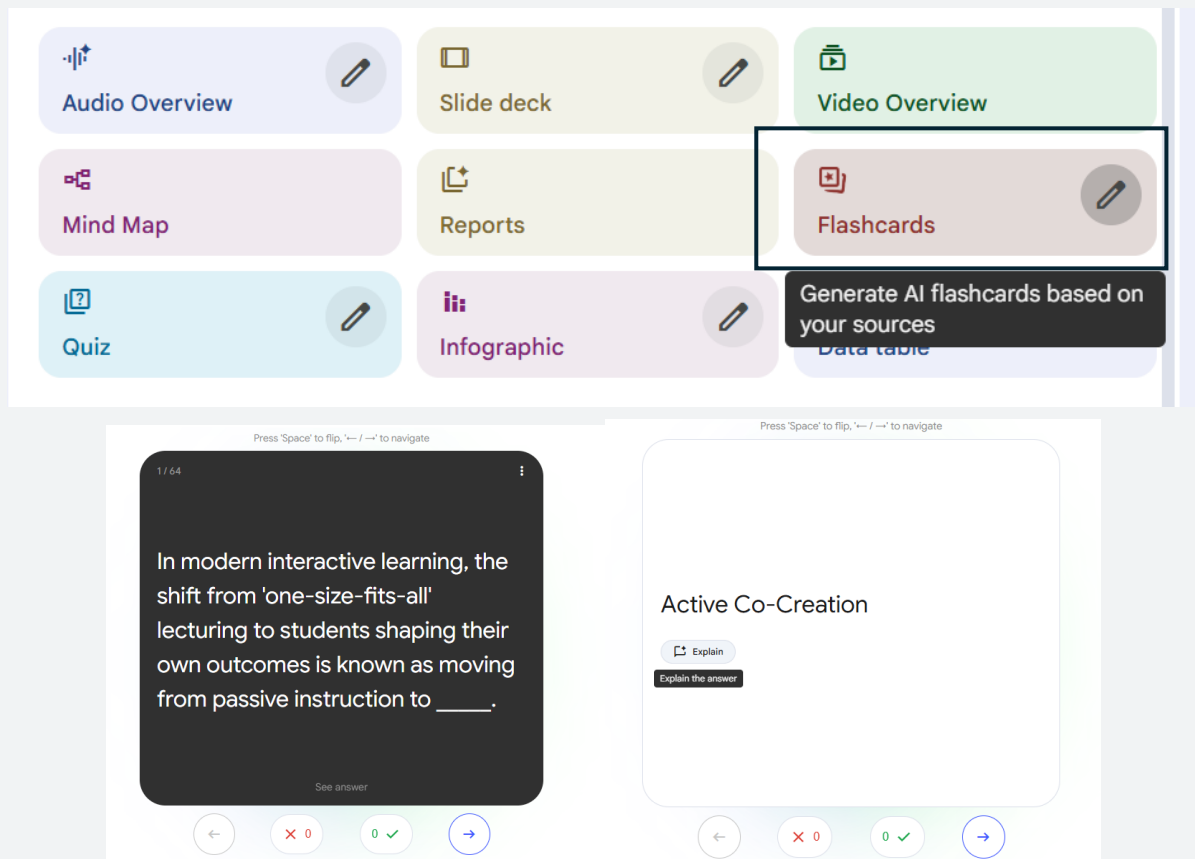
Try this: Export, then rewrite in your own words. The act of paraphrasing is itself a revision technique — you're not just moving information, you're processing it.

Part 4: Active Revision and Exam Prep

This is where NotebookLM really earns its keep. Flashcards, quizzes, audio podcasts, interactive tutoring. These tips cover the full range of tools available for active recall and spaced repetition. If you only read one section, make it this one.

Tip 23: Generate Flashcards from Your Sources for Spaced Repetition

One click in the Studio panel generates a stack of flashcards drawn from your uploaded material. These aren't random. They're grounded in the specific content of your sources. Use them for spaced repetition, which is one of the most evidence-backed methods for long-term retention.



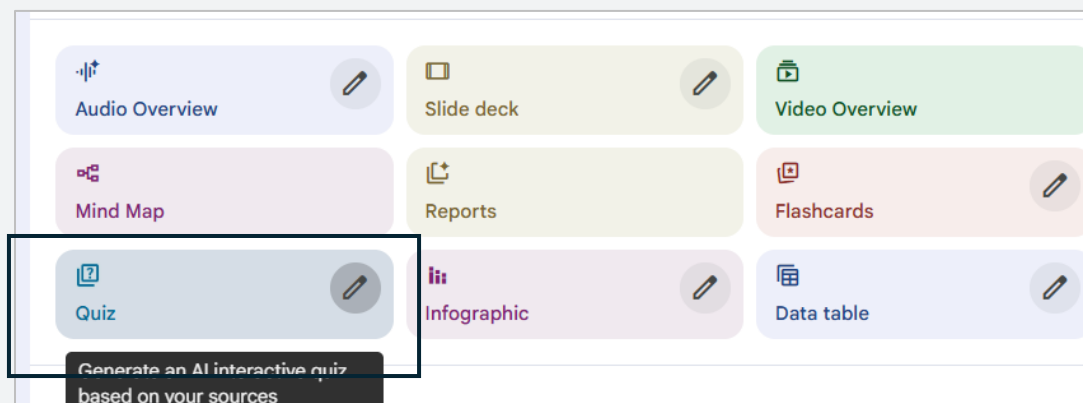
You can mark understand or not using the tick and cross button and also delete any card for topic that you are already very familiar with. The best part you can also ask AI to explain why the answer is such.



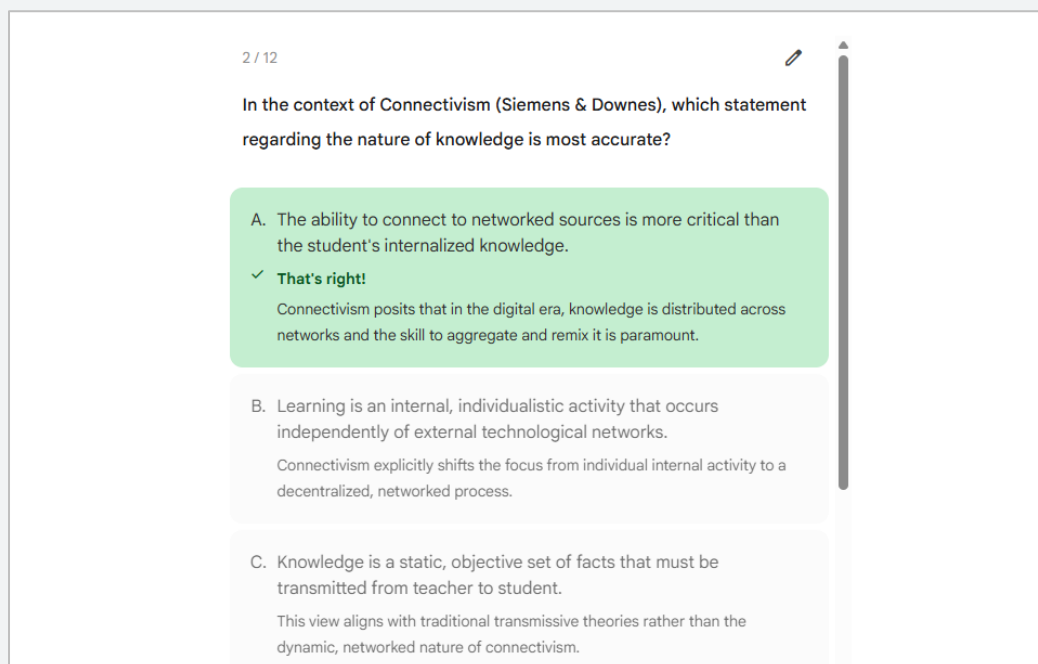
Try this: Review them daily in short bursts rather than cramming the night before. Ten minutes a day beats two hours once a week.

Tip 24: Create Practice Quizzes with Answer Keys

The Quiz feature generates multiple-choice and short-answer questions based on your sources, complete with an answer key that cites exactly where in your documents each answer comes from. It's like having a custom mock exam written by someone who's actually read your course material.



You can click the pencil icon to customise your quiz. E.g. what topic to focus on, what level of difficulty etc.



Try this: Do a quiz at the start of a revision session, not the end. It shows you what you don't know yet, so you can focus your time where it matters.



In practice: You generate a quiz on cellular respiration. You get 7 out of 10 right. The three you got wrong are all about the electron transport chain. Now you know: that's today's revision focus.

Tip 25: Use Explain in Quiz to Trace Back to Source Material

Tip 25: Use Explain in Quiz to Trace Back to Source Material

When you get a quiz question wrong, don't just read the correct answer click explain. It explains clearly to you and takes you back to the exact passage in your source material. This closes the loop: you see what you got wrong, why, and where to find the full explanation.

