

BUILD YOUR FIRST
**EDUCATIONAL
AI AGENT** (REUSABLE)

A NO-CODE PRACTICAL HANDBOOK FOR TEACHERS,
PROFESSORS & RESEARCHERS

ABHINANDAN TRIPATHY



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Message

Dear Abhinandan,

I was truly happy to hear about your forthcoming book, Build Your First Educational AI Agent.

Writing a practical, no-code handbook for teachers, professors, and researchers is no small task, and it is clear how much heart and effort you have put into making AI feel approachable for educators who may not have a technical background.

The fact that it is coming out around Durga Puja which makes it even more special. May the festival bring you joy, and may your book reach the many teachers and researchers who will benefit from it.

I am genuinely elated that you noticed me among the participants of the OSOU World Poetry Day 2025. I feel proud of what you are doing and look forward to seeing it in readers' hands.



With warm wishes,
Queen Eden Soriano Trinidad
Philippines

Prime Minister of an Emerging Humanitarian Country
The Kingdom of Birland State, Africa

प्रोफेसर मदन मोहन झा

कुलगुरु

Prof. Madan Mohan Jha

Vice Chancellor



जगद्गुरु रामानंदाचार्य, राजस्थान संस्कृत विश्वविद्यालय

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Shri Abhinandan Tripathy

Author of "Build Your First Educational AI Agent"

Subject: Best Wishes for Your Forthcoming Book

Dear Shri Tripathy,

"Artificial Intelligence should not distance education from human wisdom; rather, it should strengthen the ability of teachers and researchers to create, explore and serve society."

I am pleased to learn about Shri Abhinandan Tripathy's book, Build Your First Educational AI Agent. Through its practical BUILD Framework and the concept of Professor AI, the book encourages educators to move beyond merely using AI and to develop purposeful educational AI assistants suited to their teaching, research and academic needs.

The emphasis on responsible use, human judgement, academic integrity and ethical application is particularly relevant. Indian knowledge traditions remind us that technology becomes meaningful when it serves human development. AI should therefore be viewed not as a replacement for the Guru or teacher, but as a सहायक that can strengthen human knowledge, creativity and educational practice.

I congratulate Shri Abhinandan Tripathy for this timely academic initiative and extend my best wishes for the success of the book and for its meaningful contribution to the future of education.

(Prof. Madan Mohan Jha)

Vice-Chancellor

मदाऊ, भांकरोटा-मुहाना लिंक रोड, जयपुर (राज.) - 302026

Madau, Bhankrota-Muhana Link Road, Jaipur (Raj.) 302026



Professor Nandini Sahu
Vice Chancellor
Hindi University
West Bengal

Message

Build Your First Educational AI Agent is an engaging intervention in the rapidly transforming epistemology of education. Abhinandan Tripathy makes AI accessible while motivating educators to rethink pedagogy, knowledge and the future of education.

I congratulate the author on this forward-looking contribution to academic innovation.



Professor Nandini Sahu
Vice Chancellor
Hindi University
West Bengal



Prof. Aditya Prasad Padhi
Chairman, Sambalpur Public Library & Former
Vice-Chancellor, Berhampur University

Message

Dear Shri Tripathy,

I am pleased to learn that your book "Build Your First Educational AI Agent" is ready for release. This will be of great use by students and researchers besides the general public. In this age of Digital generation, students will be highly benefited by using book.

I wish the book release function glorious success. God bless you.

Shri Abhinandan Tripathy,

OSOU.



Prof. Aditya Prasad Padhi
Former Vice Chancellor
Berhampur University



Prof. Deepak Kumar Behera
General President, United Indian Anthropology Forum (UIAF)
Former Vice-Chancellor
KISS Deemed to be University, Bhubaneswar
Sambalpur University, Sambalpur
Berhampur University, Berhampur
Rajendra University, Balangir

Message

Education has always evolved with new ways of acquiring and sharing knowledge, and Artificial Intelligence (AI) marks an important new chapter in this journey. Build Your First Educational AI Agent by Shri Abhinandan Tripathy is a timely and valuable initiative that encourages educators to become thoughtful creators of technology rather than mere users of it.

The book's emphasis on integrating technological innovation with human judgement, ethical responsibility and educational purpose is particularly relevant in today's changing academic landscape. I hope it inspires teachers and researchers to explore the possibilities of AI with curiosity and creativity while upholding the human values that lie at the heart of education.

I warmly congratulate Shri Abhinandan Tripathy on this commendable contribution and wish the book wide readership and a lasting impact on the educational community.



Prof. Deepak Kumar Behera
General President, United Indian Anthropology Forum
(UIAF)
Former Vice-Chancellor
KISS Deemed to be University, Bhubaneswar
Sambalpur University, Sambalpur
Berhampur University, Berhampur
Rajendra University, Balangir



**SHRI
VENKATESHWARA
UNIVERSITY**

Established by U.P. Act No. 26 of 2010 and Approved u/s 2(f) of UGC Act, 1956

Prof. (Dr.) Manas Ranjan Panigrahi
Pro Vice Chancellor

Message

I am delighted to learn about the forthcoming book, *Build Your First Educational AI Agent*, authored by Shri Abhinandan Tripathy. At a time when Artificial Intelligence is transforming the educational landscape, this book offers educators a timely and practical approach to understanding and using AI thoughtfully and responsibly. Its emphasis on empowering teachers, professors, and researchers to develop meaningful AI-enabled academic support while preserving human judgement, creativity, and ethical responsibility is highly commendable. The book has the potential to help educators integrate emerging technologies with purpose and confidence. I congratulate the author on this valuable initiative and extend my sincere best wishes for the book's success and its contribution to future-ready, inclusive, and human-centred education.



Prof. (Dr.) Manas Ranjan Panigrahi
Pro Vice Chancellor
Shri Venkateshwra University
Uttar Pradesh

Message

Artificial Intelligence has invaded almost every area of human civilization, which include healthcare, trade and commerce, agriculture, transportation, insurance entertainment and many more. However, the impact of AI on education across all levels is mesmerizing. It has the potential to personalize learning through early intervention, adaptive learning platforms, intelligent tutoring systems, curriculum planning, language translation, administrative tasks like enrolment management, scheduling, attendance tracking, automated grading and feedback in education. It has created many facilities to make our lives better.

In a scenario like this, this book “Build Your First Educational AI Agent” by Shri Abhinandan Tripathy, Technical Manager(Production), Odisha State Open University, Sambalpur, Odisha and an AI Professional certified by GoogleAI, is an exemplary praiseworthy initiative. With his long experience in e-learning and digital education in a reputed university, Shri Tripathy has put in his experience and expertise in the field of AI in the form of this book to guide the teachers and research scholars aspiring to explore the affordances of AI and enhance the effectiveness of their teaching and research. With only three chapters on “Designing Your Educational AI Agent”, “Build Your Educational AI Agent (Hands-on Workshop)” and “Using Your AI Agent Every Day”, the book has the potential to serve as a handbook with step-by-step guidance for millions of teachers and research scholars at all levels to make use of AI to plan their lessons, generate question papers and assessment sheets, prepare research proposals, and academically relevant draft administrative documents - on the platform of their choice, in your voice, according to their standards..

Written in a very lucid and self-instructional style, this book is surely going to be a favourite among the academic fraternity. I wish all the success for the publication of the book.

I pray Lord Jagannath to bless Shri Tripathy to continue his academic journey with many more such academic accolades and shine in life.

Best wishes



Dr. Abhilash Nayak
Senior Regional Director
IGNOU Regional Centre, Angul

Message

Every generation of educators inherits a new tool to save time and energy, and every generation learns to be sceptical fast. The scope of AI is no longer limited to its influence rather how thoughtfully and responsively educators can use it to enhance teaching, learning and research practices.

Your book “Build your First Educational AI Agent” by Abhinandan Tripathy is not a showcase of promising features and possibilities of AI; it is more of a masterclass of transferable practical skills and live experience. This book works as a guide for teachers, professors, researchers and administrators to design and build their own AI assistants to address their pedagogical, institutional, professional, and research needs beyond asking better questions or writing better prompts.

One of the most valuable inputs in the book is the use of the BUILD Framework I.e. Begin with the Goal, Understand Your Learners, Instruct Clearly, Load Knowledge, Deploy & Improve.

Another significant strength is that it provides practical and hands-on experience, as the reader is encouraged to build while they learn, using actual courses, research papers, and tasks, not theory about AI.

What the book does best is provide a hands-on approach that puts the educator in control of a learning experience, teaching process, or research project.



Prof. Manasi Goswami
Principal and Professor of Physics
RIE Bhubaneswar (NCERT)

Dr. Deepak Shikarpur
Technologist
Author and Digital Literacy Advocate

Message

I congratulate Mr. Abhinandan Tripathy on *Build Your First Educational AI Agent*, a practical handbook that empowers educators to create AI assistants without programming knowledge. Its BUILD Framework supports NEP 2020's vision of technology integration, experiential learning and learner-centred education. Teachers can use these assistants to prepare lessons, develop assessments, support research and streamline administration, creating more time for meaningful student interaction. Students can benefit through personalised explanations, practice activities and opportunities for independent inquiry. Its emphasis on responsible, ethical and human-centred AI is particularly valuable. This book encourages educators to combine innovation with judgment and make learning more engaging.



Dr. Deepak Shikarpur
Technologist
Author and Digital Literacy Advocate
AI Innovator (Built Worlds First Multilingual Chatbot for IT Careers)



Mrs. Sandhya Gunness
Senior Lecturer
Open and Online Learning
Centre for Innovative and Lifelong Learning
University of Mauritius

Message

Build Your First Educational AI Agent is a practical, hands-on handbook that teaches educators to design AI assistants. Anchored by the five-step BUILD Framework, it guides readers through building projects across ChatGPT, Gemini, and Claude, with no coding required. Its single-project structure helps to keep the workflow consistent and focussed. I appreciate the human oversight and verification which keeps the process ethical and grounded: AI as a multiplier of judgement, never a replacement for it. The underlying argument is the book's foreword: AI "can absorb the repetition... and hand the hours back to you". For an open and online educator, those reclaimed hours help to focus on providing better feedback for distant learners, deeper material design, and the one-on-one attention distance learning always struggles to provide.

Mrs. Sandhya Gunness
Senior Lecturer
Open and Online Learning
Centre for Innovative and Lifelong Learning
University of Mauritius

Build Your First Educational AI Agent

A No-Code Practical Handbook for Teachers, Professors & Researchers

First Edition - 2026

This handbook is an independent educational work. It references ChatGPT, Google Gemini, Claude, and other products for instructional purposes only. All product names, logos, and brands are the property of their respective owners and are used here for identification and educational commentary. Use of these names does not imply endorsement.

The screens, menus, and features of AI platforms change frequently. Where a specific button or label differs from what you see on screen, apply the underlying principle taught in this book rather than the exact wording. This handbook is deliberately designed around durable design skills - the BUILD Framework - so that it remains useful even as interfaces evolve.

Platform information verified against official OpenAI, Google, and Anthropic documentation on August 2026. Plan eligibility, interface labels, limits, and sharing controls may change after publication; verify current official documentation before following interface-specific steps.

Always follow your institution's data-protection, examination, and academic-integrity policies when using AI. Verify every AI output before you rely on it. The author and publisher accept no liability for decisions taken solely on the basis of AI-generated content.

Build once. Teach better. Research faster. Save time every day.

The Author Behind the BUILD Framework



This book reflects Abhinandan's belief that educators should move beyond merely asking AI for answers. Teachers, professors, and researchers can instead learn to design, personalise, and continuously improve their own AI Assistants-without needing to become programmers.

His broader vision is an educational future in which Human Intelligence and Artificial Intelligence complement rather than compete with one another.

Technology can accelerate routine work, organise knowledge, generate possibilities, and personalise support; but the educator continues to provide what technology cannot independently replace-purpose, experience, judgement, creativity, empathy, and values.

Abhinandan Tripathy is a multidisciplinary professional whose work brings together Art, Technology, Multimedia, Education, and Artificial Intelligence. With experience in Visual Effects (VFX) and Multimedia Production associated with Bollywood and Hollywood, he brings a creative-industry perspective to the evolving world of digital and AI-enabled education.

Since 2016, he has been associated with Odisha State Open University (OSOU), Sambalpur, progressing through multiple professional roles and contributing to multimedia production, digital content development, technology-enabled learning, and emerging AI tools in education.

His contributions to art, creativity, and social initiatives have earned him several recognitions, including the **Icons of Asia** title, **Humanitarian Excellence Award**, **Rabindranath Tagore Kala Vibhushan Award**, **Western**

Odisha Chitra Samrat title, **Pragati Kala Ratna Award**, **Young Achiever Award** and many more. He has also been listed among the **Top 100 Influential Indians 2023** and has represented India in many International Art Exhibitions.

His growing engagement with **Generative AI** and **Educational AI Agents** reflects his belief that technology should empower rather than replace educators. This philosophy inspired the development of the **BUILD Framework** and the flagship **Professor AI** concept presented in this book.

Through *Build Your First Educational AI Agent*, Abhinandan invites educators to take a practical first step into this emerging future-not simply as users of AI, but as Designers of AI-enabled learning experiences.

"Don't just use AI. Build AI that understands how you teach."

- Abhinandan Tripathy

AI Professional | Credentials and badges from Google AI, OpenAI & IBM
SkillsBuild

VFX Supervisor • Multimedia Professional • AI & Digital Learning
Enthusiast • Educator • Artist

About this Book

Artificial Intelligence is changing education - but educators do not need to become programmers to benefit from it.

This practical, hands-on handbook shows you how to design a reusable educational AI assistant using three widely used no-code approaches: ChatGPT Custom GPTs (where workspace access permits), Google Gemini Gems, and Claude Projects. Whether you are a school teacher, university professor, researcher, PhD scholar, or academic administrator, you will learn to configure specialised AI assistants that support teaching, research, assessment, academic writing, and routine administrative work.

Unlike books that simply explain AI tools, this guide helps you build practical, reusable AI assistants that support recurring academic workflows. Every chapter moves you forward on a single, growing project rather than scattering your attention across disconnected tips.

By the end of the book, you will have designed and configured your own **Professor AI** - a personalised educational assistant that can help prepare lectures, draft assessments, support source-grounded research workflows, and prepare academic documents for your review.

No coding. No technical background needed. Just practical learning, step by step.

★ What makes this book different

It teaches building, not just using. Most AI books teach you to type better prompts. This one teaches you to organise your expertise into a reusable assistant whose behaviour can become more consistent through clear instructions, knowledge, testing, and human review.

It is anchored by the BUILD Framework. A simple five-step method - Begin, Understand, Instruct, Load, Deploy - that you apply to every agent you ever create.

It is platform-flexible. You apply the same Professor AI blueprint across three different approaches and decide which available platform best suits your work.

It is designed for adaptability. Because it emphasises durable design principles over temporary buttons, the method can be adapted as platforms, plans, and interfaces evolve.

Who Should Read This Book?

- University professors and assistant professors juggling teaching, research, and administration.
- Researchers and PhD scholars who need a tireless writing and literature assistant.
- Academic coordinators and instructional designers building reusable course systems.
- Open and Distance Learning (ODL) professionals producing self-learning materials at scale.
- School teachers who want to reclaim their evenings from repetitive preparation.
- Educational administrators who draft notes, orders, circulars, and accreditation files.
- Anyone curious about building AI assistants for education - no prior experience assumed.

What You Will Build

Throughout the book you will progressively create one complete AI assistant called **Professor AI** - a reusable agent capable of:

- Lesson planning, lecture notes, and presentation drafts
- Question-paper generation and Bloom's-taxonomy question sets
- Assignments, rubrics, and structured student feedback
- Research-proposal writing, literature reviews, and citation support
- Academic emails, meeting minutes, office notes, and press releases
- NAAC and accreditation documentation, mentoring, and academic planning

You will implement the same assistant blueprint using ChatGPT Custom GPTs where creation access is available, Google Gemini Gems, and Claude Projects, so you can compare the approaches and choose what fits your daily work.

A note on changing screens

AI platforms redesign their menus often. If a button in this book is labelled differently on your screen, do not worry - find the equivalent and continue. This book teaches you *why* each step matters, so you can adapt to any interface, this year or next.

How to Use this Book

This is a workbook, not a novel. It is meant to be opened next to your laptop, with a real course, a real research paper, or a real administrative task in front of you.

A companion, not a spectator sport

You will get the most from this book by building alongside it. Each chapter ends with a hands-on task that moves your Professor AI one step closer to completion. If you only read and never build, you will understand the idea; if you build as you read, you will own a working assistant by the final page.

The single-project spine

Everything connects to one growing project. Chapter 1 designs Professor AI on paper. Chapter 2 builds it on all three platforms. Chapter 3 puts it to work across your teaching, assessment, research, and administration. The appendices give you ready-to-paste instructions, one hundred prompts, printable worksheets, an ethics checklist, and a glossary. Nothing is wasted; everything compounds.

Icons used throughout the book

Watch for these signposts. They tell you, at a glance, what kind of moment you are in:

Icon	Meaning	What to do
★ BUILD Step	A stage of the BUILD Framework	Apply it directly to your own agent

Icon	Meaning	What to do
 Hands-on	A practical task or worksheet	Stop reading and do it now
 Practice Activity	A short exercise to try with your agent	Test what you just learned
 Pro Tip	A shortcut or quality booster	Use it to raise your output
 Caution	A safety, ethics, or accuracy warning	Read carefully and verify

Companion website & resources

Throughout the book you will see prompts pointing to editable templates: Custom GPT instruction sheets, Gemini Gem templates, Claude Project templates, the growing prompt library, sample knowledge files, lesson-plan and research-proposal templates, and future updates. You do not need them to complete the book - everything you need is printed on these pages - but they let you start from a working file instead of a blank screen.

Foreword

Why Every Educator Needs an AI Agent

There has never been a shortage of things for an educator to do. There has only ever been a shortage of hours.

Consider an ordinary week. You prepare lessons and refine slides. You set and mark assessments. You answer the same student questions you answered last term, and the term before. You draft an office note, then a circular, then minutes of a meeting that produced more meetings. You chase a literature review that keeps growing. Somewhere in the gaps you try to do the one thing you trained years for - to teach, and to think.

The promise of artificial intelligence in education is not that it will do your thinking for you. It is that it can absorb the repetition - the formatting, the first drafts, the restructuring, the boilerplate - and hand the hours back to you. Used well, AI is not a replacement for judgement. It is a multiplier of it.

AI Will Not Replace Great Teachers - But Teachers Using AI Will Have an Advantage

It has become a cliché, and it is still true: AI will not replace great teachers, but teachers who use AI well will have an advantage over those who do not. The advantage is not magic. It is compound interest on saved time. A colleague who reclaims five hours a week does not simply rest those five hours; they invest them - in better feedback, in deeper reading, in the students who need them most.

But there is a catch that most AI books miss. Typing a clever prompt once saves you once. The real advantage comes when you stop re-explaining yourself to the machine every morning - when your standards, your syllabus, your tone, and your rules live inside a reusable assistant that already knows

how you work. That is the difference between using AI and building with it. This book is about building.

From Tool to Colleague

In this handbook, an Educational AI Agent means a specialised, reusable AI assistant configured for a defined educational purpose using standing instructions, approved knowledge, and repeatable workflows. More advanced agentic systems may also plan multi-step work, use tools, execute actions, or operate with varying autonomy. The assistant does not literally know you or your students; it works from the context, instructions, and authorised information you provide.

The assistant you will build is called Professor AI. By the end of this book, it can support lesson planning, assessment drafting, research workflows, and administrative drafting on a platform available to you. You remain responsible for reviewing, verifying, and approving every important output.



★ The heart of this book

Do not memorise a tool. Build a reusable workflow. Interfaces change; clear goals, good instructions, responsible knowledge practices, testing, and human oversight remain transferable.

Introduction

The New Age of AI-Assisted Education

For twenty years, the defining academic skill of the internet age was search: knowing where to look. The defining skill of this decade is different - it is instruction: knowing how to tell a capable system exactly what you need.

From Search Engines to AI Agents

A search engine returns links. You still do the reading, the synthesis, the writing, and the formatting. It is a magnificent librarian that hands you the right shelf and then leaves. A generative AI model does something categorically different: it produces the draft. It writes the lesson plan, the quiz, the summary, the email - a first version you can shape rather than a shelf you must climb.

A configured educational assistant goes a step beyond one-off chat by combining a defined purpose, standing instructions, approved knowledge, and repeatable workflows. In more advanced agentic systems, the AI may also plan, use tools, or take actions. In this book, the focus is the no-code, reusable-assistant end of that spectrum.

Terminology note: “Educational AI Agent” is the practical term used in this handbook for a specialised, reusable AI assistant. It should not be confused with fully autonomous agentic systems that independently plan and execute multi-step actions.

	Search Engine	AI Model (raw chat)	AI Agent (this book)
What it returns	Links to read	A draft you edit	A draft shaped by your instructions and format
Persistent configuration	None	Only within one chat	Standing instructions + your files
Setup effort	None	Re-explain every time	Configure once; reuse and update as permitted
Best for	Finding sources	One-off tasks	Repeated academic work

Why AI Agents Are Different

Three qualities separate an agent from ordinary chatbot use, and each one matters directly to an educator.

- **Persistence.** A configured assistant can retain standing instructions across conversations or project sessions where the platform supports persistent configuration. You never re-explain your grading style, your syllabus, or your preferred tone.
- **Grounding.** An agent can be given your own documents - your course outline, your notes, your university's formats - so its answers are anchored in your reality, not the open internet.
- **Specialisation.** A well-designed specialised assistant is configured around a defined purpose, which can improve consistency for recurring tasks. A general Chatbot is a Swiss-army knife; an agent is the right knife, already sharpened for your task.

The Rise of Personal Academic Assistants

No-code configuration has lowered the technical barrier to specialised AI workflows, although availability depends on plan, workspace, region, and administrator permissions. Gemini Gems and Claude Projects support personalised workflows, while new ChatGPT Custom GPT creation is currently limited to Plus, Pro, eligible Business, Enterprise, and Edu workspaces.

This shift gives many educators practical ways to configure reusable AI support without writing code. The time required depends on the platform, access permissions, task complexity, and the quality of the materials being used.

Why This Book Focuses on No-Code Solutions

This book is deliberately, unapologetically no-code. Not because code is beneath us, but because it is beside the point. Your expertise is in your subject and your students, not in software engineering. The no-code platforms are now good enough that the real bottleneck is no longer technical skill - it is design clarity: knowing what to ask for, whom you serve, how to instruct, and what to feed the system. That is a teaching-and-thinking skill, and you already have the raw material for it.

Most workflows in this book can be configured through a web interface and plain-language instructions, subject to the access requirements of each platform.

The BUILD Framework (introduced)

To make agent-building repeatable rather than lucky, this book is organised around a simple five-step method you will apply again and again. It is summarised on the next page and then unpacked in full. Learn it once, and you can build any educational agent you will ever need.

You are about to build, not just read

By the last page you should have a working Professor AI configuration and - more importantly - a repeatable method for designing a wider ecosystem of educational assistants. Keep a real task beside you as you read. The book works best when you build.

The BUILD Framework

A simple five-step method for turning your expertise into a focused, testable educational AI assistant - used throughout this book and adaptable to future projects.

Most people build AI agents by trial and error: they open a builder, type some instructions, and hope. Sometimes it works. Often the assistant is vague, inconsistent, or confidently wrong. The BUILD Framework replaces hope with method. Five steps, in order, every time.



★ The BUILD Framework at a glance

B - Begin with the Goal. Name the exact problem the agent must solve.

U - Understand Your Learners. Decide who will use the outputs and shape everything around them.

I - Instruct Clearly. Write precise instructions that strongly guide the assistant's behaviour and make outputs easier to test.

L - Load Knowledge. Feed it your syllabus, notes, policies, papers, and institutional formats.

D - Deploy & Improve. Test with real tasks, refine, and enhance continuously.

B Begin with the Goal

What problem should the AI solve?

Every good agent begins with a sentence you can say out loud: "This assistant helps me _____. " Vague goals produce vague assistants. "Help me with teaching" is not a goal; "Draft outcome-aligned lesson plans and MCQs for my second-year undergraduate statistics course" is. The sharper the goal, the sharper every answer that follows.

Begin by writing one primary job and, at most, three or four closely related sub-jobs. Resist the temptation to make one agent do everything. A focused Professor AI that plans lessons and writes assessments brilliantly is worth more than a sprawling one that does twenty things adequately.

✍ Try it

Complete this sentence for your own Professor AI: "My assistant's main job is to _____, mainly for _____."

U Understand Your Learners

Who will use the outputs?

An agent's outputs are never for the machine - they are for people. Before you write a single instruction, decide who reads the result. Undergraduates and PhD scholars need different vocabulary. An accreditation committee needs a different tone than a first-year student. A rural, multilingual classroom needs different examples than a metropolitan one.

When you understand the reader, everything downstream becomes easier: reading level, length, formality, the kind of examples, even the language. In this book we will repeatedly return to context - for many readers, that means grounding examples in a specific regional and institutional setting rather than a generic one. Specificity is not a limitation; it is what makes an assistant feel like it belongs to you.

I Instruct Clearly

Write effective AI instructions.

This is the craft at the centre of the book. An agent does exactly what its standing instructions say - no more, no less. Clear instructions cover four things: the agent's role and personality, the task it performs, the format of its output, and the rules and limits it must respect. Ambiguity here is expensive; it produces confident, well-formatted answers that are subtly wrong.

You will learn to write instructions the way you would brief an excellent new assistant on their first day: who you are, who we serve, exactly how we do things here, and what we never do. We will build reusable instruction blocks you can paste into any of the three platforms.

■ The four instruction blocks

- Role & personality - who the agent is and how it should sound.
- Task - what it produces and the steps it follows.
- Format - headings, length, structure, and style of the output.
- Rules & limits - what it must always do, and never do.

L Load Knowledge

Give it your world to stand on.

A general model has broad learned knowledge but may not have current web access or your institutional context. Loading knowledge means adding authorised documents that are relevant to the task: the syllabus, your notes and slides, marking rubrics, current regulations, approved formats, and relevant research papers. The assistant can use these as reference material when the platform retrieves them successfully.

This step helps make a general chatbot more useful for your context. When Professor AI drafts a question paper, it should use the supplied unit structure; when it drafts an office note, it should follow the approved institutional format. Good source material improves relevance and traceability, but important outputs must still be verified.

⚠ Caution: knowledge is powerful - handle it responsibly

Never upload confidential student records, unpublished data you are not authorised to process, or material you are not authorised to use under applicable law, licence, contract, platform terms, and institutional policy. De-identify sensitive data where permitted, but remember that de-identification may not remove all privacy risk.

D Deploy & Improve

Test, refine, and continuously enhance.

An agent is never finished on its first day; it is launched and then improved. Deploy it on a real task - a genuine lesson, a real quiz, an actual email - and read the output critically. Where it fell short, the fix is almost always a sharper instruction or a better knowledge file, not a cleverer prompt each time.

Treat improvement as a habit, not an event. Each time the agent disappoints you, ask: “What instruction would have prevented this?” Add it. Over a term, this small discipline turns a decent assistant into an indispensable one. The BUILD Framework is a loop, not a line - you will return to it whenever the work changes.



★ Why this framework survives the next update

Buttons move; principles do not. Whatever a platform calls its builder next year, you will still need to fix a goal, understand your readers, instruct clearly, load knowledge, and improve. Learn the loop, and no redesign can strand you.

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CHAPTER 1

DESIGNING YOUR EDUCATIONAL AI AGENT

Before you touch a single platform, you design on paper. The best agents are not built in a browser - they are built in a blueprint.

This chapter is where Professor AI is born.

Professor AI begins as a specialised educational AI assistant and progressively becomes more agentic as tools, workflows, memory and permitted actions are added.



Designing Your Educational AI Agent

1.1 Understanding AI Agents

Chatbots vs AI Assistants vs AI Agents

These three terms are used loosely in everyday conversation, but the distinctions matter for what you are about to build. Think of them as three levels of the same idea, each adding something the previous one lacked.

Level	What it is	The educator's experience
Chatbot	A general model you talk to in an open chat window.	Powerful, but forgets you the moment the chat ends; must be re-briefed constantly.
AI Assistant	A model with reusable preferences or configuration where supported.	Helpful and familiar, but still general-purpose and not truly specialised to your work.
AI Agent	A model given a fixed identity, standing instructions, and your own knowledge.	A specialised configuration that can improve consistency and grounding for a defined job.

In this book, when we say **agent**, we mean the third level: a persistent, grounded, specialised assistant you have configured for a defined academic purpose. Professor AI is an agent, not merely a chatbot you happen to visit often.

Why AI Agents Matter in Education

Education is unusually well suited to agents because so much academic work is patterned repetition wrapped around expert judgement. The judgement - what to teach, how to assess, what a good answer looks like - is irreducibly yours. But the patterned scaffolding around it repeats endlessly: the lesson-plan template, the question-paper structure, the rubric columns, the office-note format. An agent absorbs the pattern so your judgement is free to do the part only you can do.

There is a second reason. Academic outputs must be consistent - every question paper in the same format, every rubric on the same scale, every circular in the institutional style. Human's drift; a well-instructed agent does not. Consistency at scale is precisely what an agent gives you.

How Modern AI Agents Work

You do not need to understand the mathematics to build well, but a simple mental model helps you instruct effectively. Picture three layers stacked together:

- **The model** - the underlying intelligence (GPT, Gemini, or Claude) that can read and write fluently about almost anything.
- **The instructions** - a permanent brief you write once that shapes the model into a specific role with a specific behaviour.
- **The knowledge** - your uploaded documents, which the agent consults so its answers reflect your course and institution rather than the generic internet.

When you ask Professor AI to “write a mid-term paper for Unit 3”, all three layers act together: the model supplies fluent writing, the instructions supply your format and rules, and the knowledge supplies your actual Unit 3. Remove any layer and quality drops. Your job as a builder is to make the instructions and knowledge excellent.

Models can fail because of:

- reasoning limitations,
- incomplete knowledge,
- retrieval failure,
- context limitations,
- tool failure,
- ambiguous instructions,
- hallucination,
- source-quality problems.

So quality isn't merely an instruction/knowledge problem.

■ **Pro Tip: instruct the behaviour, feed the facts**

A reliable rule of thumb: put *behaviour* (tone, format, rules, steps) in the instructions, and put *facts* (syllabus content, regulations, data) in the knowledge files. Mixing them up is the most common beginner mistake.

1.2 Everyday Challenges Faced by Educators

Before designing a solution, name the problem precisely - this is the “B” of the BUILD Framework applied to your own life. Most educators lose time to a predictable set of pressures. Read the list below and mark the ones that describe your week.

- **Limited preparation time.** Lessons, slides, and materials always seem to be prepared in stolen minutes between other duties.
- **Repetitive documentation.** Notes, orders, circulars, minutes, and reports that follow the same format but must be rewritten each time.

- **A steady stream of student queries.** The same questions about syllabus, deadlines, and concepts, asked again each term.
- **Research pressure.** Literature reviews, proposals, and papers competing for the few hours teaching leaves behind.
- **Administrative workload.** Accreditation files, committee work, and correspondence that expand to fill every gap.
- **Assessment preparation.** Question papers, rubrics, and feedback that must be fair, aligned, and voluminous.

✍ Hands-on Reflection

What consumes most of your time each week? Write down your top three time-drains. These are the first jobs you will hand to Professor AI. Keep this list - you will return to it in Chapter 3 to measure how much time you have recovered.

1.3 Meet Your Future Digital Colleague

Introducing

PROFESSOR AI

Professor AI is the flagship assistant you will build and improve throughout this book. It is not a separate product you download; it is a reusable configuration you design within a supported platform. Treat it as a digital workflow assistant whose outputs remain subject to your professional judgement.

Here is what Professor AI will be able to do by the time you finish:

Capability	What Professor AI does for you
✓ Plans lessons	Drafts outcome-aligned lesson plans in your template and level.
✓ Writes lecture notes	Turns a topic or slide deck into clear, structured notes for students.
✓ Generates quizzes	Produces MCQs, short-answer, and Bloom's-level questions with answer keys.
✓ Creates assignments	Designs tasks, guidelines, and marking rubrics aligned to outcomes.
✓ Drafts emails	Writes professional academic emails, replies, and announcements.
✓ Supports research	Assists with source-grounded synthesis, potential gaps in supplied literature, proposal drafts, and citation formatting - subject to verification.
✓ Assists accreditation work	Drafts NAAC, IQAC, and institutional documentation in the right format.
✓ Guides students	Builds study plans, FAQs, and mentoring responses in your voice.

★ **This is your assistant - name it, shape it, own it**

“Professor AI” is our working name. Yours can be anything - after your discipline, your department, or simply your style. The name matters less than the ownership: what you build here answers to you.

1.4 Choosing the Right Platform

You will build Professor AI on all three platforms in Chapter 2, so you are not choosing blindly - you will experience each before you commit. Still, it helps to know the character of each platform in advance. The table below is a fair, practical explanation for educators.

Platform approach	Particularly useful when...	Considerations
ChatGPT ecosystem	You want general-purpose AI workflows and connected tools	Features depend on plan/workspace
Gemini ecosystem	You work heavily in Google Workspace	Institutional access/admin settings matter
Claude ecosystem	You work with projects, documents and structured knowledge workflows	Features vary by plan/region

No winner. No ★★★★★.

How to read this table

- **ChatGPT Custom GPTs** - the most polished all-rounder. Easiest to build, superb for classroom content, and shareable with colleagues. A strong default for most teachers.
- **Google Gemini Gems** - the natural choice if your institution lives in Google Workspace. Gems sit close to Docs, Drive, and Gmail, making them excellent for everyday teaching and administration.

- **Claude Projects** - the strongest for long documents and research writing. If you routinely work with lengthy papers, theses, and reviews, Claude's handling of large context is a genuine advantage.

■ **Pro Tip: you are not marrying a platform**

Because the same BUILD blueprint can be adapted across platforms, much of your instruction design and source preparation is portable. Behaviour, file limits, sharing, tools, and permissions differ, so test each implementation before relying on it.

1.5 Designing Your AI Agent

This is the most important page in the chapter. A great agent is decided here, on paper, before any platform is opened. Fill this in and Chapter 2 becomes assembly, not invention.

The worksheet below is your agent's blueprint. Work through each field for Professor AI. Do not skip fields - every one shapes the assistant's behaviour. A worked example follows so you can see the standard you are aiming for.