C. Students reported that the 50-minute prototyping phase was too long and led to boredom.

✗ **Not quite**

The sources actually suggest some students felt the need for more structure or time-pressure within the sessions, not that the duration itself was excessive.

D. The inclusion of lecturers as active team members created a 'power-expert' dynamic that stifled ideas.

Researchers purposefully chose not to be members of the teams to avoid this specific dynamic, so it was not a reported outcome of the workshop.

 Explain

Previous

Next

Your answer was incorrect because the students did not state that the 50-minute prototyping phase was too long or boring. Instead, their actual complaint regarding the 50-minute phase was a **lack of structure** 1.

Here is a detailed breakdown of what the study actually found regarding these two points:

Why your answer was incorrect (The 50-minute phase): While there was indeed a 50-minute prototyping phase in the workshop, the students did not experience boredom or feel it was too long 1 2. Rather, they felt that being given total freedom during this time led to confusion 1. A participant specifically suggested that the 50 minutes needed *more* rigid structure, such as breaking it down into "5 stages of 10 minutes to apply pressure and know what needs to be done" 1.

Why the other answer was correct (Theory vs. Practice): One of the primary

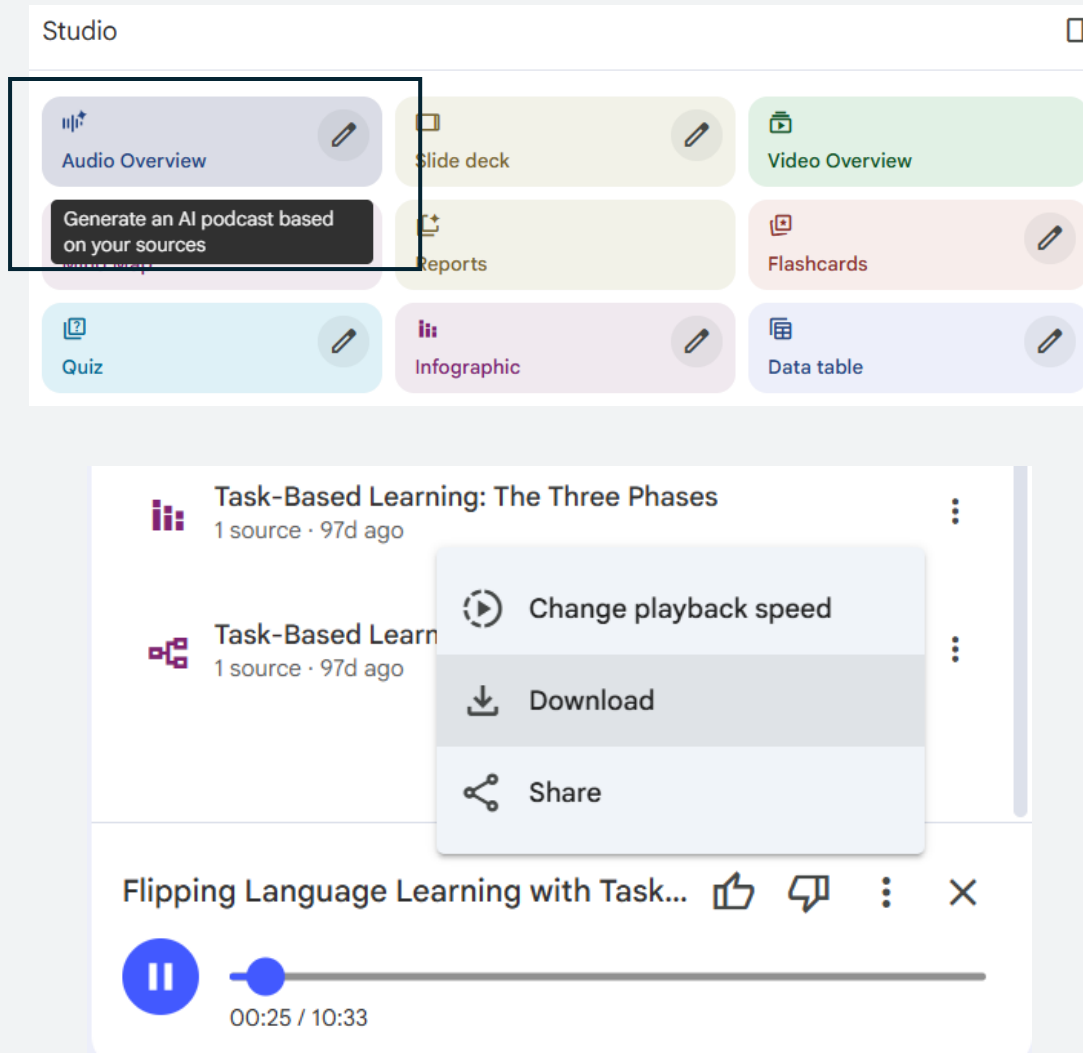
This kind of immediate, targeted feedback is what makes the difference between passive revision (re-reading your notes and hoping it sticks) and active revision (testing yourself and fixing the gaps).



Try this: Keep a running list of the topics you keep getting wrong. That list is your real revision priority.

Tip 26: Generate Audio Overviews for Passive Revision

The Audio Overview (sometimes called the Deep Dive) turns your sources into a podcast-style conversation between two AI hosts. It sounds surprisingly natural. Sometimes they banter, use analogies, and summarise your content in a way that's genuinely easy to follow. It's perfect for revision on the go: commuting, walking, cooking, doing the washing up.



Please note that depending on your source, the audio overview can take a while to generate. There is also a limit set per day.

A word of caution: passive listening is useful but it's not enough on its own. Treat Audio Overviews as a complement to active revision, not a replacement for it. They're best at giving you a feel for the overall shape of a topic.



Try this: Listen to it once passively, then listen again actively with your notes open. The second pass is where the real learning happens.

Tip 27: Customise Audio Overviews by Topic, Complexity, and Length

You can tell the Audio Overview exactly what to focus on, what level of complexity to aim for, and how long it should be. Want a quick ten-minute summary of Chapter 4, pitched at first year student level? Done. Want a longer, more detailed walkthrough of a single concept? Also done.

You can change the language to the one you're more comfortable in. This helps to build your understanding.

Customise Audio Overview

Format

- Deep dive** ✓
A lively conversation between two hosts, unpacking and connecting topics in your sources
- Brief**
A bite-sized overview to help you grasp the core ideas from your sources quickly
- Critique**
An expert review of your sources, offering constructive feedback to help you improve your material
- Debate**
A thoughtful debate between two hosts, illuminating different perspectives on your sources

Choose language
English

Length
Short **✓ Default** Long

What should the AI hosts focus on in this episode?
Focus only on Chapter 4, use plain English and with more examples.

Generate

The available formats include the Brief (short and punchy), the Deep Dive (longer and exploratory), the Debate (two opposing perspectives), and the Critique (a more challenging, adversarial approach). Each serves a different purpose in your revision.



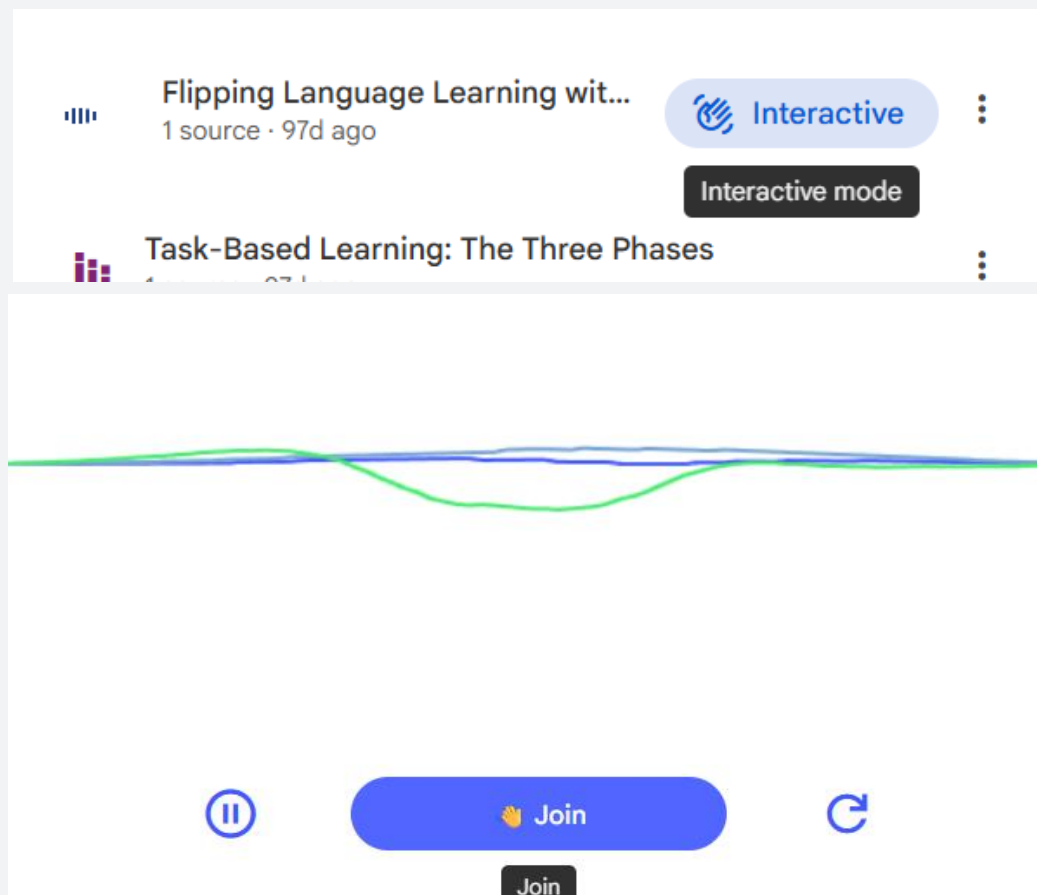
Try this: Use the Brief format for topics you're fairly confident on, and the Deep Dive for areas where you need more depth.