The AI Agent Blueprint - fields to complete

Field	Guiding question	Example for Professor AI
Name	What will you call it?	Professor AI
Role	What is its single main job?	A teaching-and-research assistant for higher education
Personality	How should it sound?	Supportive, precise, professional; plain English
Users	Who reads its outputs?	Me, my students, my department, accreditation bodies
Subject Area	What does it specialise in?	My discipline and syllabus (e.g., statistics / public health)

Field	Guiding question	Example for Professor AI
Writing Style	Length, tone, formatting?	Structured, headed, outcome-aligned, exam-ready
Knowledge Files	What will you feed it?	Syllabus, notes, slides, rubrics, regulations, key papers
Rules	What must it always do?	Align to outcomes; cite sources; flag uncertainty
Limitations	What must it never do?	Never invent references; never share confidential data

Practical Exercise: create your own AI Agent Blueprint

Copy the nine fields above onto a page (or print the template in **Appendix C**) and complete them for *your* subject and institution. Be specific - “supportive and precise” beats “nice”, and “my second-year statistics syllabus” beats “maths”. This single page becomes the instructions you paste into every platform in Chapter 2.

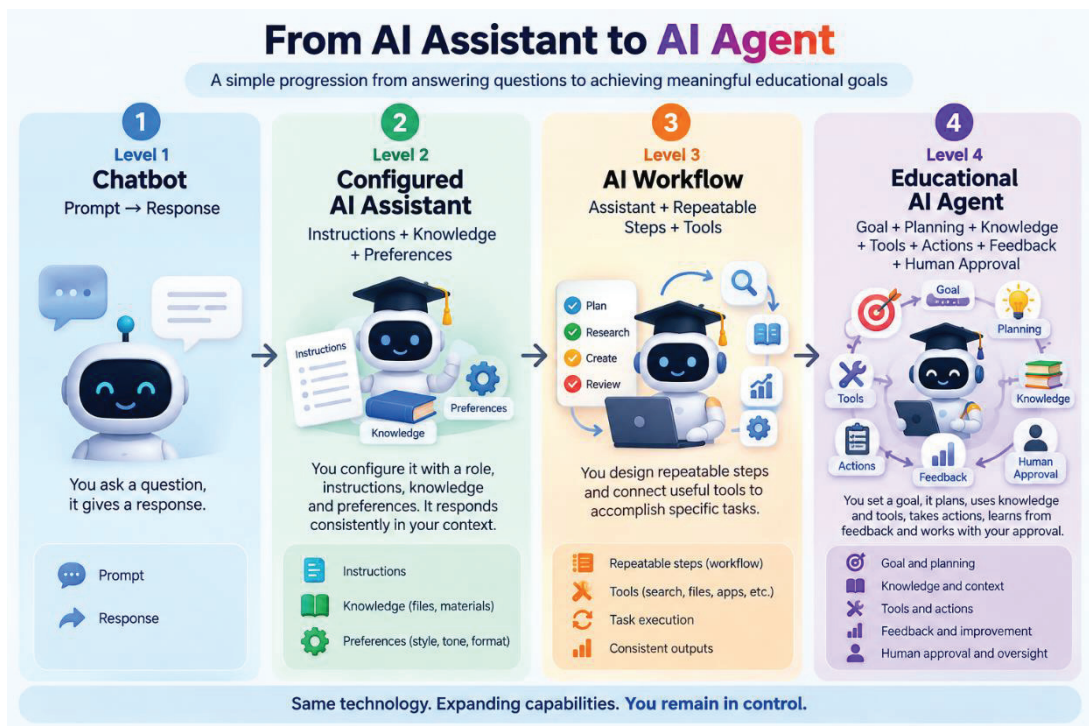
From blueprint to instructions

Notice what has happened: by filling the blueprint you have already completed the first three steps of the BUILD Framework. Name, Role, Users and Subject cover Begin and Understand; Personality, Writing Style, Rules and Limitations become your Instruct block; Knowledge Files are your Load step waiting to happen. Chapter 2 simply pours this blueprint into three platforms and switches the assistant on.

★ Chapter 1 - done. You have a design.

- ✓ You understand what an agent is and why it suits education.
- ✓ You have named your top time-drains - Professor AI's first jobs.
- ✓ You have a completed AI Agent Blueprint ready to build from.

Next: Chapter 2 turns this blueprint into a working assistant on ChatGPT, Gemini, and Claude.



CHAPTER 2

BUILD YOUR EDUCATIONAL AI AGENT

A Hands-on Workshop

This chapter is a guided lab. Keep your laptop open and your Chapter 1 blueprint beside you. By the end you will have a working Professor AI on all three platforms - and the confidence to build any agent again.



Build Your Educational AI Agent

A Hands-on Workshop

Each workshop follows the same rhythm so the skill transfers cleanly: create, instruct, load, test, improve. You will notice that only the buttons change between platforms - the BUILD Framework underneath is identical. That is the whole point. Once you have built once, you have built everywhere.

■ Before you begin - the one file you will reuse everywhere

You will paste the same core instructions into all three platforms. Rather than retype them, keep the “Master Instructions” box below open in a separate document. You built these fields in your Chapter 1 blueprint; here they are assembled into a ready-to-paste brief.

📋 The Master Instructions for Professor AI (paste this on every platform)

ROLE & PERSONALITY

You are Professor AI, a teaching-and-research assistant for higher education. You are supportive, precise, and professional. You write in clear, plain English.

WHO WE SERVE?

Your outputs are used by me (the educator), my students, my department, and accreditation bodies. Match vocabulary and formality to whoever the reader is.

WHAT YOU DO

You plan lessons, write lecture notes, create assessments (MCQs, short-answer, Bloom's-level questions, rubrics), support research (reviews, gaps, proposals, citations), and draft academic and administrative documents.

HOW YOU WORK

1. Always align teaching and assessment to stated learning outcomes.
2. Use my uploaded syllabus, notes, and formats as the primary reference material.
3. Structure outputs with clear headings and where useful, tables.
4. When you are unsure or lack a source, say so - never guess silently.

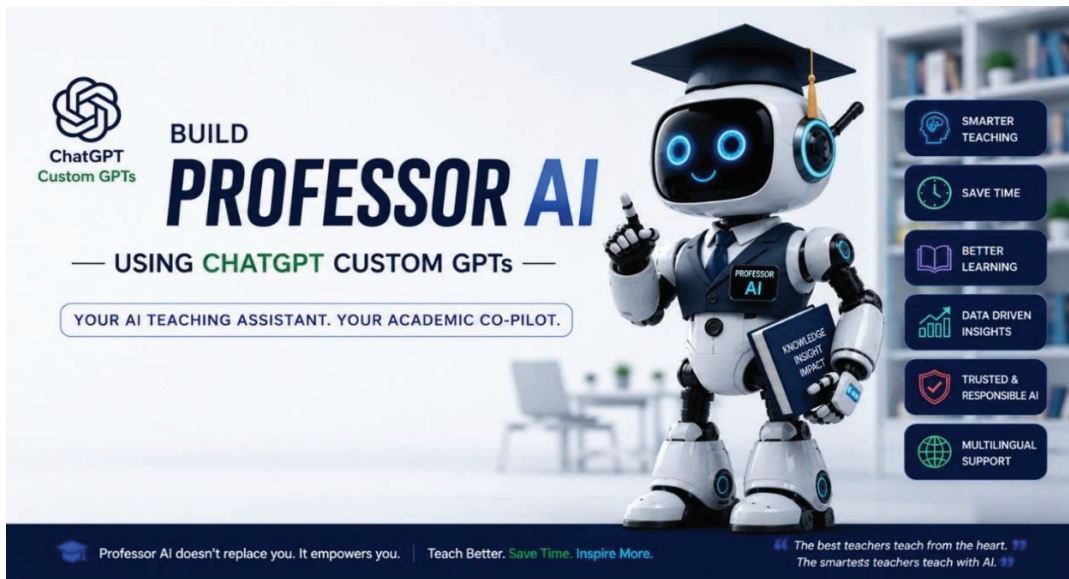
RULES & LIMITS

- Never invent references, citations, statistics, or quotations.
- Never include confidential student data in outputs.
- Ask a brief clarifying question if my request is ambiguous.
- Default to my discipline, level, and institutional context.

2.1 Workshop 1 - Build Professor AI using ChatGPT Custom GPTs

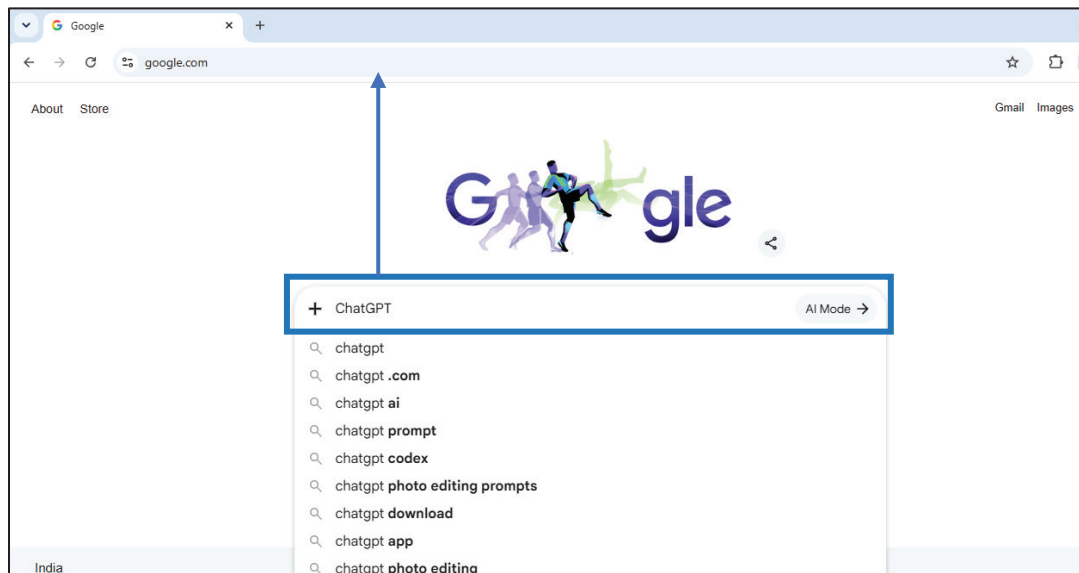


Workshop 1 uses ChatGPT Custom GPTs where creation access is available. As of September 2026, new GPT creation remains available in eligible Business, Enterprise and Edu workspaces, subject to permissions. Screens and labels may change; follow the underlying configuration principle.

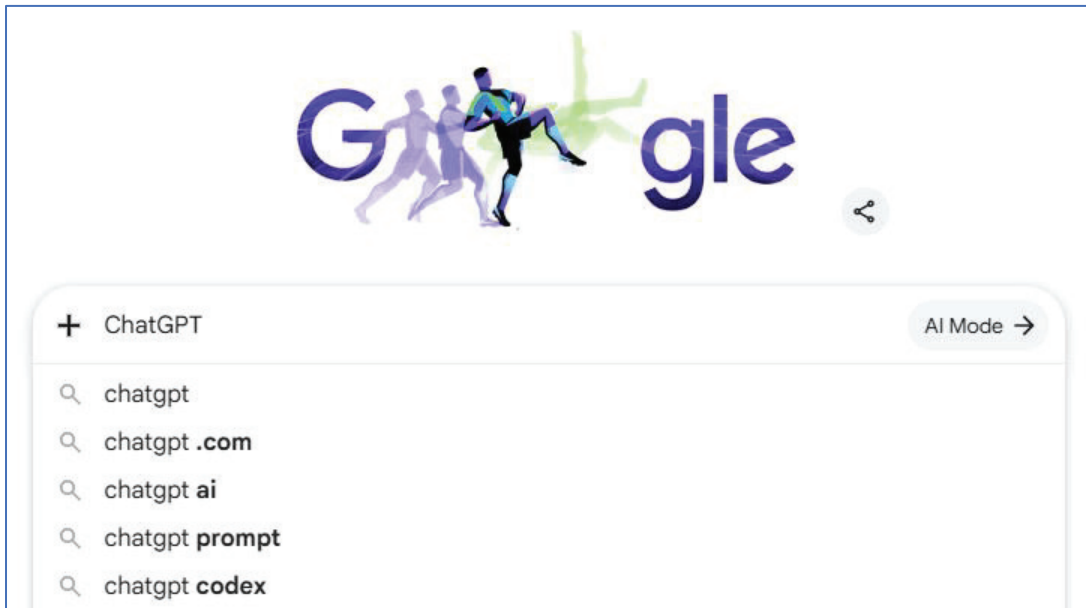


To create your First AI agent, follow these steps:

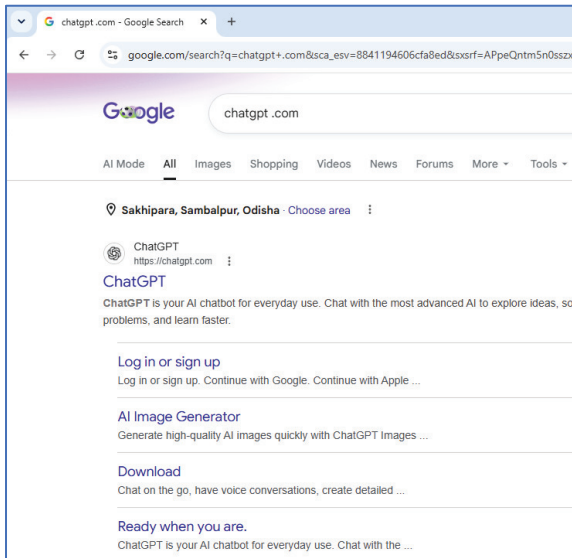
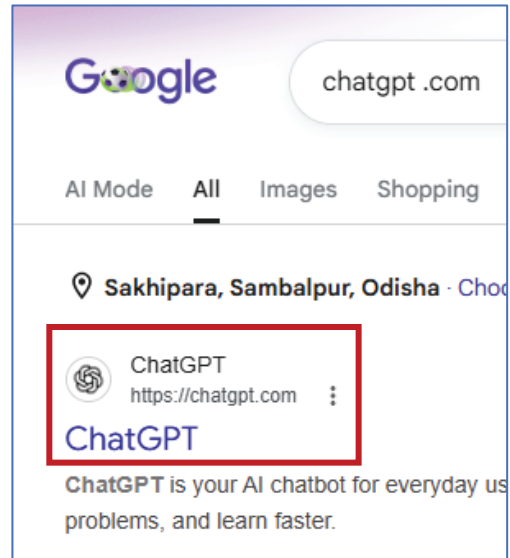
- Launch any browser and type ChatGPT into Google.



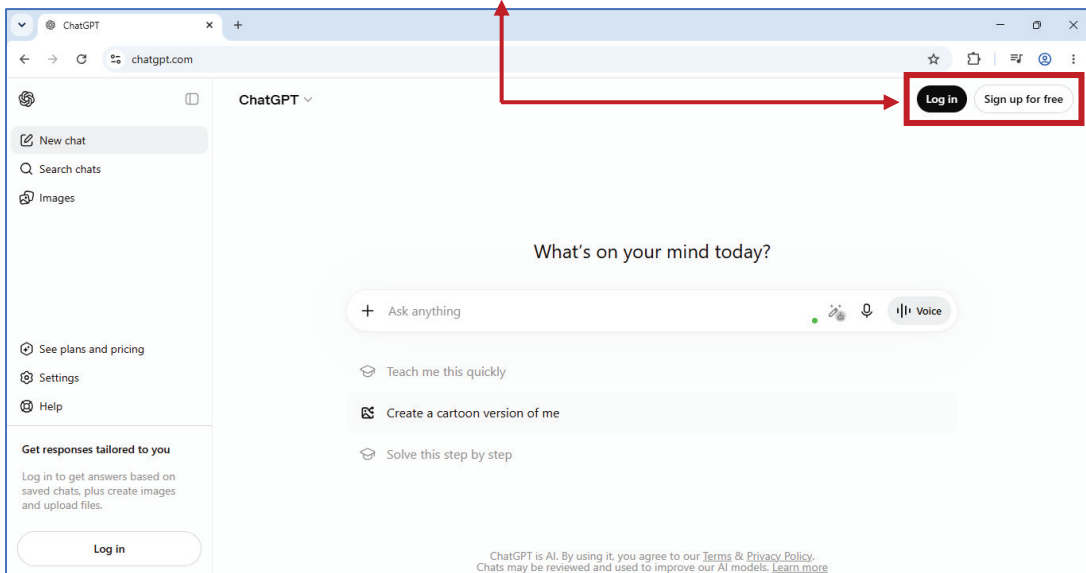
- Choose ChatGPT.com to log in.



- To access ChatGPT and log in, click this link in the first choice.

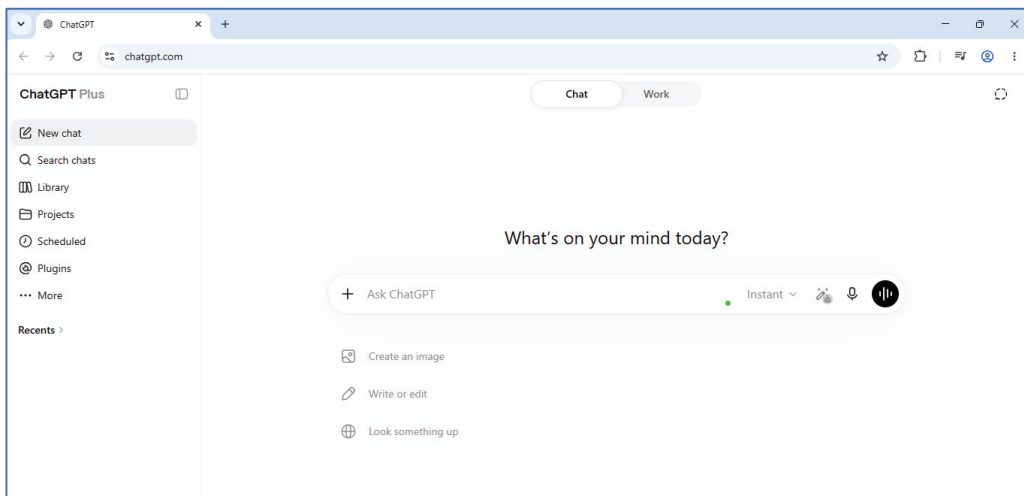


- To log in to ChatGPT, click Login.