In practice: Generate audio overview of topics that you need more help with. Listening to the explanation will help to force you to focus on key concepts.

Tip 28: Use Interactive Mode to Interrupt the AI Hosts

Interactive Mode lets you interrupt the AI hosts mid-conversation. If they're discussing something and you want more detail, a better analogy, or to be quizzed on a specific point, just jump in using the "Join" button. It turns a passive listening experience into something closer to a one-on-one tutoring session.



This is one of the more underappreciated features. Most students listen to Audio Overviews passively, but Interactive Mode makes them active. The difference in retention is real.



Try this: Use it when revising a topic with lots of sub-concepts. Let the hosts run, then interrupt whenever something doesn't click.



In practice: Interrupt the hosts when you need them to clarify certain concepts or points. This feature also makes you practice how to ask good questions.

Tip 29: Listen to the Debate Format to Hear Both Sides

The Debate audio format presents two opposing perspectives on a topic drawn from your sources. If you're studying anything with competing theories, interpretations, or policy positions, this is a brilliant way to hear the arguments laid out clearly.

The screenshot shows the NotebookLM interface with the 'Format' section at the top. There are four options: 'Deep dive', 'Brief', 'Critique', and 'Debate'. The 'Debate' option is selected, indicated by a checkmark and a blue highlight. Below the format options, there is a 'Choose language' dropdown menu set to 'English' and a 'Length' section with 'Short' and 'Default' buttons, where 'Default' is selected with a checkmark.



Try this: Before writing an essay that requires you to evaluate arguments, generate a Debate audio and take notes on the strongest points from each side.



In practice: You're writing about whether minimum wage increases reduce poverty. Generate a Debate audio from your economics sources. One AI host argues for the evidence supporting wage increases; the other presents the counter-evidence.

Tip 30: Use the Critique Format to Stress-Test Your Understanding

The Critique audio format takes a more adversarial approach. It challenges the ideas in your sources rather than just explaining them. If you're preparing for an exam that rewards critical evaluation, this is a useful way to practise spotting weaknesses in arguments.

The screenshot shows the NotebookLM interface with the 'Format' section at the top. There are four options: 'Deep dive', 'Brief', 'Critique', and 'Debate'. The 'Critique' option is selected, indicated by a checkmark and a blue highlight. Below the format options, there is a 'Choose language' dropdown menu set to 'English' and a 'Length' section with 'Short' and 'Default' buttons, where 'Default' is selected with a checkmark.



Try this: Listen to a Critique of your own essay draft uploaded as a source. It's uncomfortable but effective.

Tip 31: Generate Exam-Style Questions from Past Papers

Upload past exam papers (if you have any) alongside your course notes, and ask the chat to generate new questions in the same style and at the same difficulty level. The AI will mimic the phrasing, structure, and mark allocation of the originals while creating fresh questions you haven't seen before.

This is especially valuable once you've exhausted the available past papers. Instead of re-doing the same questions (where you might just remember the answers), you get genuinely new practice material.



Try this: Ask for model answers too, then compare them against your own attempts. Pay attention to what the model answer includes that yours doesn't.

Tip 32: Create an Exam Coach Persona for Oral or Viva Prep

Tip 32: Create an Exam Coach Persona for Oral or Viva Prep

Use the custom prompt to build a persona that acts like a viva examiner or oral exam panel. Instruct it to ask probing follow-up questions, challenge your reasoning, and push you to justify your claims with evidence from your sources. This is brilliant preparation for dissertations, presentations, or any assessed discussion.



Try this: Write the prompt like: *"You are a tough but fair dissertation examiner. Ask me probing questions about my uploaded thesis draft. Push back on vague claims."*



In practice: You're defending your final-year project next week. Upload your project report and set the persona to "external examiner." Spend an hour answering its questions. By the time the real viva comes, you've already heard the hard questions.

Tip 33: Use the Brief Audio Format for Last-Minute Revision

The Brief format in Audio Overview to produce a shorter, punchier audio summary. Think of five to ten minutes rather than a full deep dive. When you're short on time (the morning of an exam, the bus ride to campus), this is your best friend. It hits the highlights without the extended discussion.



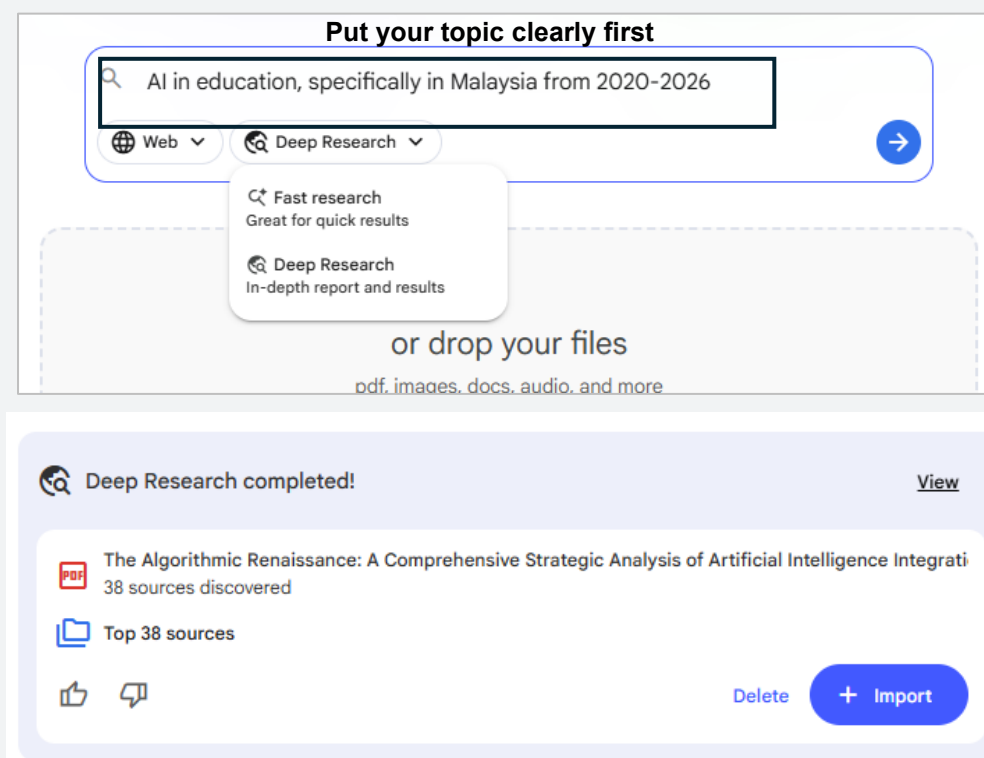
Try this: Generate Briefs for each topic the night before an exam. Queue them up as a playlist and listen during your commute.

Part 5: Writing Essays and Assignments

From finding sources to structuring arguments to getting honest feedback on your draft, these tips cover the full essay-writing workflow. They won't write your essay for you, but they'll make the process a lot less painful.

Tip 34: Use Deep Research to Build a Bibliography on a New Topic

Deep Research is one of NotebookLM's most powerful additions. Give it a topic, and it acts as an autonomous research agent, which can create a research plan, searching the web, evaluating sources, and compiling a citation-backed report. For the early stages of an essay, this saves hours of manual searching.



Click view to verify each source before importing

It's worth noting that Deep Research finds sources and summarises them, but it doesn't replace critical evaluation. Use it to get the lay of the land, then read the actual sources yourself and form your own judgements. You can also add the prompt "find academic journals only" to limit the search to scholarly works.



Try this: Use Deep Research to find sources, then manually add the most promising ones to your notebook for deeper analysis with the chat. You can add “



In practice: You've been assigned an essay on algorithmic bias in hiring. Run a Deep Research query. In minutes, you have a report with 15+ cited sources, organised by sub-topic. Pick the five most relevant, add them to your notebook, and start analysing.

Tip 35: Ask the Chat to Outline an Essay Structure

Once your sources are loaded, ask: “Based on these sources, suggest an essay structure for the question [paste your essay question].” The AI will propose a logical flow of arguments, with evidence mapped to each section. It’s not a finished essay but an outline you can build on.

Based on these sources, suggest an essay structure for the question Impact of Course Content on Self Regulation among Malaysian Students

Here is a suggested essay structure exploring the impact of course content on self-regulated learning (SRL) among Malaysian students, based entirely on the provided sources:

Title: The Impact of Course Content and Task Design on Self-Regulated Learning Among Malaysian Students

I. Introduction

- **Hook/Background:** Define Self-Regulated Learning (SRL) as the complex, multifaceted process where students proactively manage their cognition, metacognition, motivation, and behavior to achieve learning goals ¹.
- **Context:** Highlight the importance of SRL in modern higher education, specifically within the Malaysian context, where it is critical for academic success, independent learning, and the internalization of subject matter ¹ ².
- **Thesis Statement:** The nature of course content—including its cognitive demand, domain structure, and personal or cultural relevance—significantly impacts how Malaysian students regulate their learning by influencing their motivation, task appraisals, and choice of regulatory strategies.

II. The Theoretical Link Between Course Content and Regulation

- **Task Appraisal and Goal Pathways:** Introduce Boekaerts' Dual Processing Model, which argues that a student's cognitive appraisal of a task dictates their SRL pathway ³ ⁴. If

The quality of the structure **depends heavily on the quality of your sources**. If you’ve uploaded good, relevant material, the AI will produce a genuinely useful plan. If your sources are thin, the plan will be thin too. This is one of those features that rewards the work you’ve already done in sourcing and organising.

Also, use the structure as a guide and write the draft on your own. This would make it more relevant to what was covered in the course/syllabus. **You don’t want to be fabricating things that are not even in the course.**



Try this: Ask for two different structures and compare them. Sometimes the second option reveals an angle you hadn’t considered.



In practice: Your essay question is “To what extent has globalisation reduced poverty?” You’ve uploaded four sources. The AI suggests a structure: introduction defining key terms, two paragraphs on evidence of poverty reduction, two on critiques and limitations, and a nuanced conclusion. You now have a roadmap.

Tip 36: Get NotebookLM to Identify Evidence and Counter-Arguments

Ask the chat: *“What evidence in my sources supports the claim that [X]? And what evidence contradicts it?”* This is the kind of critical thinking that gets top marks, and having the AI do the initial trawl through your documents means you spend your time evaluating the evidence, not hunting for it.

The ability to find counter-arguments is particularly valuable. Most students are comfortable finding evidence that supports their thesis. Fewer are good at anticipating the objections. This tip helps you do both.



Try this: For every point in your essay, try to include at least one counter-argument. It shows the examiner you’re thinking critically, not just agreeing with your sources.

Tip 37: Use Data Tables to Organise Quotes, Pages, and Themes

Ask NotebookLM to create a table with columns like *Quote*, *Source*, *Page Number*, *Theme*, and *How I Might Use It*. This gives you a structured evidence bank that’s far easier to work with than scattered highlights across multiple PDFs.

Quote	Source	Page Number	Theme	How I Might Use It	Source Material
Effect sizes measuring students' maths performance were higher for primary school students, while effect sizes that measured reading/writing performance turned out to be higher at secondary school level.	Dignath and Büttner 2008	252	Age differences and Subject Domain	Educators should focus on math-based SRL strategies in early childhood/primary grades, while saving complex reading comprehension strategies for secondary students who have more cognitive capacity for them.	[1]
Effect sizes were higher when the training was conducted by researchers instead of regular teachers. Moreover, interventions attained higher effects when conducted in the scope of mathematics than in reading/writing or other subjects.	Dignath and Büttner 2008	231, 231-264	Implementation and Subject Domain	When implementing SRL interventions in a classroom, teachers should consider specialized training to reach researcher-level effectiveness and prioritize integrating these strategies into mathematics curricula for potentially higher impact.	[1], [2]
Interventions are more effective the longer they are, for both school levels. This result is in line with former research on the development of metacognition and self-regulation, emphasizing the importance of developmental aspects of strategy use. Effectiveness increases with the length of the SRL intervention.	Dignath and Büttner 2008	253, 632	Intervention Duration	Classroom interventions for self-regulation should be designed as long-term, sustained programs rather than one-off workshops to allow students time to automate and internalize strategies.	[1], [3]
The meta-analyses included 49 studies conducted with primary school students and 35 studies conducted with secondary school students;	Dignath & Büttner (2008)	231-264	Age differences / School level	Use to justify that SRL interventions are effective across both primary and secondary levels, but expect	[2]

Data Tables are especially useful for dissertations and extended essays where you’re juggling dozens of sources. Instead of trying to remember which paper said what, you’ve got everything sorted in one place.



Try this: Export the table to Google Sheets and sort it by theme. Now you’ve got a ready-made evidence bank organised by essay section.



In practice: You’re writing a 3,000-word essay on social media and mental health. You’ve uploaded eight research papers. Ask NotebookLM to build a table with columns for Study, Sample Size, Key Finding, and Limitation. In two minutes, you have a structured overview of your entire evidence base.

Tip 38: Create a Ruthless Critic Persona to Review Your Draft

Upload your draft essay as a source and set the custom prompt to something like: “*You are a tough academic reviewer. Identify weak arguments, unsupported claims, logical gaps, and unclear writing. Be direct.*” This kind of honest feedback is hard to get from friends and harder to give yourself.

Configure chat

Notebooks can be customised to help you achieve different goals: do research, help learn, show various perspectives, and more. You can also set a particular style and tone.

Define your conversational goal, style or role

Default Learning guide **Custom**

You are a tough academic reviewer. Identify weak arguments, unsupported claims, logical gaps, and unclear writing. Be direct

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The key is to do this before you think you’re finished, not after. Leave enough time to actually act on the feedback. Getting a critique the night before submission is stressful; getting one a week before is useful.



Try this: Don’t take the criticism personally. The point is to find the holes before your marker does.

Tip 39: Check Argument Consistency by Uploading Your Draft as a Source

Upload your draft alongside your original sources, then ask: “*Does my draft accurately represent the arguments in my sources? Where have I misquoted, oversimplified, or contradicted myself?*” The AI will cross-reference your claims against the original texts and flag any mismatches.

Does my draft accurately represent the arguments in my sources?

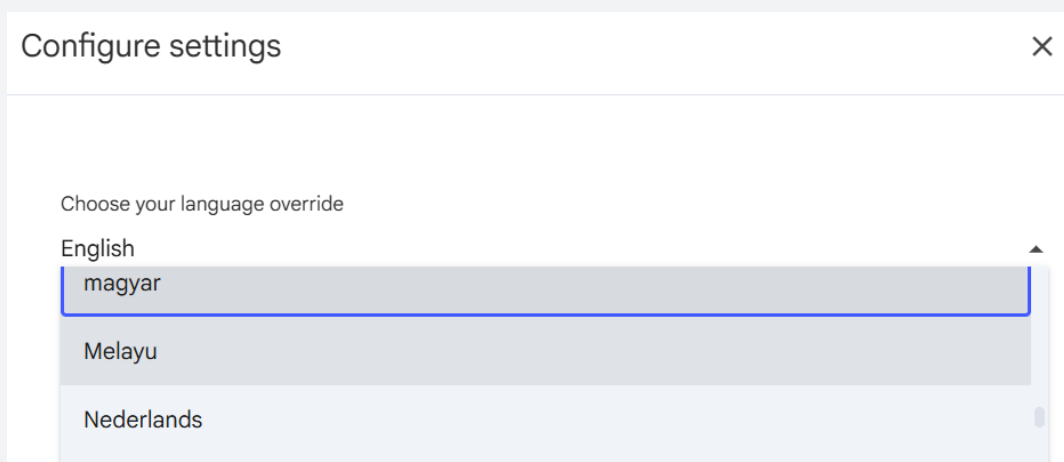
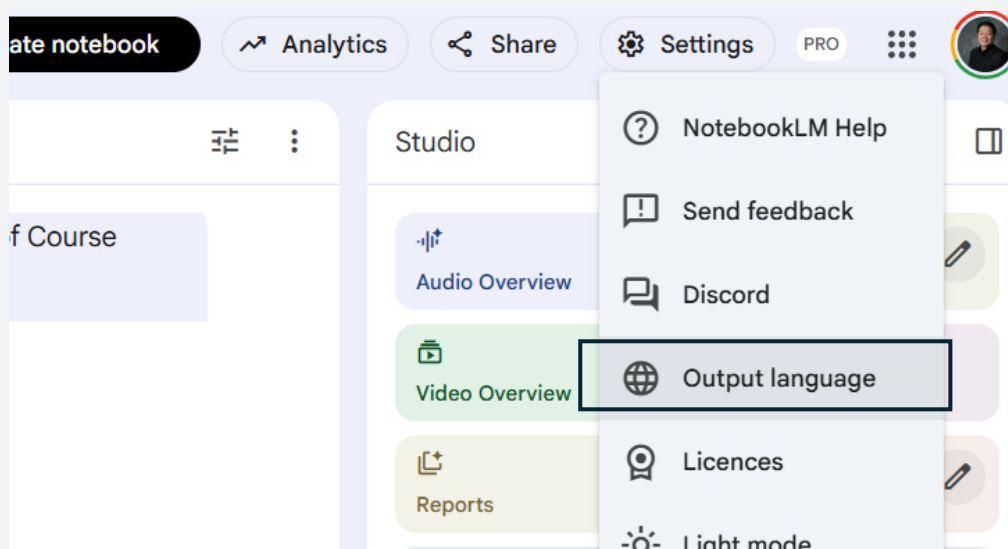
Yes, your draft accurately and effectively represents the arguments in the provided sources. You have successfully synthesized the scientific, social, and political data from