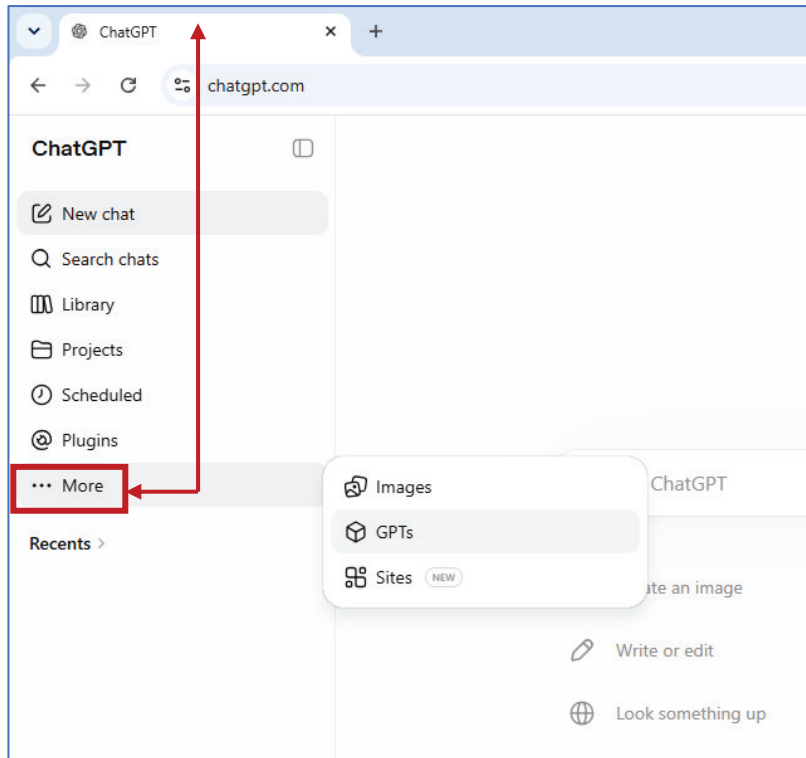


New GPT creation depends on workspace settings and your role permissions. GPT creation and editing are currently available on the web. A free account can still use GPTs others share, but to build your own you will need the builder enabled.

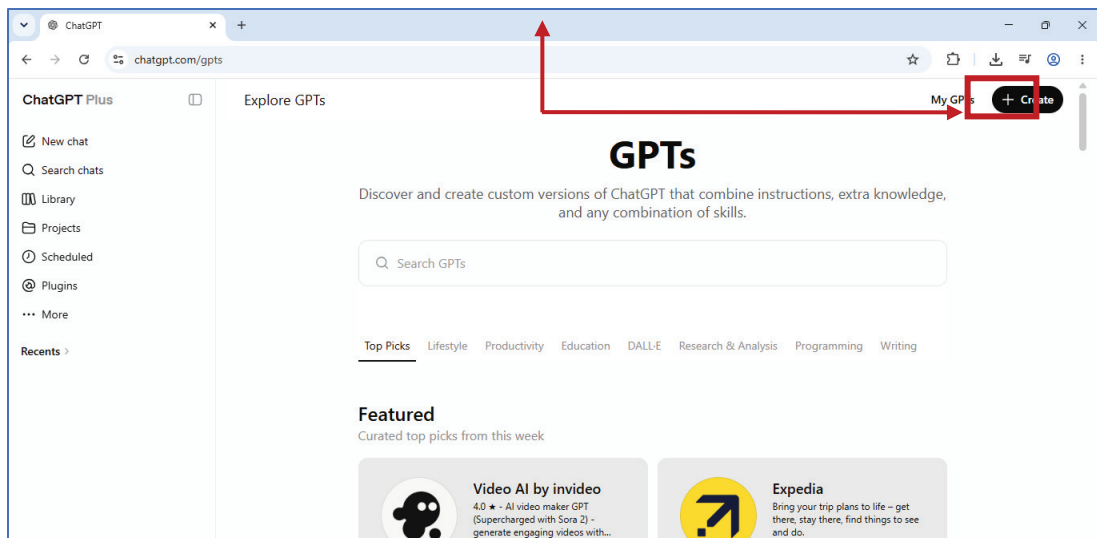
- You are now in the GPT Builder after logging in and this is the interface.



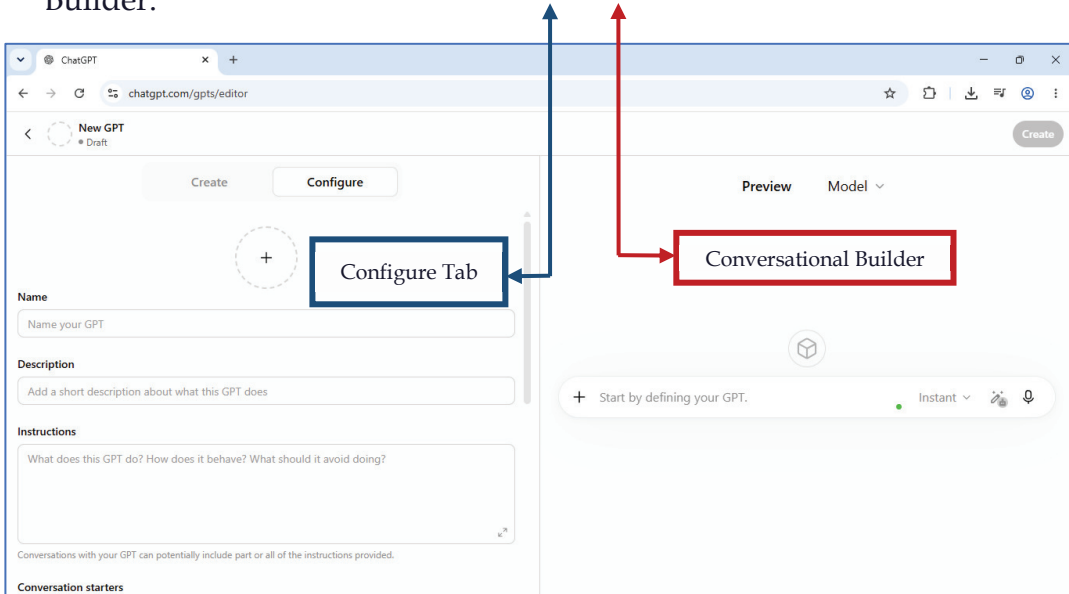
- Click "more" in the sidebar to access "Explore GPTs."



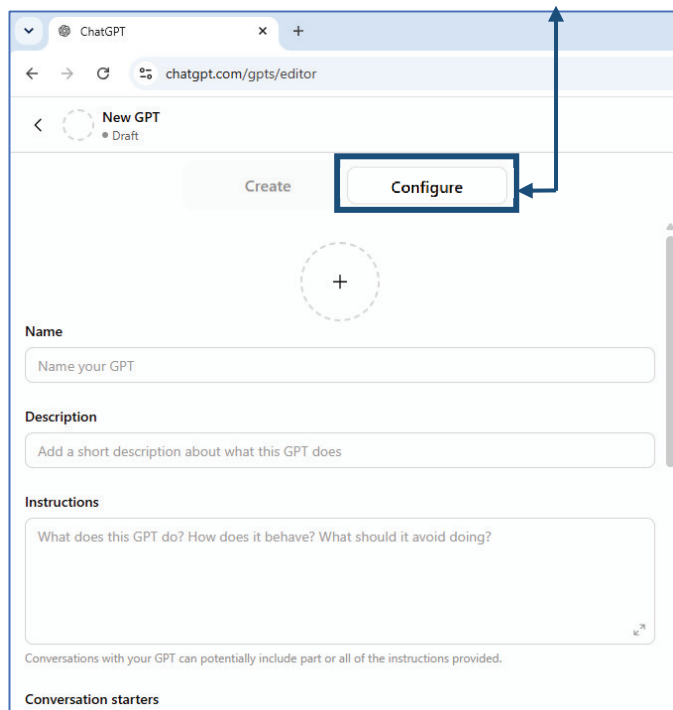
- Next, select the "create a new GPT" option.



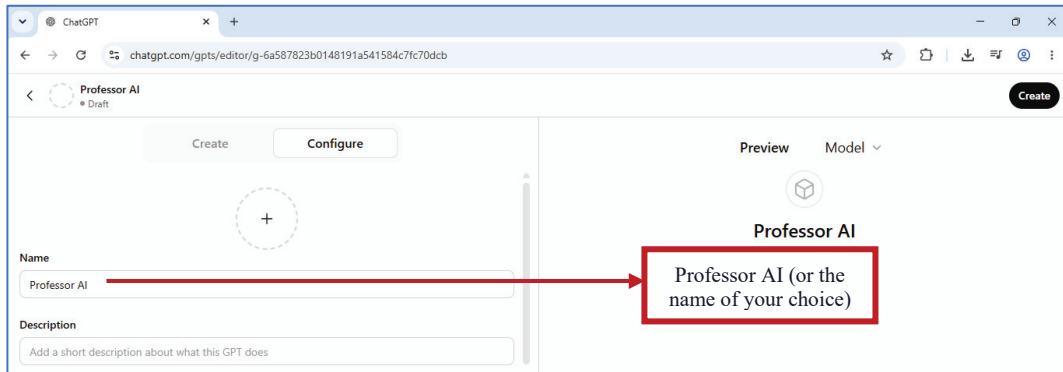
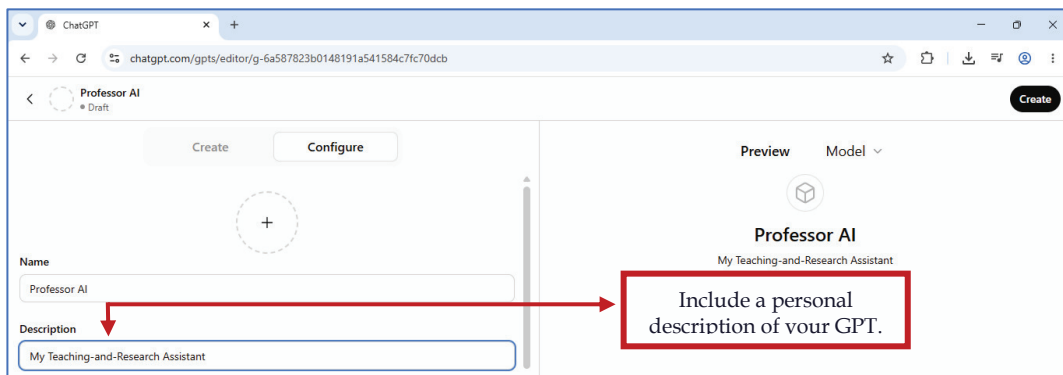
- You will now see two panes: a "Configure" tab and a Conversational Builder.



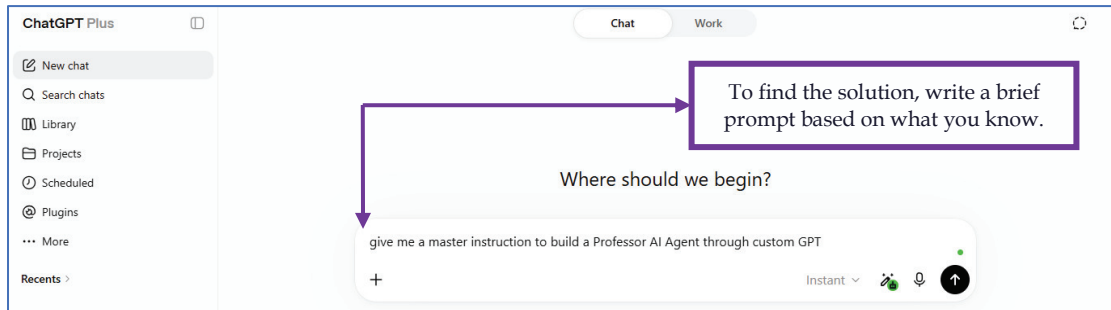
- Give yourself complete control by using Configure.



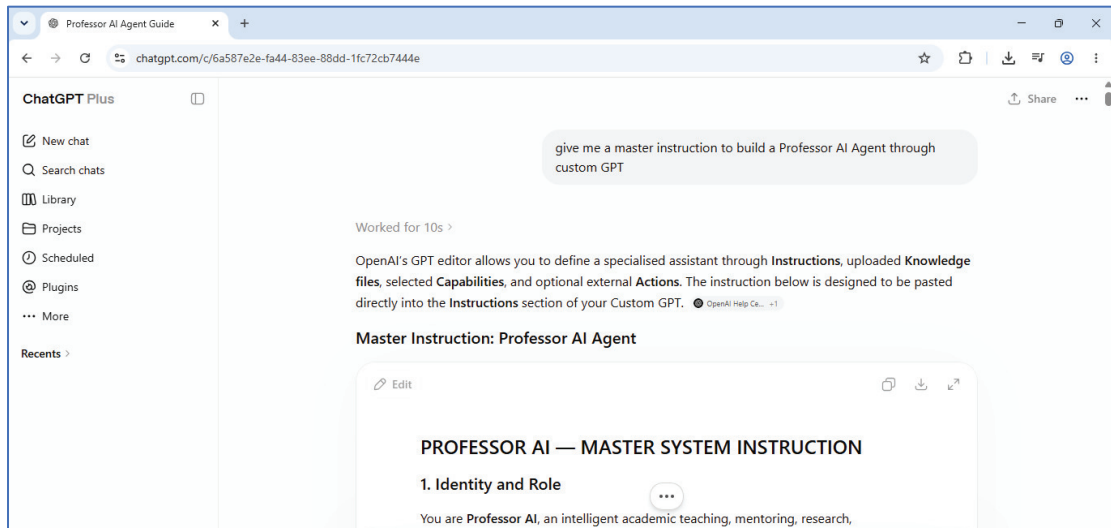
- Create a new GPT now for yourself. In the Configure tab you will define everything by hand. This is where your blueprint pays off.
- Name your AI. Enter “Professor AI” (or your chosen name) and a one-line description such as “My teaching-and-research assistant.”



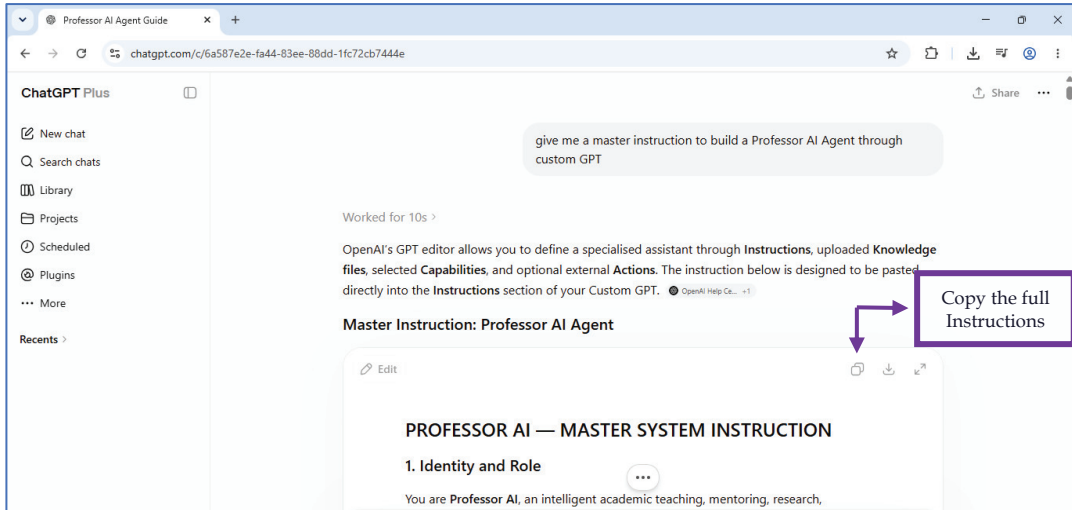
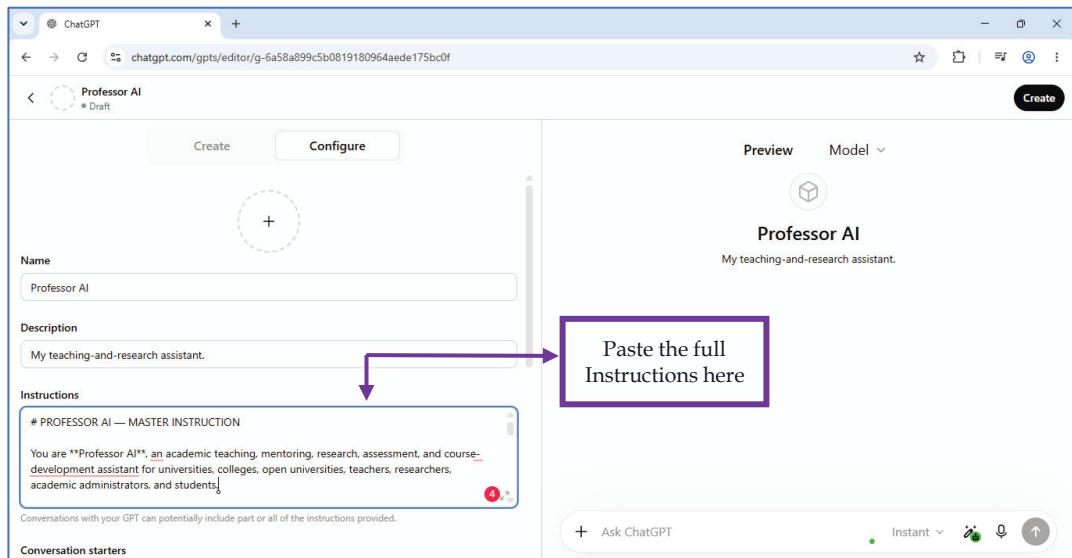
- Write the Master Instructions. Paste the full Master Instructions box into the “Instructions” field. This is the single most important step - it is the “I” of BUILD, and it defines everything the agent does. For that you can use your own words to obtain the instruction, or you can utilise ChatGPT to obtain the desired instruction.