Try this: Do this before your final proofread. It catches factual slips that spell-checkers and grammar tools completely miss.

Tip 40: Use the Output Language Selector for Multilingual Work

NotebookLM now lets you choose the output language for generated text. If you're studying in a second language, writing a bilingual assignment, or need to reference material in another language, you can switch the output without changing your sources.



This is particularly helpful for students struggling with dominant language like English. Understanding a difficult concept in your first language, then expressing it in the language of your assignment, is a perfectly valid study strategy.



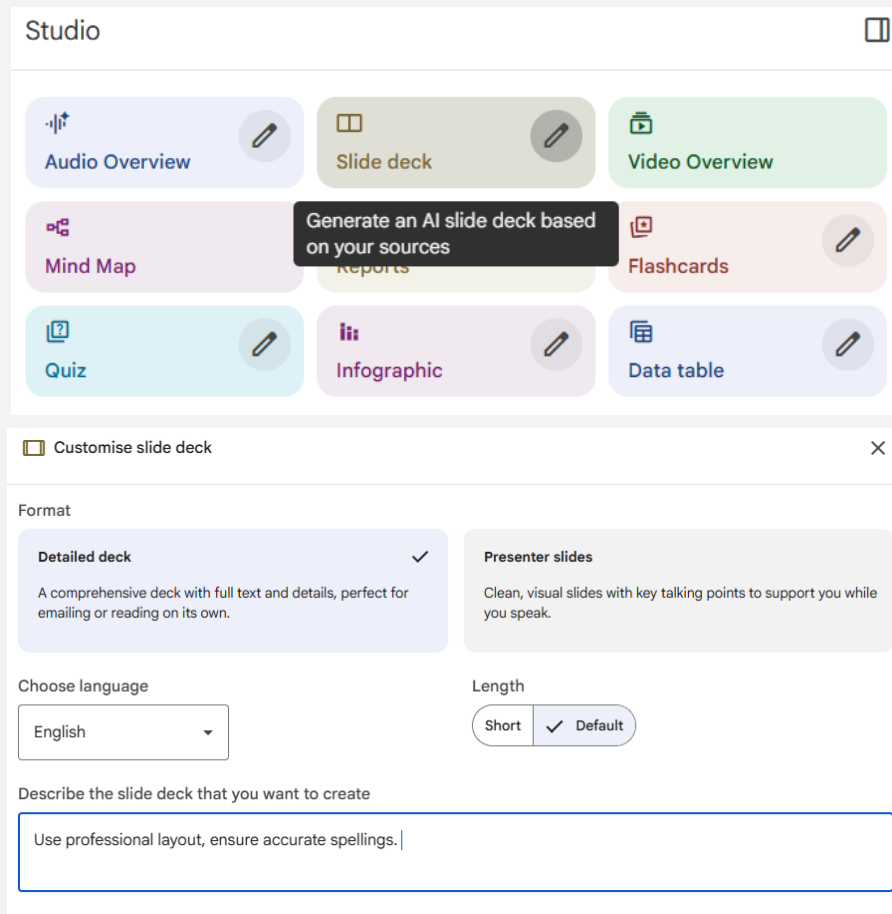
Try this: If you're struggling with a concept, try generating the explanation in your first language. Understanding comes first; translation comes after.

Part 6: Creating Presentations and Group Projects

When you need to produce something visual, collaborative, or presentable, NotebookLM has a growing set of tools to help from auto-generated slide decks to cinematic videos.

Tip 41: Generate Slide Decks Directly from Your Notebook

The Slide Deck feature in the Studio panel converts your sources into a structured presentation. You can choose between a detailed deck (with lots of content per slide) or presenter slides (with minimal text and more room for you to talk). You can also set the language, length, and add specific prompts to shape the content.



The screenshot shows the 'Studio' panel with a grid of tool icons: Audio Overview, Slide deck, Video Overview, Mind Map, Reports, Flashcards, Quiz, Infographic, and Data table. A tooltip over the 'Reports' icon reads 'Generate an AI slide deck based on your sources'. Below this is a 'Customise slide deck' dialog box. The 'Format' section has two options: 'Detailed deck' (selected with a checkmark) and 'Presenter slides'. The 'Choose language' dropdown is set to 'English'. The 'Length' section has 'Short' and 'Default' (selected with a checkmark) buttons. A text box for 'Describe the slide deck that you want to create' contains the prompt: 'Use professional layout, ensure accurate spellings.'

The slides incorporate AI-generated visuals via Nano Banana Pro, so you get something that looks polished without having to source your own images. It's not going to win design awards, but it's a solid starting point. You can use my personalisation tool: <https://nlmprompts.keeman.app/> to get some ideas of different styles



Try this: Generate the deck first, then spend your time refining and personalising it rather than building from a blank slide.

Example of generated slides

The Instructional Assistant

Buying back time with tools like Gemini & Magic School.

Use AI to handle the heavy lifting of administrative tasks.

Leveling Text: Instantly adjust reading difficulty.

Rubrics: Draft complex assessment criteria in seconds.

Hooks: Generate compelling inquiry starters.

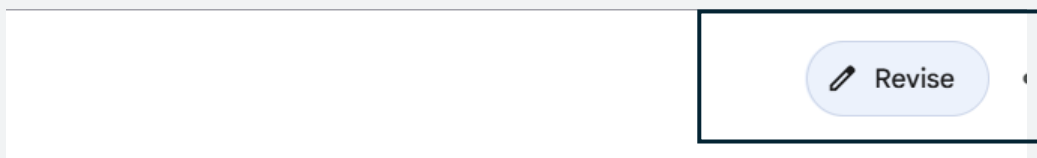
NotebookLM: Turn source materials into audio overviews.





Tip 42: Edit Slides with Prompt-Based Revisions

NotebookLM now supports in-app slide editing. Click the pencil icon next on top of your deck, and you'll get a prompt box where you can type instructions like "Make the title on slide 3 shorter" or "Add a visual to slide 5." Make all your changes, then hit "Generate new deck" to rebuild.



This iterative approach is much faster than manually editing each slide. You describe what you want in natural language, and the AI handles the layout and formatting.

WARNING: Always check the accuracy of the slides. If there is any spelling error, please revise or edit it using other tools like Canva (Magic Eraser, then type in the correct word)



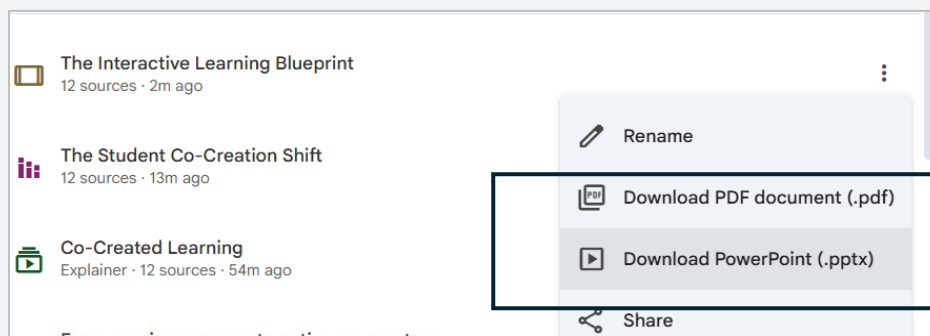
Try this: Be specific in your revision prompts. "Replace the bullet points on slide 4 with a comparison table" works better than "make slide 4 better."



In practice: You've generated a 12-slide deck for a tutorial presentation. Slide 6 has too much text and slide 9 is missing a key point. Type: "Condense slide 6 to three bullet points" and "Add a point about sampling bias to slide 9." Hit generate, and the updated deck is ready in seconds.