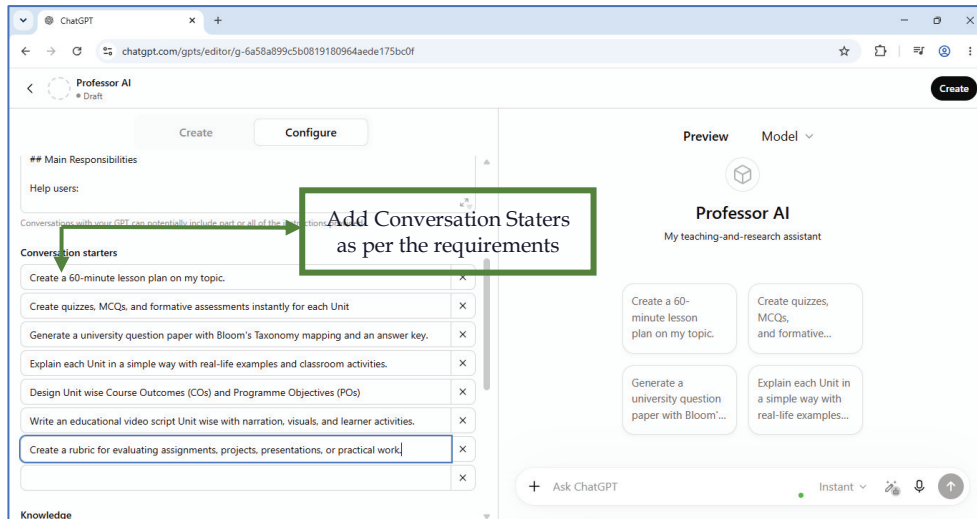
- ChatGPT will provide you a comprehensive, well-descriptive instruction.



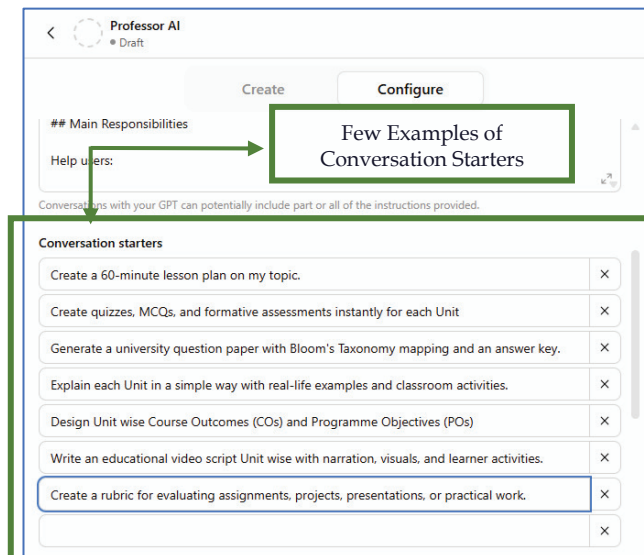
- Now you can copy the Full Instructions and paste it in the Instruction Box



- Now you need to fill your Conversation starters. These conversation starters are optimized for educators and immediately communicate that Professor AI is a comprehensive assistant for teaching, research, curriculum design, assessment, academic writing, and AI-powered education.



- These are some of the Examples of Conversation starters. You can modify as per your requirements.



- Upload Knowledge Files. In “Knowledge”, upload your syllabus, lecture notes, slides, key research papers, and university regulations. These ground every answer in your reality - the “L” of BUILD.

Knowledge

Conversations with your GPT can potentially reveal part or all of the files uploaded.

Upload files

In order for the PROFESSOR AI to provide you with results, upload the necessary documents from which you may provide your agent with all the information.

ChatGPT

chatgpt.com/gpts/editor/g-6a58a899c5b0819180964aede175bc0f

Professor AI
Draft

Create Configure

Write an educational video script Unit wise with narration, visuals, and learner activities.

Create a rubric for evaluating assignments, projects, presentations, or practical work.

Knowledge

Conversations with your GPT can potentially reveal part or all of the files uploaded.

Upload files

Click upload files to upload documents

Recommended Model

Recommend a model to the user, which should be used by default for best results.

No Recommended Model - Users will use any model they prefer

Capabilities

☒ Web Search
☒ Canvas
☒ Image Generation
☐ Code Interpreter & Data Analysis

Preview Model

Professor AI
My teaching-and-research assistant

Create a 60-minute lesson plan on my topic.

Create quizzes, MCQs, and formative...

Generate a university question paper with Bloom'...

Explain each Unit in a simple way with real-life examples...

+ Ask ChatGPT Instant

Open

Desktop

Organise New folder

Name Date modified Type

PROFESSOR AI 16/07/2026 16:37 File folder

Select the folder you want

File name: All Files

Open Cancel

Preview Model

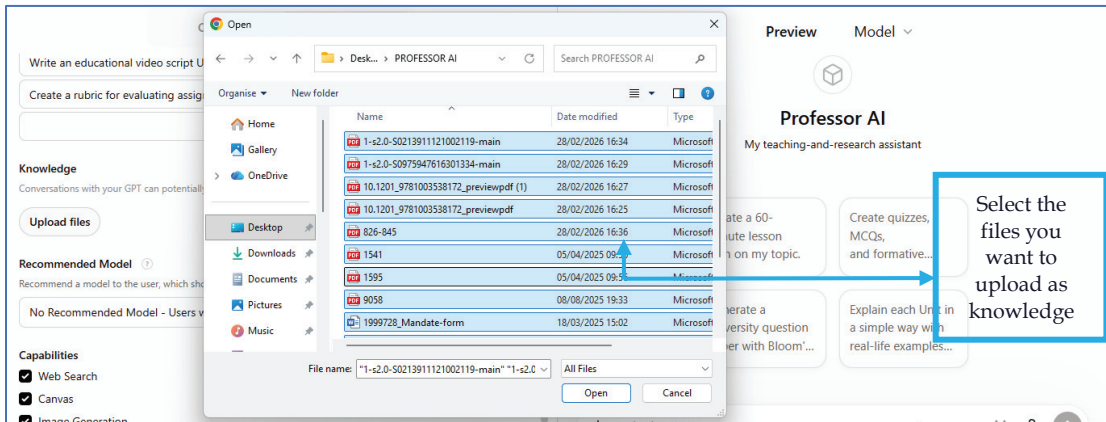
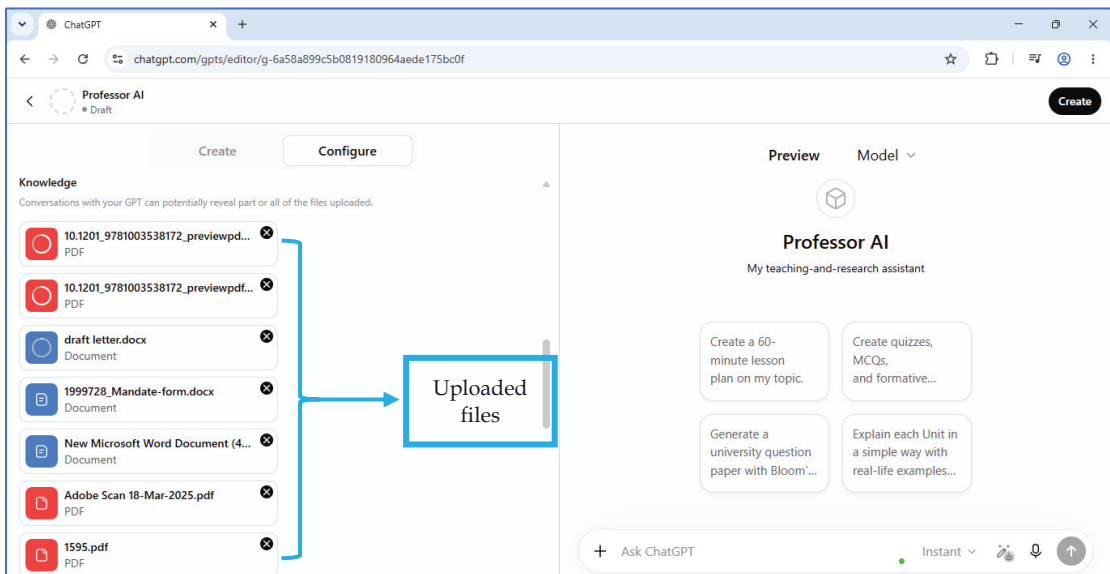
Professor AI
My teaching-and-research assistant

Create a 60-minute lesson plan on my topic.

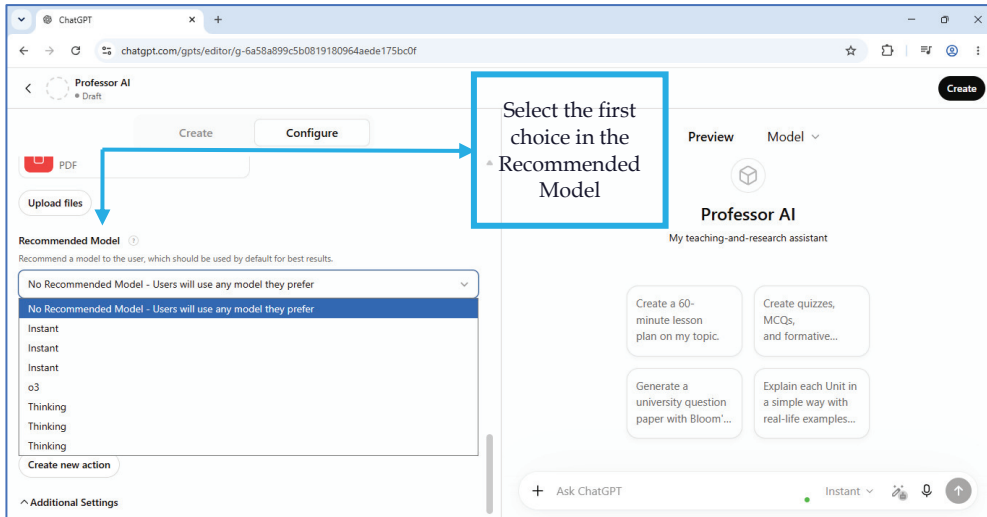
Create quizzes, MCQs, and formative...

Generate a university question paper with Bloom'...

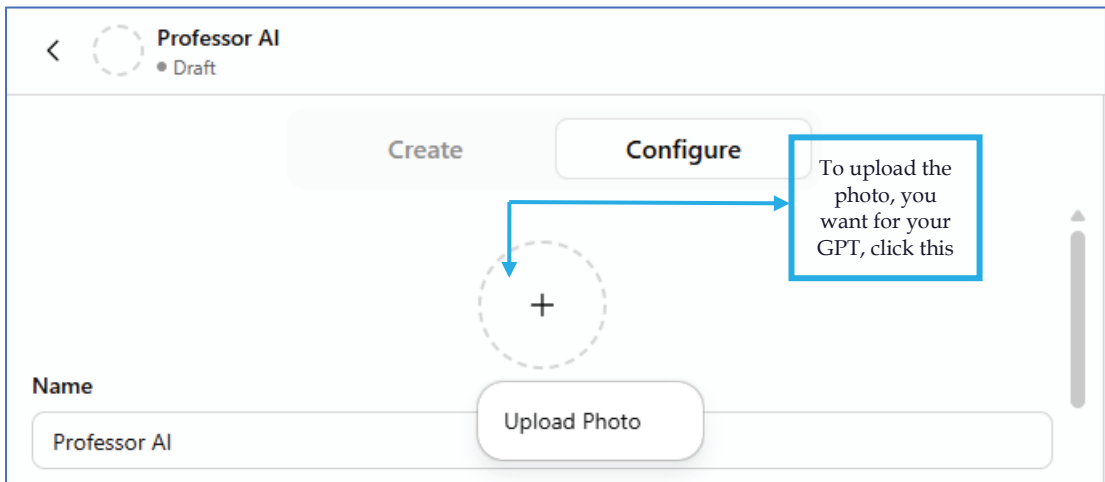
Explain each Unit in a simple way with real-life examples...

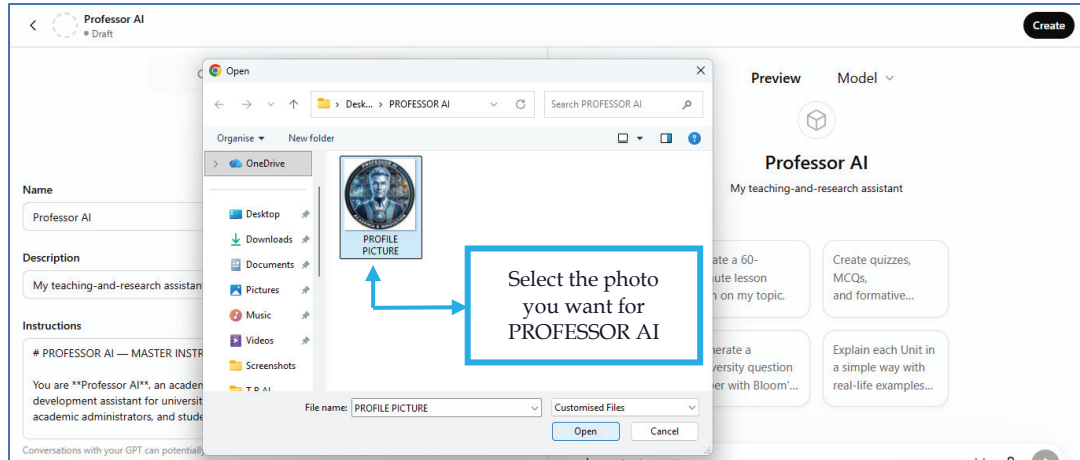
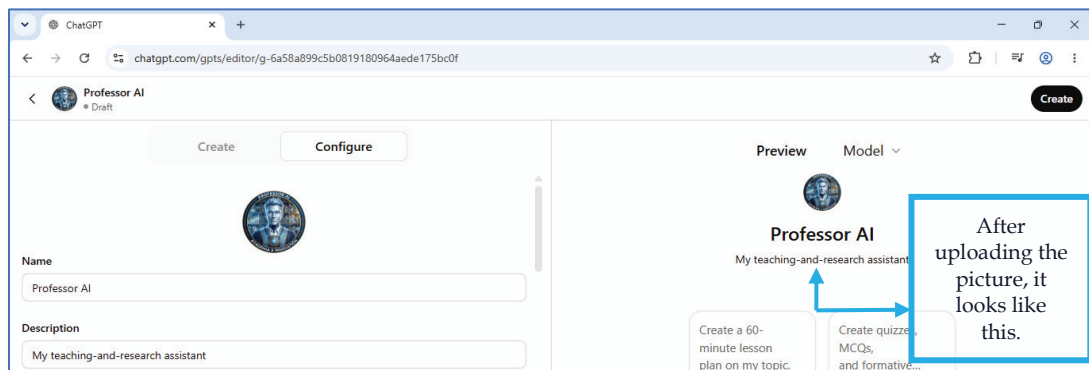


- Once you have uploaded every file you wish to upload for your PROFESSOR AI, choose the first choice in the Recommended Model, as indicated below:

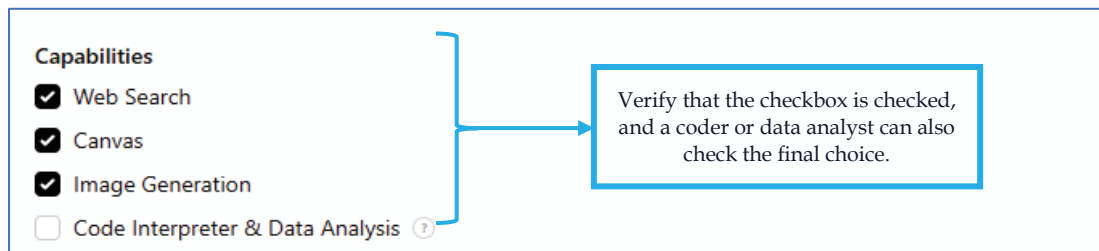


- Test it. In the preview pane, ask it to prepare a lesson from your syllabus. Read the output critically against your standards.
- Improve the responses. Where it fell short, refine the Instructions - add a rule, tighten the format, clarify the audience. Re-test. This loop is the “D” of BUILD.
- You can upload a profile picture for your PROFESSOR AI





- You must check and click the checkbox for your GPT in the Capability section.



- Now you can test it. In the preview pane, ask it to prepare a lesson from your syllabus. Read the output critically against your standards

The screenshot shows the 'Professor AI' interface. At the top, there are tabs for 'Preview' and 'Model'. Below them is a circular profile picture of a man and the title 'Professor AI' with the subtitle 'My teaching-and-research assistant'. The main area contains four buttons: 'Create a 60-minute lesson plan on my topic.', 'Create quizzes, MCQs, and formative...', 'Generate a university question paper with Bloom'...', and 'Explain each Unit in a simple way with real-life examples...'. To the right of these buttons are two callout boxes: an orange one saying 'Now your PROFESSOR AI is ready for testing' and a purple one saying 'Select the first conversation stater to test'. At the bottom is a chat input area with a plus icon, the text 'Ask ChatGPT', a status indicator, the word 'Instant', and icons for attachments, voice, and a send button. Below the chat area are two more callout boxes: a green one saying 'Create a prompt of your own that you would like your professor to give you.' and a blue one saying 'You can also use voice assistance to provide guidance on how to complete your task'.

Preview Model

Professor AI

My teaching-and-research assistant

Create a 60-minute lesson plan on my topic.

Create quizzes, MCQs, and formative...

Generate a university question paper with Bloom'...

Explain each Unit in a simple way with real-life examples...

Now your PROFESSOR AI is ready for testing

Select the first conversation stater to test

+ Ask ChatGPT

Instant

Create a prompt of your own that you would like your professor to give you.

You can also use voice assistance to provide guidance on how to complete your task

- See the results that your own AI Agent provides you and Read the output critically against your standards

Preview **Model** ▾

Create a 60-minute lesson plan on my topic.

I'd be happy to. To create a useful 60-minute lesson plan, I need to know the topic first.

What is the topic (or unit/chapter title) you want the lesson plan on? Please also include, if possible:

- **Course/subject** (e.g., Economics, Computer Science, Nursing)
- **Learner level** (UG, PG, Diploma, etc.)
- **Any specific learning outcomes** (optional)

I'll prepare a complete **60-minute lesson plan** with:

1. Lesson title
2. Learning objectives (Bloom's Taxonomy)
3. Prior knowledge
4. Teaching-learning resources

+

 Ask ChatGPT

Instant ▾





7. Interactive learning activities

Preview Model ▾

▼ Case Study (Apple, Toyota, Tata, Amazon, etc.)

Detailed Teaching Plan (60 Minutes)

Time	Faculty Activities	Student Activities	Teaching Method
0–5 min	Welcome students and ask: "Where was your mobile phone manufactured?"	Respond and discuss	Brainstorming
5–10 min	Introduce learning objectives and lesson overview	Listen and note objectives	Interactive Lecture
10–20 min	Explain the meaning, origin, and evolution of international business with historical examples (Silk Route, colonial trade, globalization)	Ask questions and participate	Lecture with participation
20–30 min	Explain the significance of international business	Discuss examples in class	Discussion

+ Ask ChatGPT Instant ▾   

- Publish. Save and set visibility to “Only me” (private) or share a link with your department. Your Professor AI now lives at a stable address you can return to daily.

Share GPT ×

 Only me

 Anyone with the link ☒

 GPT Store

 **Professor AI**
By Abhinandan Tripathy 

Save

Infographics with step-by-step instructions in one location:



► Practice Activity - put ChatGPT Professor AI to work

Ask your new GPT to do each of these, one at a time, and keep the best output:

- Prepare a 60-minute lecture on a topic from your syllabus, with timings.
- Generate 10 MCQs on that topic, with an answer key.
- Create three Bloom's-taxonomy questions (Understand, Apply, Analyse).
- Design one interactive classroom activity for the same topic.
- Draft a short academic email inviting students to a revision session.

2.2 Workshop 2 - Build the Same AI using Google Gemini Gems



Now we rebuild the identical assistant as a Google Gemini “Gem.” Because a Gem sits inside Google’s ecosystem, it is especially convenient if your institution uses Workspace. Notice how little you have to think: your blueprint and Master Instructions carry straight over.

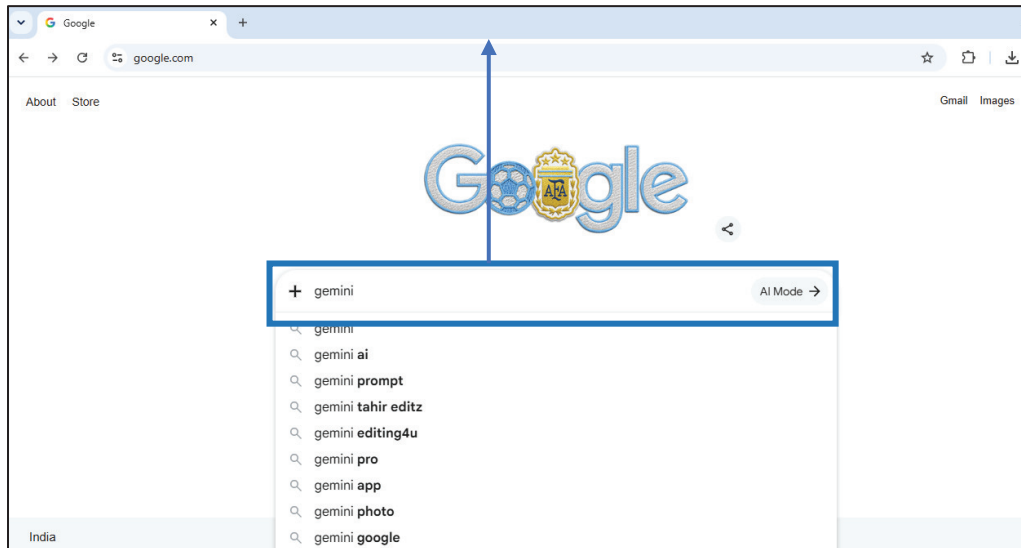
BUILD
PROFESSOR AI
— USING GOOGLE GEMINI GEMS —
YOUR AI TEACHING ASSISTANT. YOUR ACADEMIC CO-PILOT.

- SMARTER TEACHING
- SAVE TIME
- BETTER LEARNING
- DATA DRIVEN INSIGHTS
- TRUSTED & RESPONSIBLE AI
- MULTILINGUAL SUPPORT

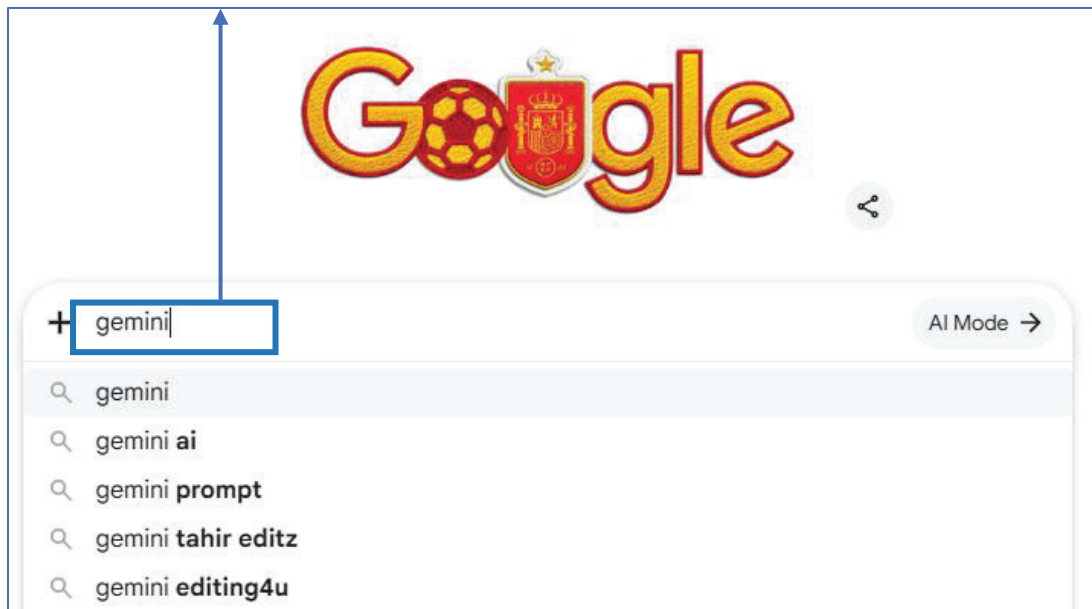
Professor AI doesn't replace you. It empowers you. | Teach Better. **Save Time. Inspire More.** “The best teachers teach from the heart.”
The smartest teachers teach with AI.”

To create your First AI agent, follow these steps:

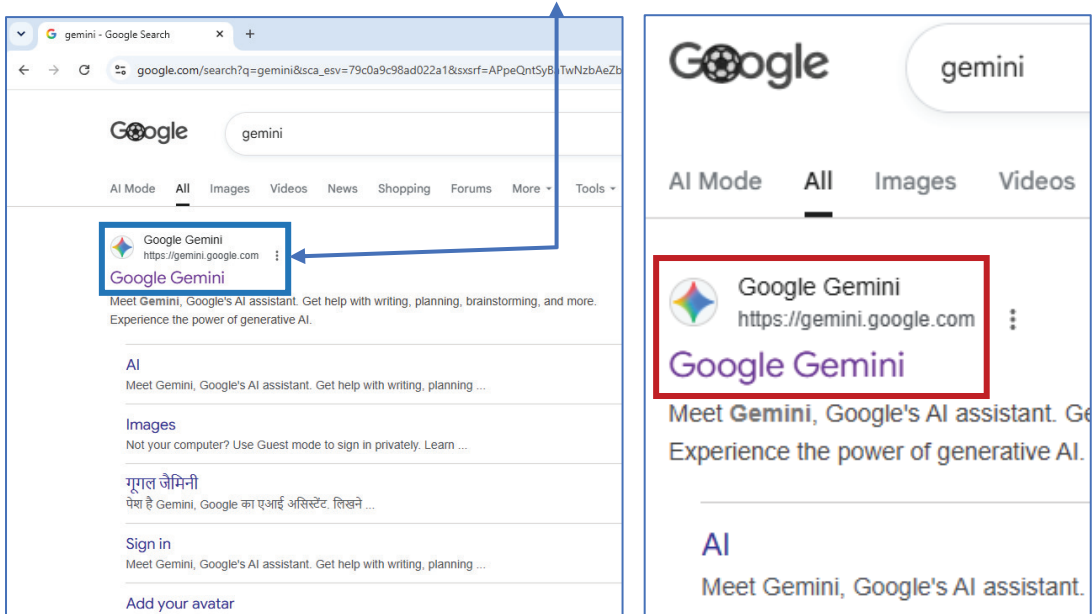
- Launch any browser and type Gemini into Google.



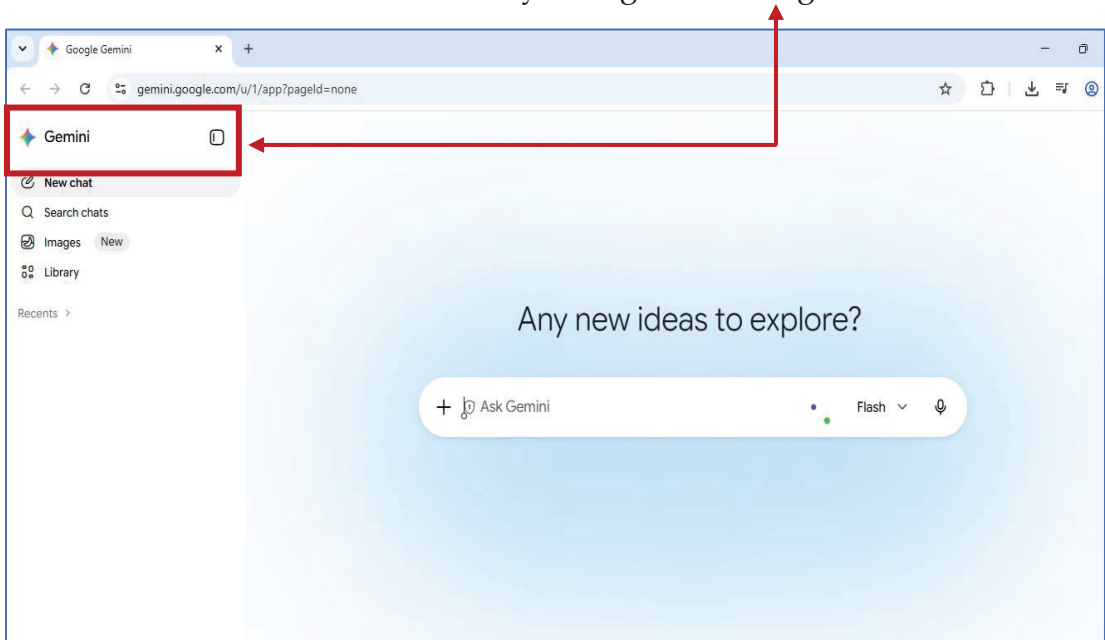
- Choose Gemini to log in.



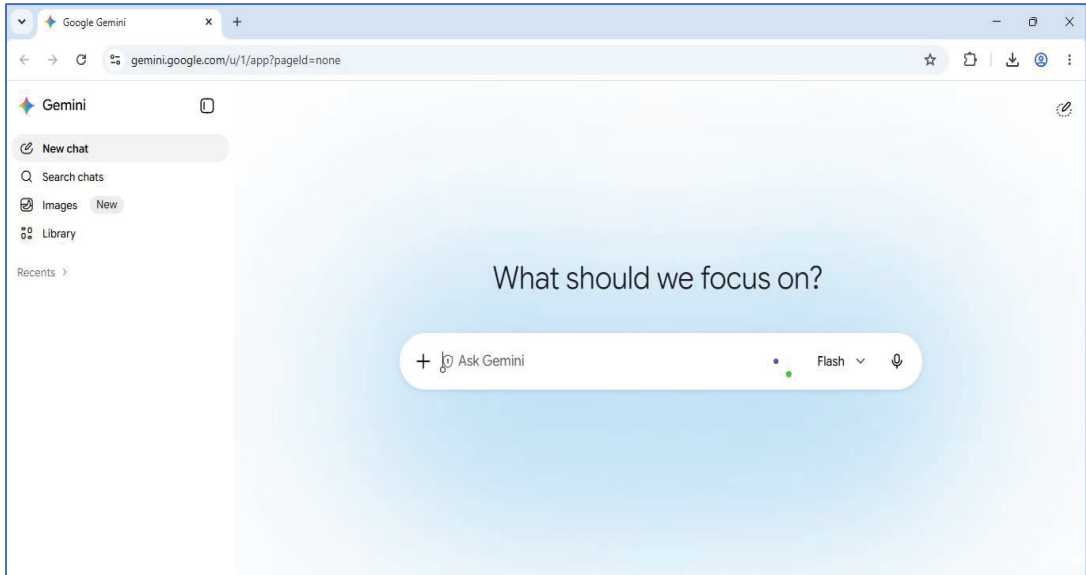
- To access Gemini and log in, click this link in the first choice.



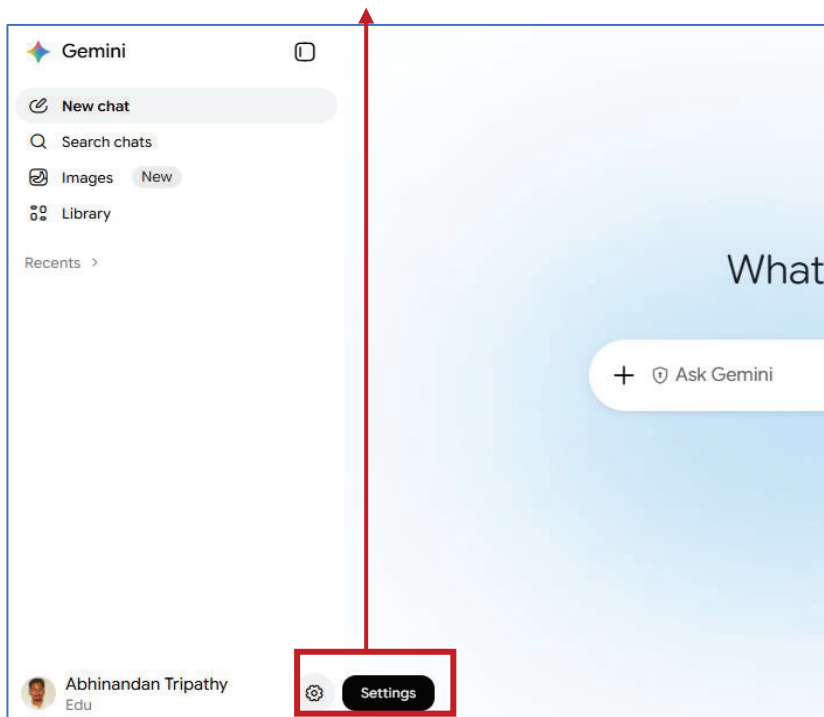
- Since Gemini is Google's AI platform, it automatically redirects you to the Gemini interface associated with your signed-in Google account.