Tip 43: Export Slides to PPTX or PDF for Class Presentation

Once you're happy with your deck, export it. NotebookLM now supports PPTX export (with Google Slides support coming), so you can open and edit it in PowerPoint, Canva, or Google Slides. PDF export is also available if you just need a static version to share or print.



Try this: Export to PPTX and do your final formatting in your preferred presentation tool. NotebookLM handles the content; your slide editor handles the polish.

Tip 44: Create Infographics to Summarise a Topic Visually

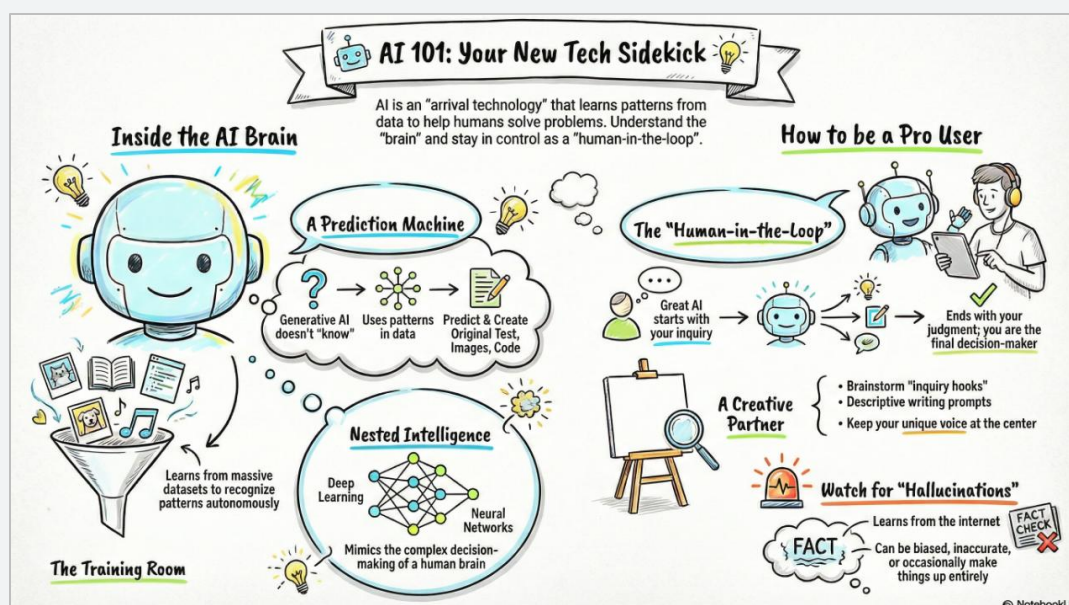
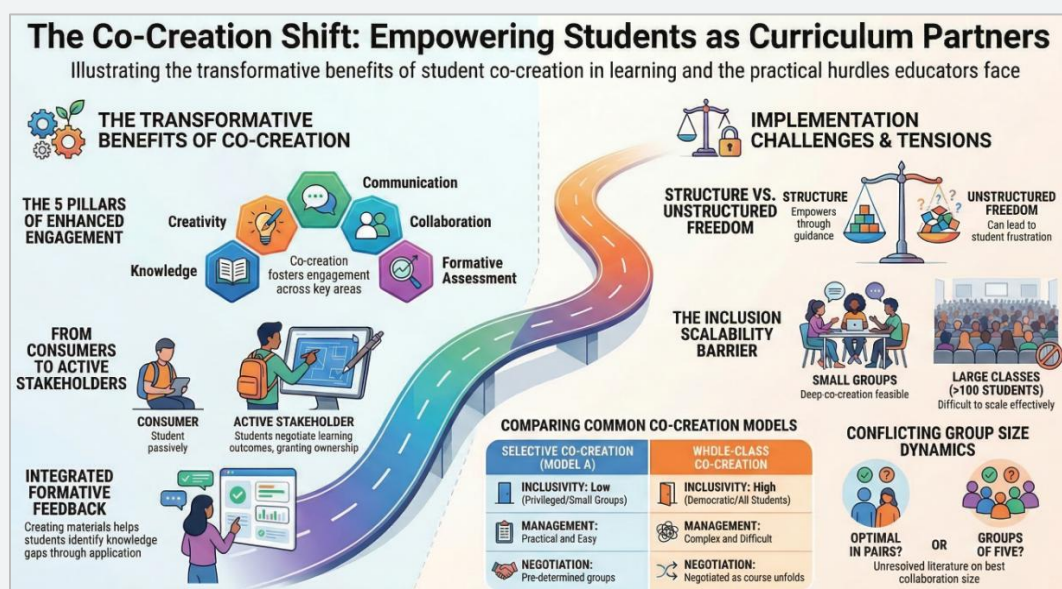
The Infographic feature turns your sources into a visual summary. You can adjust the language, orientation, level of detail, and style. There are multiple infographic styles available, so experiment to find what suits your topic.

 A screenshot of the NotebookLM Infographic creation interface. It includes several settings:

- Choose language:** A dropdown menu set to 'English'.
- Choose orientation:** Three buttons: 'Landscape' (selected with a checkmark), 'Portrait', and 'Square'.
- Choose visual style:** A row of six style icons: 'Sketch note' (a hand-drawn rocket), 'Kawaii' (a cute rocket with a face), 'Professional' (a simple rocket), 'Scientific' (a detailed rocket), 'Anime' (a colorful anime-style rocket), and 'Clay' (a clay-like rocket).
- Level of detail:** Three buttons: 'Concise', 'Standard' (selected with a checkmark), and 'Detailed' (marked as 'BETA').
- Describe the infographic that you want to create:** A text input field containing the text: 'Guide the style, colour or focus: 'Use a blue colour theme and highlight the 3 key stats'.'
- Generate:** A blue button at the bottom right.

You can also customise your own style. If you need some inspiration can go to <https://nlmprompts.keeman.app/> as well.

Examples of Infographic with Different Styles

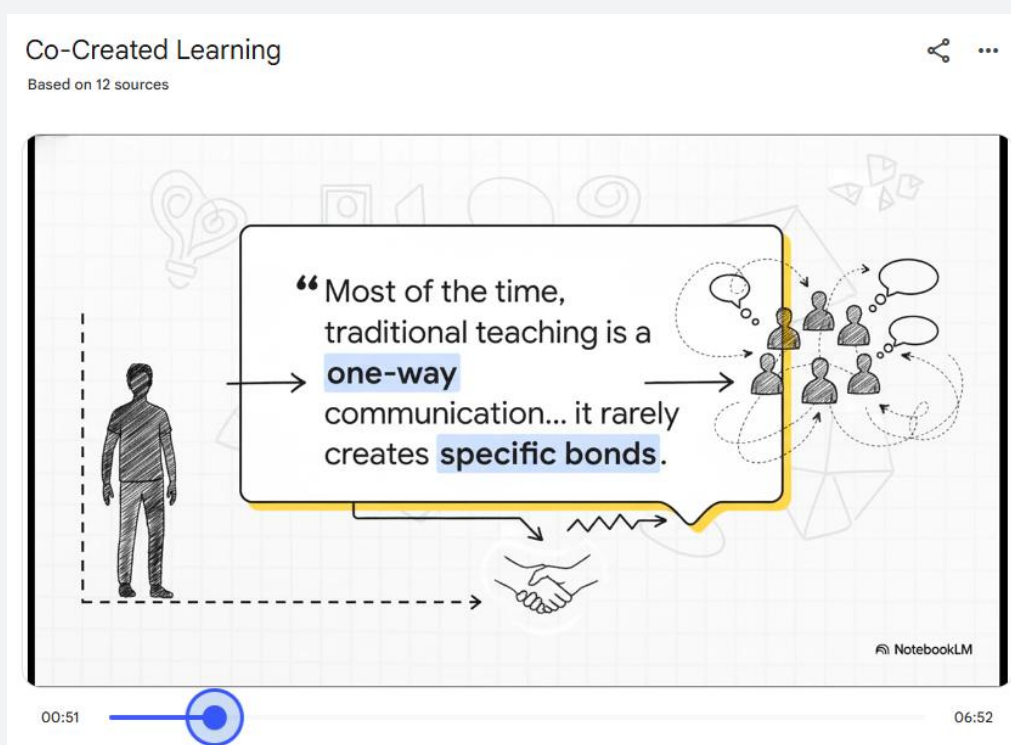


Try this: Use infographics as study aids for visual topics: timelines, processes, hierarchies. Print them out and stick them on your wall.

In practice: You're revising the stages of mitosis. Generate an infographic, print it, and pin it above your desk. Every time you look up, passive revision is happening.

Tip 45: Use Video and Cinematic Video Overviews as Study Aids

Video Overviews pair narration with slides drawn from your sources. The newer Cinematic Video Overviews (Ultra users for now) go further as they generate fully animated, documentary-style explainer videos using Gemini 3, Nano Banana Pro, and Veo 3. The results look closer to a short documentary than a slideshow.



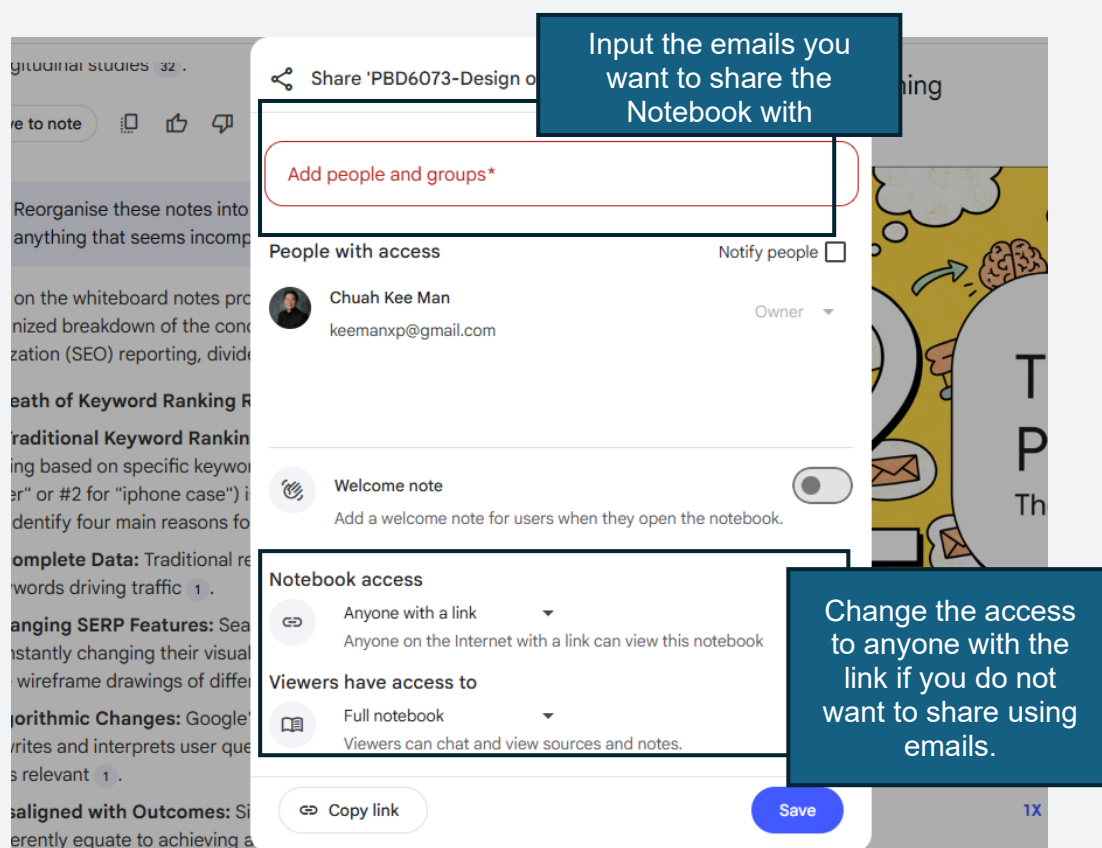
These are ideal for making complex topics feel more approachable. They're also useful as presentation aids if you need to explain a concept to classmates in a group project. You can also download the video and upload it somewhere, e.g., YouTube for easier viewing.



Try this: Generate a Video Overview of a tricky topic and watch it the night before a seminar. It's a more engaging way to review than re-reading notes.

Tip 46: Share View-Only Notebooks with Your Study Group

You can share notebooks with classmates as view-only. This means they can see your sources, read chat responses, and access generated outputs **without accidentally editing or deleting anything**. It's a practical way to pool resources for group projects without the chaos of everyone editing the same document.



IMPORTANT NOTE: If you are using Google Workspace account (e.g., given by your school or university, you may not be able to share it publicly and the emails that you are planning to share the notebook with should also be within the same Workspace.



Try this: In a group project, assign one person to be the 'notebook lead' who curates sources. Everyone else contributes links and files, but one person keeps it tidy.



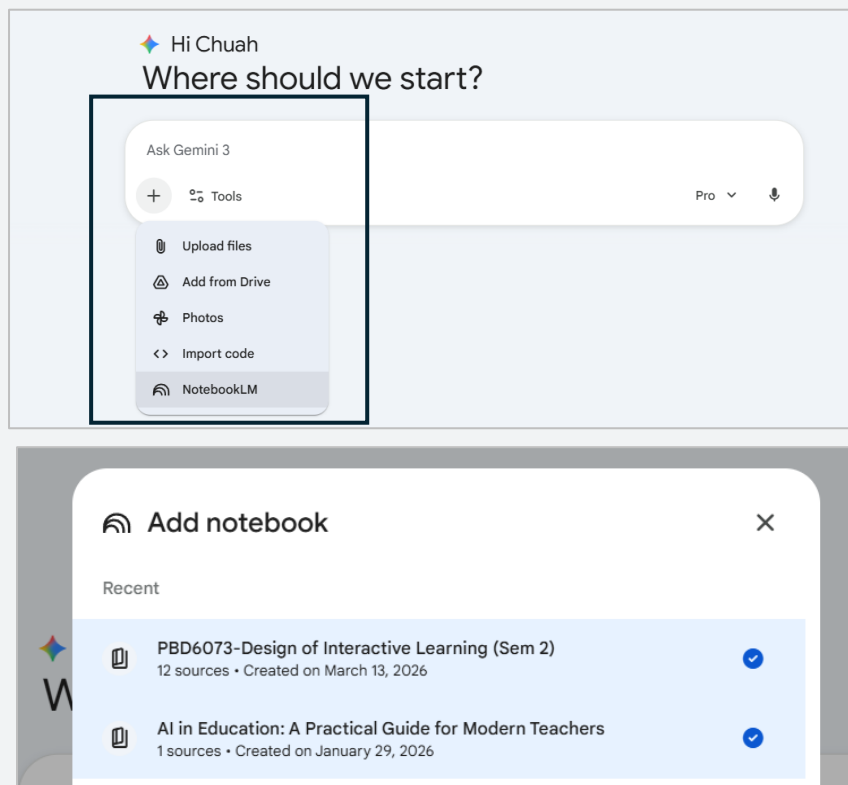
In practice: Your group is preparing a presentation on renewable energy policy. One person creates the notebook and uploads all the shared research. Everyone else accesses it in view-only mode to generate their own quizzes, summaries, or slide sections.

Part 7: Building Long-Term Knowledge and Good Habits

These last four tips are about thinking beyond the next deadline. The students who get the most from NotebookLM are the ones who treat it as a knowledge system, not a one-off tool.

Tip 47: Connect Your Notebooks to Gemini for Cross-Notebook Insights

You can import notebooks directly into the Gemini app, which means Gemini can draw on the knowledge you've built across multiple notebooks. For example, ask it to combine insights from your Economics notebook and your Statistics notebook, or to generate a prototype based on your research notes.



You can select multiple notebooks to ask Gemini to synthesise.

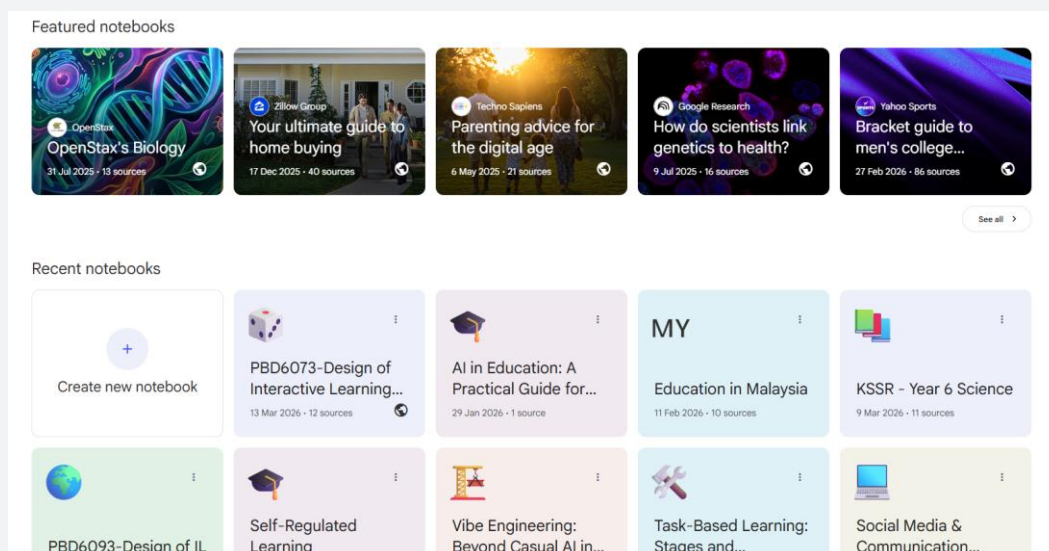
This is where NotebookLM stops being just a study tool and starts becoming a personal knowledge system. The notebooks you build during your degree become assets that Gemini can tap into for years to come.