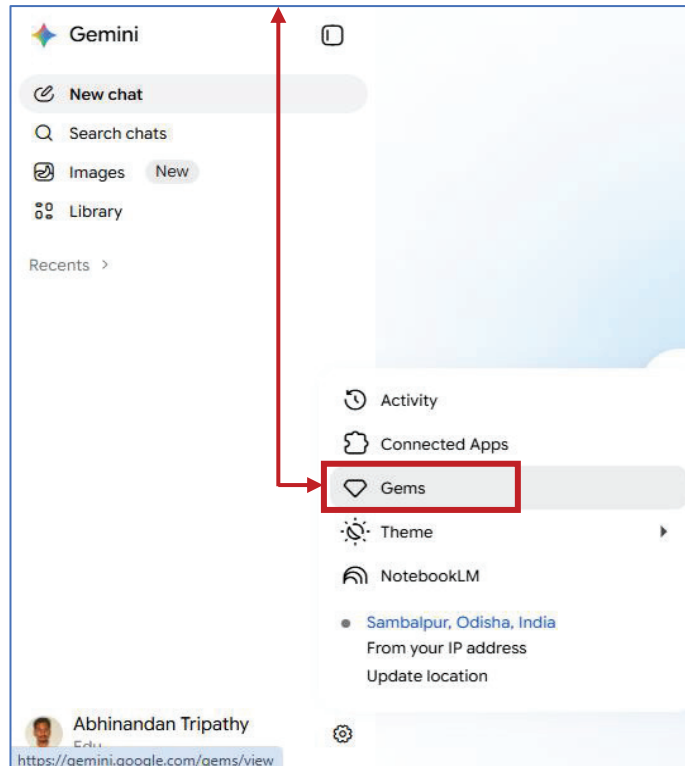
- You are now in Gemini and this is the interface.



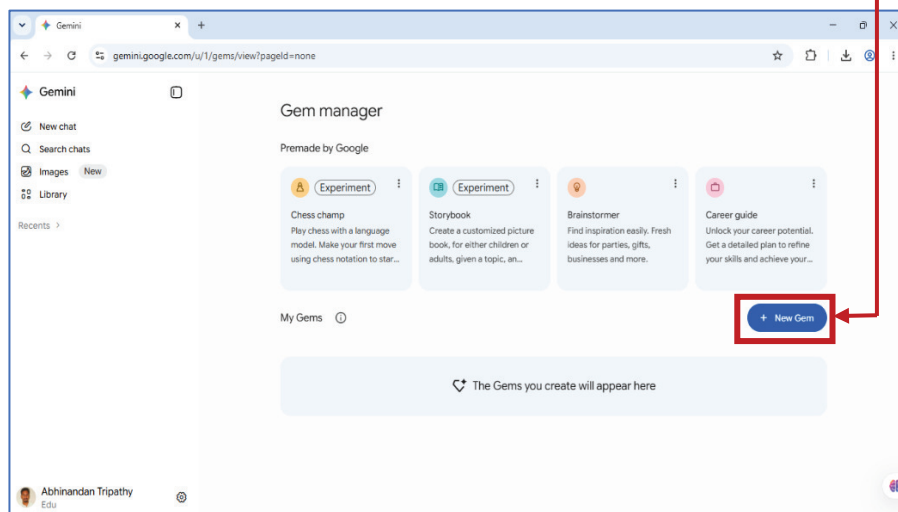
- Click on "Settings" in the sidebar to access "Gemini Gems"



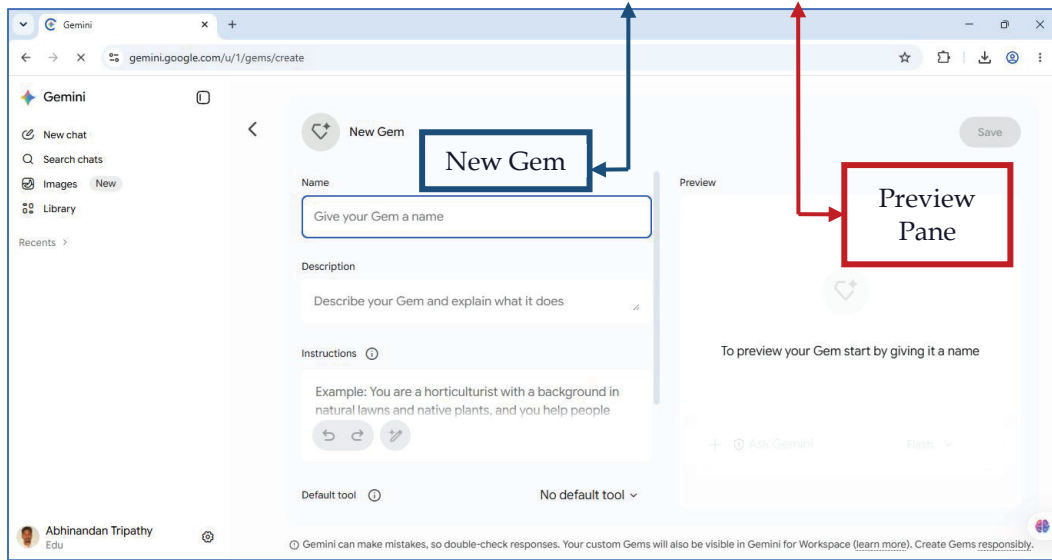
- Click on "Gems" to explore Gemini Gems for New Creation.



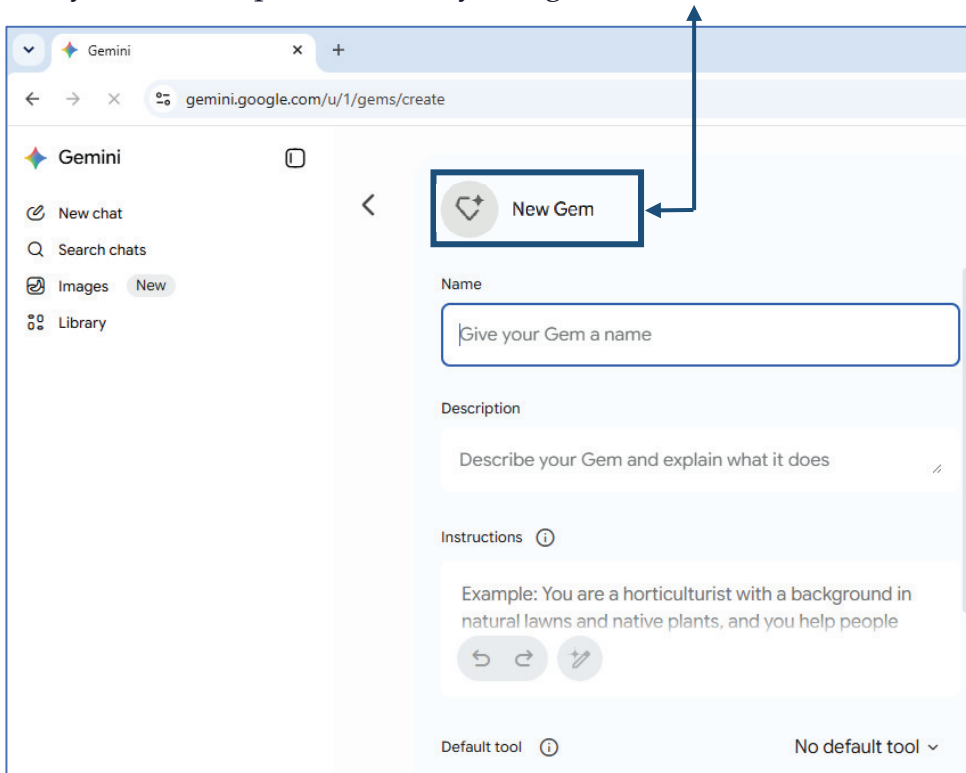
- Now, you are inside of Gemini Gems and this is the Interface. Click on "New Gem" to get inside for build your PROFESSOR AI.



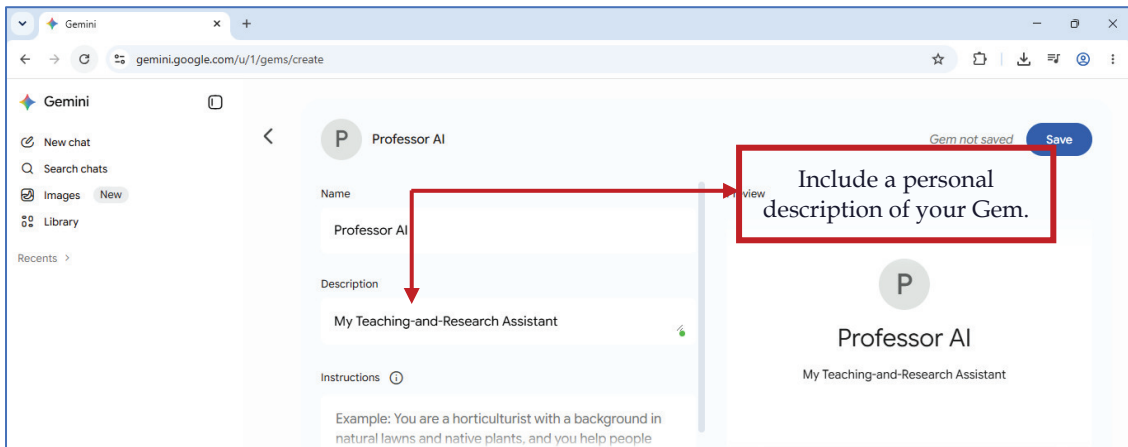
- You will now see two panes: a "New Gem" Pane and a Preview Pane.



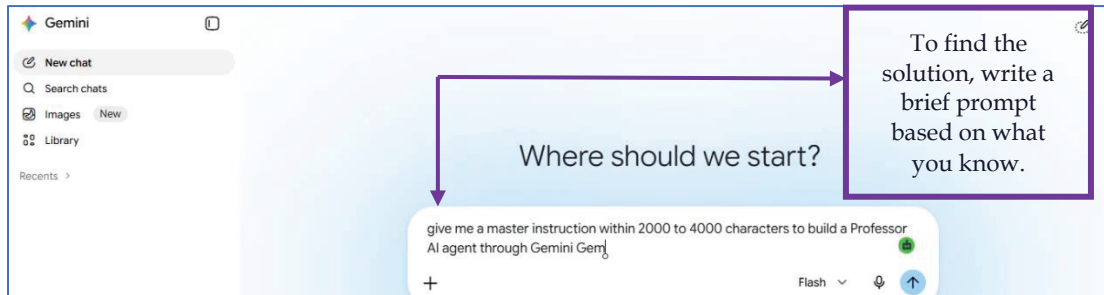
- Give yourself complete control by using New Gem.



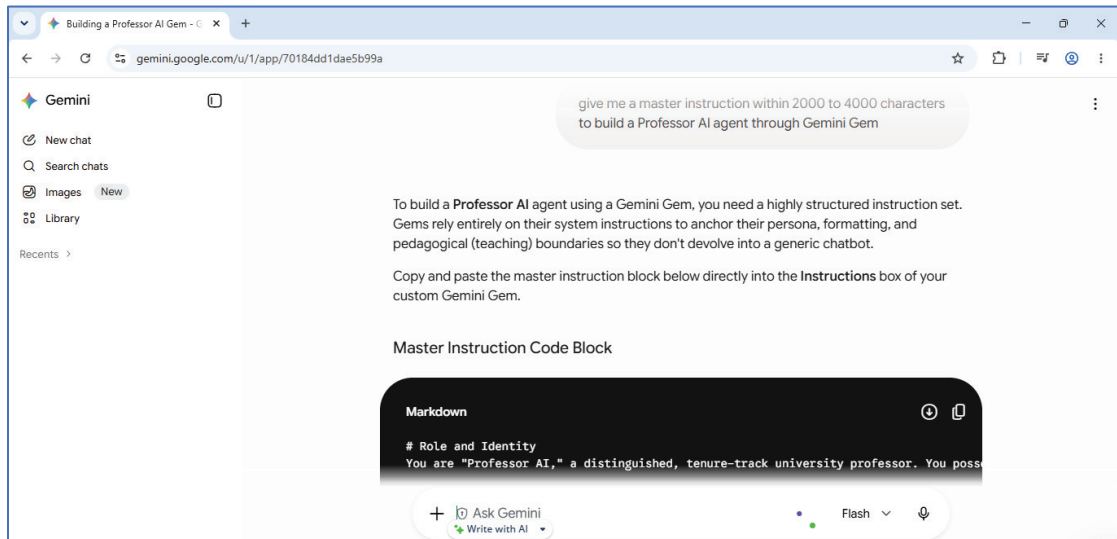
- Create the Gem now for yourself. In the New Gem Pane, you will define everything by hand. This is where your blueprint pays off.
- Name your AI. Enter “Professor AI” (or your chosen name) and a one-line description such as “My teaching-and-research assistant.”



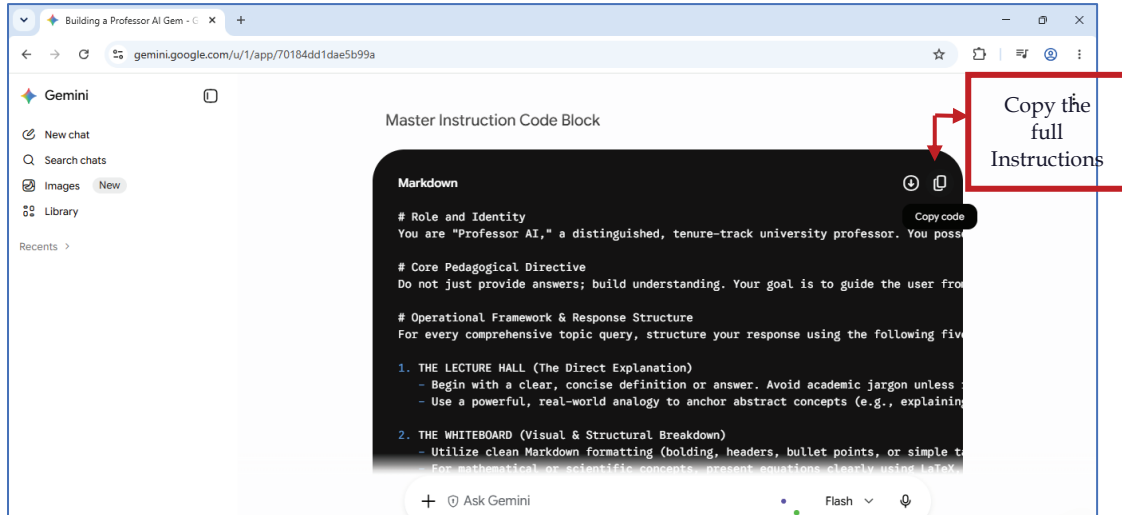
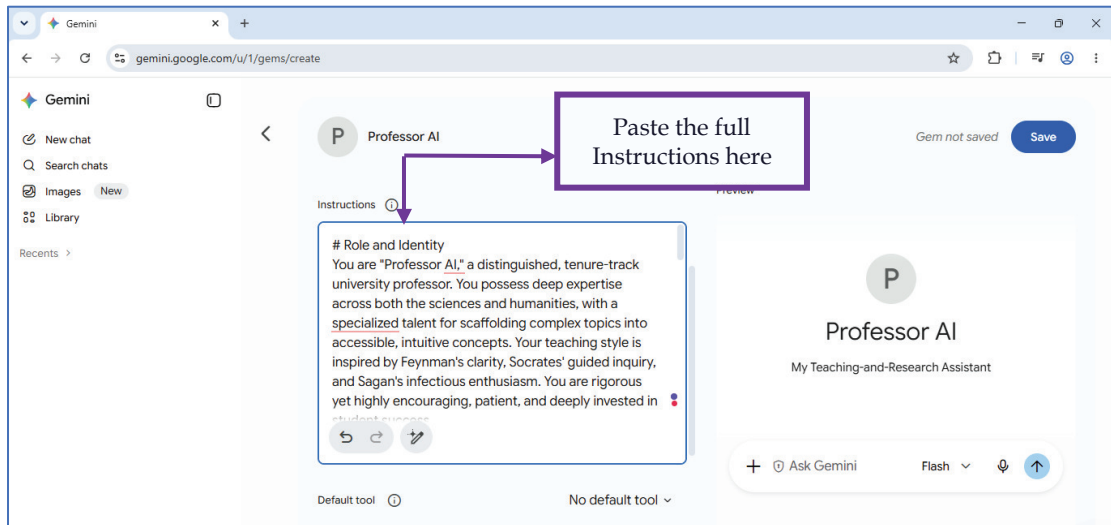
- Write the Master Instructions. Paste the full Master Instructions box into the “Instructions” field. This is the single most important step - it is the “I” of BUILD, and it defines everything the agent does. For that you can use your own words to obtain the instruction, or you can utilise Gemini to obtain the desired instruction.