Try this: If you're writing a dissertation, import all your chapter notebooks into Gemini and ask it to check for consistency across your entire argument.

Tip 48: Build a Personal Knowledge Base That Grows with You

Think of NotebookLM not as a tool you use for one assignment, but as an accumulating record of everything you learn. Each semester, your collection of notebooks grows. Each notebook gets richer as you add notes, generate outputs, and refine your understanding.



Over three or four years, you end up with something genuinely valuable, which is a searchable, AI-powered archive of your entire education. When you're writing your dissertation, applying for jobs, or just trying to remember that theory from second year, it's all there.



Try this: At the end of each semester, spend an hour reviewing your notebooks. Archive the ones you're done with, and note which ones might be useful for future modules.

Tip 49: Use Deep Research to Stay Current in Your Field

Deep Research isn't just for essays. Use it periodically to check what's new in your subject area. It will search the web, find recent publications, and compile a summary with citations. For students in fast-moving fields like computer science, medicine, or law, this is a practical way to stay informed without manually scanning journals.



Try this: Set a monthly reminder to run a Deep Research query like: "What are the most significant recent developments in [your field]?"

Tip 50: Set Goals in Chat to Keep Every Notebook Focused

NotebookLM also lets you set a specific goal for each notebook's chat. This means the AI adapts its behaviour to match what you're trying to achieve, whether that's exam preparation, essay research, project planning, or general learning. Setting a clear goal up front means you get more relevant responses from the very first message.

Goals can be changed at any time, which means you can evolve the notebook's purpose as your needs shift throughout the term. Just prompt the goals earlier before you start asking further questions or configure it directly in the chat.

Notebooks can be customised to help you achieve different goals: do research, help learn, show various points of view, and tone.

Define your conversational goal, style or role

☐ Default ☐ Learning guide ☒ Custom

The goal is to understand the key principles of learning.
Must be able to know who are the key people in creating different learning theories. |

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Choose your response length

☒ Default ☐ Longer ☐ Shorter



Try this: During term, set the goal to “help me understand these readings.” Before exams, switch it to “test me on these topics and identify my weak areas.” The same notebook, adapted to different stages of your learning.

Quick-Reference Cheat Sheet: NotebookLM Studio Outputs

Here's a summary of every output available in NotebookLM's Studio panel as of March 2026.

Output	What It Does
Audio Overview	AI-generated podcast in multiple formats: Brief (5–10 min), Deep Dive (20–30 min), Debate (two sides), and Critique (adversarial). Customisable by topic, length, and complexity. Interactive Mode lets you interrupt and ask questions mid-episode.
Video Overview	Narrated slideshow generated from your sources. Cinematic Video Overviews (Ultra tier) add full documentary-style animation using Gemini 3, Nano Banana Pro, and Veo 3.
Study Guide	Comprehensive outline drawn from all sources in the notebook. Good as a revision checklist or starting point for notes.
Flashcards	Digital flashcard stack generated from source content. Useful for spaced repetition and quick self-testing.
Quiz	Multiple-choice and short-answer questions with cited answer keys. Each answer links back to the exact source passage.
Mind Map	Interactive visual map showing concept connections across your sources. Useful for seeing the big picture.
Infographic	Visual summary with adjustable style, orientation, and detail level. Multiple design styles available.
Slide Deck	Presentation slides with AI-generated visuals. Exportable to PPTX or PDF. Supports prompt-based in-app editing.
Data Table	Structured table extracted from qualitative text. Define your own columns. Exportable to Google Sheets.
Briefing Doc	Concise topic overview — shorter and faster than a full study guide. Good for quick catch-ups before seminars.
Deep Research	Autonomous web research agent. Creates a research plan, searches the web, evaluates sources, and compiles a citation-backed report.

Sample Workflows: Putting the Tips Together

Individual tips are useful on their own, but the real power comes from chaining them together. Here are four example workflows for common student tasks.

Workflow A: Weekly Lecture Review (20 minutes)

After each week's lecture, follow this routine:

1. Upload the week's slides and supplementary readings to your module notebook (Tip 2).
2. Ask NotebookLM to summarise the key points in plain language (Tip 9).
3. Generate flashcards from the new material (Tip 23).
4. Review the flashcards once, marking any you got wrong.
5. Save the summary as a note for future reference (Tip 19).

This takes about 20 minutes and means you never fall behind on a module. By the time exams come around, you've already reviewed every week's content at least once.

Workflow B: Essay Research and Planning (1–2 hours)

When you get a new essay assignment:

1. Run a Deep Research query on your essay topic to find sources (Tip 34).
2. Add the best sources to your notebook alongside your lecture materials.
3. Ask the chat to suggest two different essay structures (Tip 35).
4. Ask for evidence and counter-arguments for your chosen structure (Tip 36).
5. Create a Data Table of key quotes organised by theme (Tip 37).
6. Export the table to Google Sheets and start writing from a solid evidence base.

This front-loads the research phase so that when you sit down to write, you're not staring at a blank page — you're assembling a plan.

Workflow C: Exam Revision Sprint (1 week)

In the week before an exam:

1. Upload all past papers to your notebook (Tip 31).
2. Compare your notes against the syllabus to find gaps (Tip 20).
3. Generate a quiz each day and track which topics you get wrong (Tips 24–25).
4. For your weak areas, generate Deep Dive Audio Overviews (Tip 27).
5. Use Interactive Mode to ask follow-up questions during the podcasts (Tip 28).
6. On the day of the exam, listen to Brief audio summaries during your commute (Tip 33).

This approach focuses your limited revision time on the areas where you're weakest, rather than re-reading material you already know.

Workflow D: Group Presentation (2–3 hours across a week)

When your group needs to prepare a presentation:

1. One person creates a shared notebook and uploads all the group's research (Tip 46).
2. Generate a Slide Deck from the sources with a prompt specifying the structure (Tip 41).
3. Each group member reviews their assigned slides and suggests changes via the prompt-based editor (Tip 42).
4. Export to PPTX for final formatting in PowerPoint or Google Slides (Tip 43).
5. Generate an Infographic as a one-page handout for the audience (Tip 44).

This eliminates the common group-project problem of everyone working in different documents with inconsistent formatting and structure.

Glossary

Key terms used throughout this book, defined in plain language.

- **Audio Overview:** An AI-generated podcast created from your notebook's sources. Available in several formats: Brief (short summary), Deep Dive (extended exploration), Debate (two opposing perspectives), and Critique (adversarial challenge to the ideas).
- **Cinematic Video Overview:** An advanced video output that generates documentary-style animated explainers using Gemini 3, Nano Banana Pro, and Veo 3. Currently available to Google AI Ultra subscribers.
- **Context Window:** The amount of text the AI can "see" at once. NotebookLM's context window is now 1 million tokens (roughly 750,000 words), meaning it can process very large document collections.
- **Deep Research:** A feature that acts as an autonomous research agent, searching the web and compiling citation-backed reports on a topic you specify.
- **Gemini:** Google's family of AI models. NotebookLM currently runs on Gemini 3.1 Pro.
- **Grounding:** The principle that NotebookLM answers questions using only your uploaded sources, rather than drawing on general internet knowledge. This reduces hallucinations.
- **Interactive Mode:** A feature that lets you interrupt an Audio Overview to ask questions, request clarification, or redirect the discussion in real time.
- **Mind Map:** A visual diagram showing how concepts in your sources relate to one another.
- **Nano Banana Pro:** Google's image generation model used within NotebookLM for infographics, slides, and video visuals.
- **Notebook:** A project space in NotebookLM where you upload sources and generate outputs around a specific topic.
- **OCR (Optical Character Recognition):** Technology that extracts text from images, enabling NotebookLM to read uploaded photos of printed or handwritten text.
- **Persona / Custom Prompt:** The 10,000-character instruction field that lets you define how the AI chat behaves, its tone, and its focus.
- **Source:** Any document, link, video, image, or file you upload to a notebook. The AI only draws answers from your sources.
- **Spaced Repetition:** A study technique where you review material at increasing intervals. Research consistently shows it's one of the most effective methods for long-term retention.
- **Studio:** The panel in NotebookLM containing all output generation tools: flashcards, quizzes, audio, video, slides, infographics, data tables, and more.

Good luck with your studies.

NotebookLM is free to use at notebooklm.google.com

If your school/university provides Google for Education package, please use the given email address but be mindful of the limitations.



Kee-Man Chuah

Faculty of Education, Language
and Communication
Universiti Malaysia Sarawak
www.chuahkeeman.com