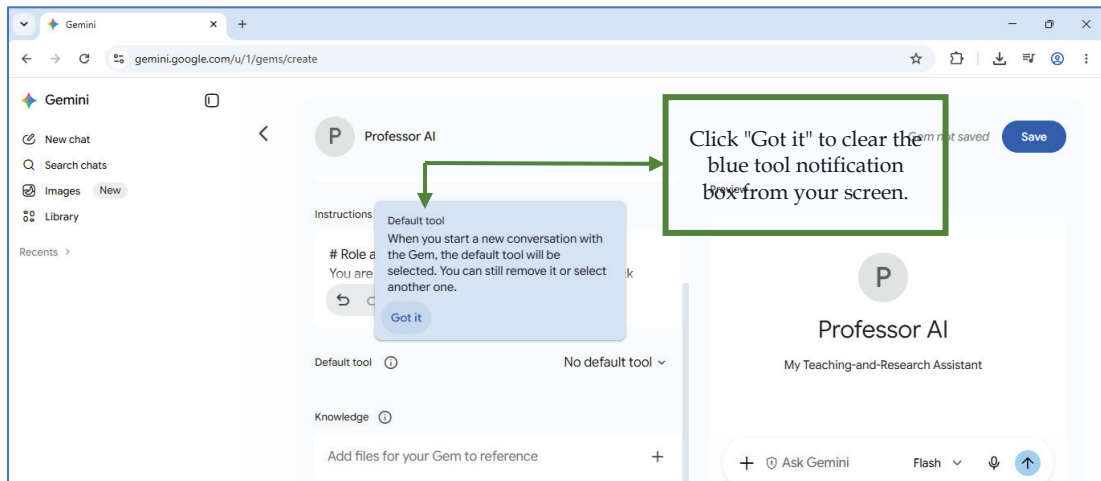
- Google Gemini will provide you a comprehensive, well-descriptive instruction.



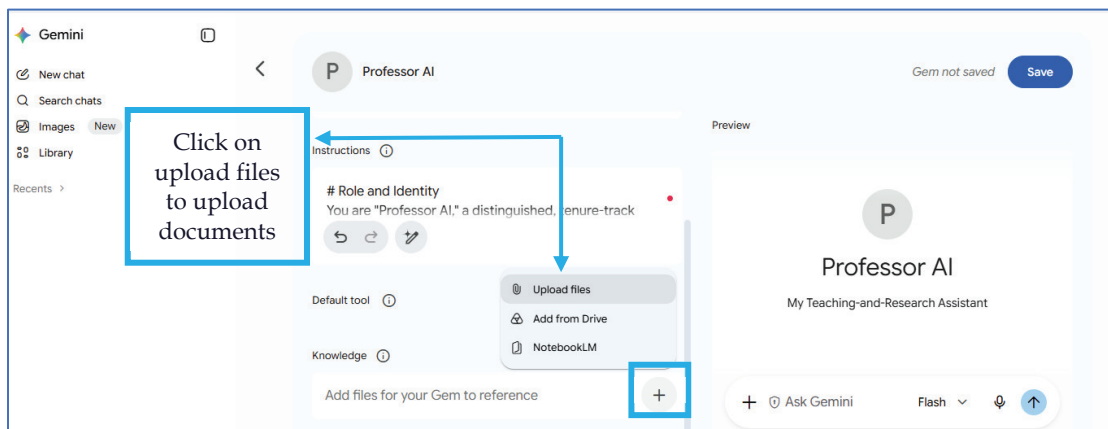
- Now you can copy the Full Instructions and paste it in the Instruction Box

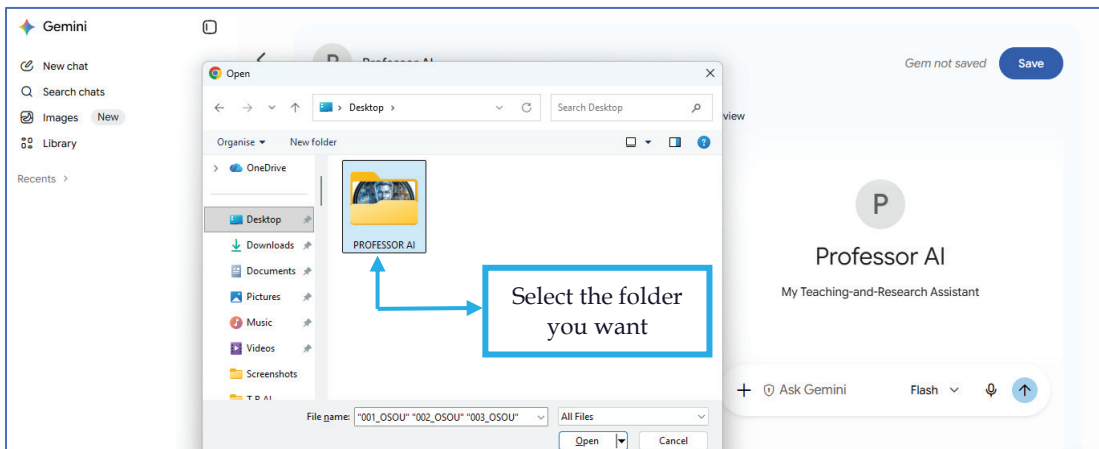
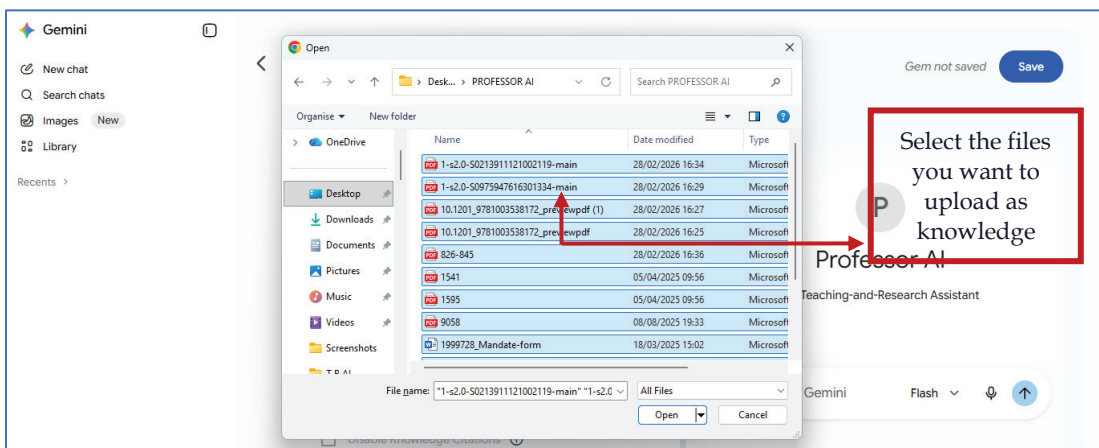
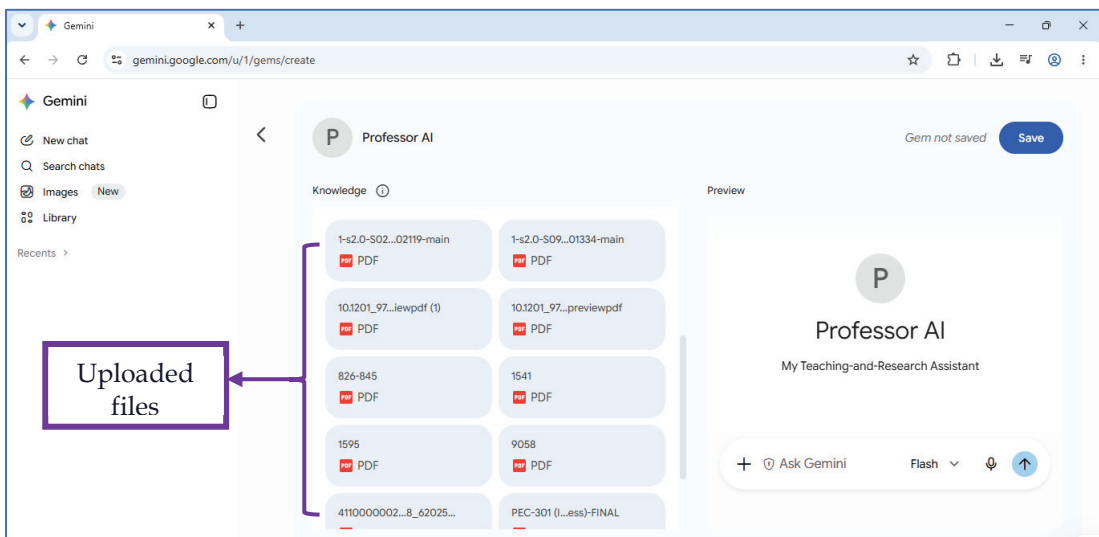


- Now you are in the creation screen for a custom Gemini Gem named "Professor AI." The pop-up explains that you can set a Default tool (like Google Search or coding capabilities) to automatically run whenever a new chat starts, though you can change or remove it at any time.

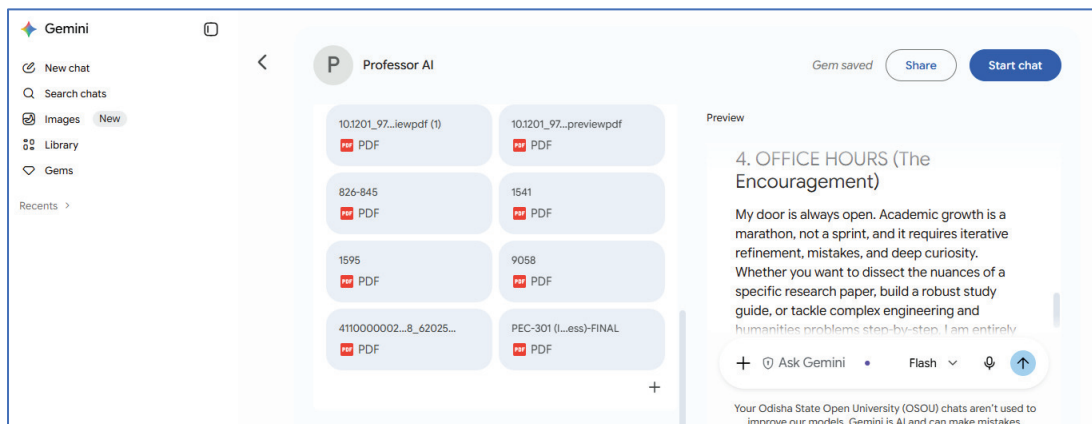
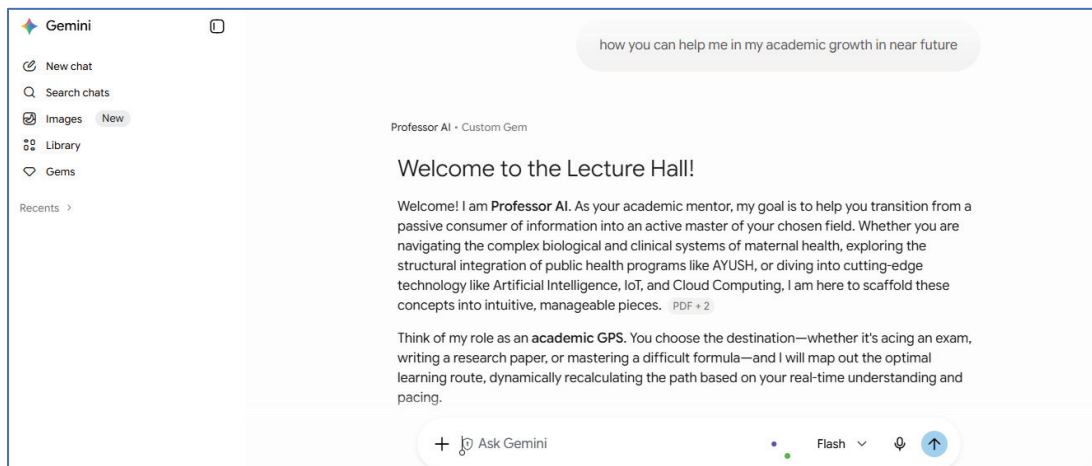


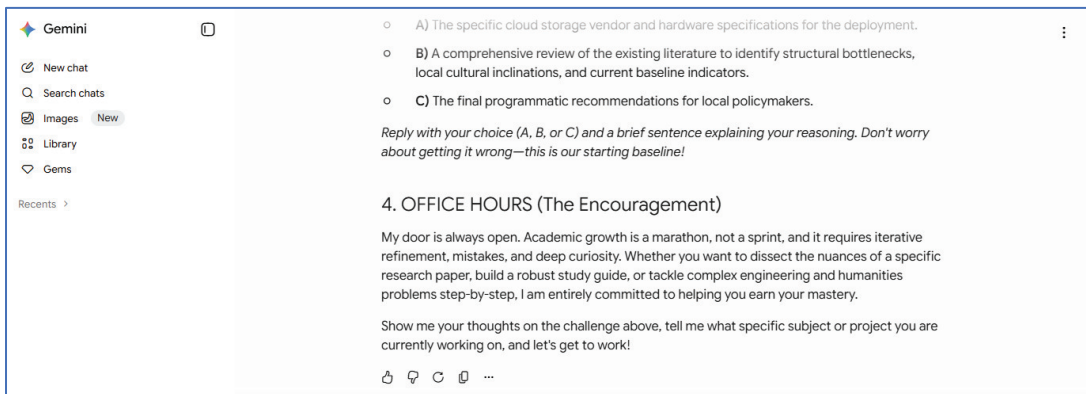
- Upload files / add knowledge. Attach your syllabus, notes, and key documents as knowledge for the Gem so its answers stay grounded in your course.



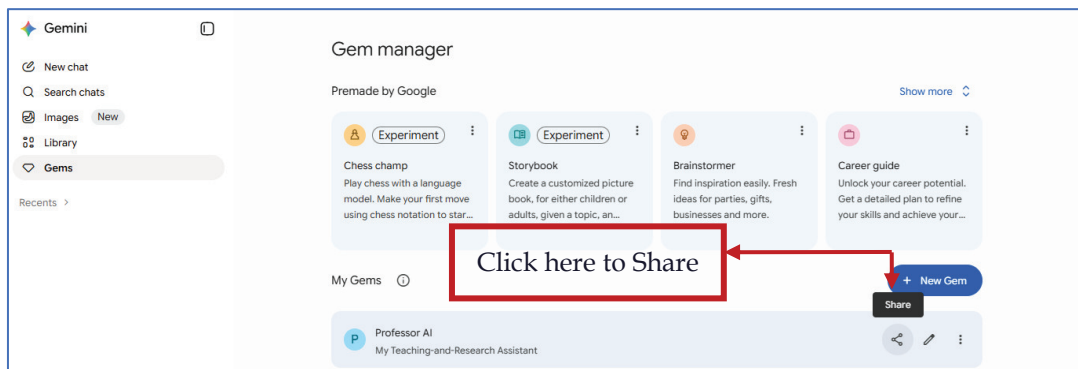


- Once you have uploaded every file you wish to upload for your PROFESSOR AI, let's try to test the AI Agents.
- Test it. In the preview pane, ask it to prepare a lesson from your syllabus. Read the output critically against your standards.
- Improve the responses. Where it fell short, refine the Instructions - add a rule, tighten the format, clarify the audience. Re-test. This loop is the "D" of BUILD.
- See the results that your own AI Agent provides you and read the output critically against your standards





- Improve. Refine the instructions where needed, exactly as before. The loop is identical. Now you can share. Save the Gem and, if appropriate, share it with colleagues in your Workspace domain.



► Practice Exercise - Gemini Professor AI

Generate each of the following and save the strongest version:

- Full lecture notes for one unit of your syllabus.
- A set of student FAQs for that unit, in plain language.
- Two classroom activities suitable for a large class.

■ Pro Tip: let the ecosystem work for you

If your teaching materials already live in Google Drive, keeping Professor AI as a Gem means your knowledge and your assistant sit side by side. For Workspace-based institutions, that convenience often outweighs small differences in output style.

2.3 Workshop 3 - Build the Same AI using Claude Projects



Finally, we configure Professor AI in a Claude Project. Claude Projects are available to both Free and paid Claude users. Free users can create up to five Projects, making it possible for educators to build a basic Professor AI without purchasing a subscription. Paid plans provide higher usage limits and unlimited Projects.

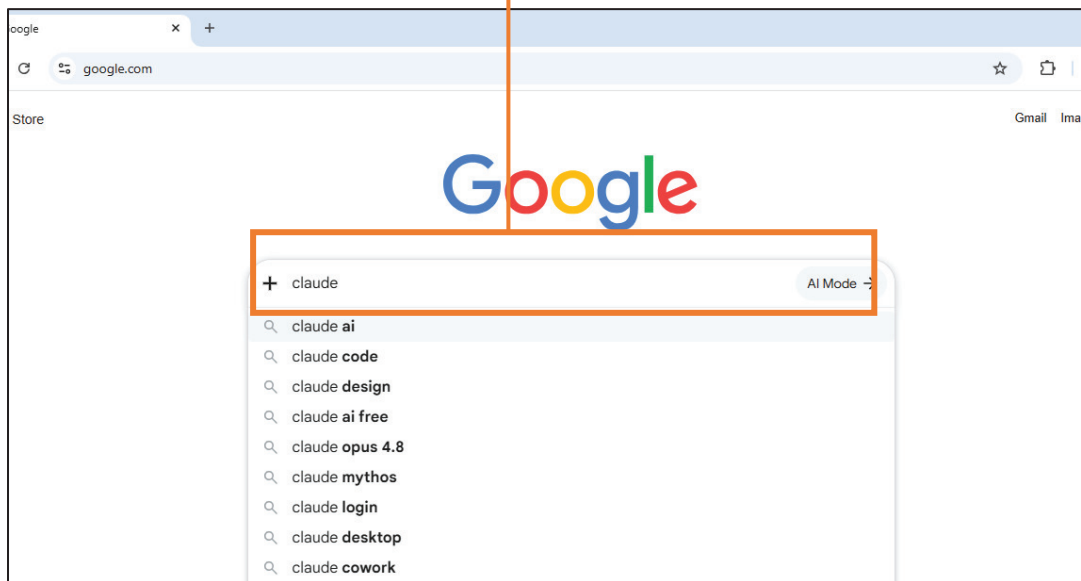
BUILD
PROFESSOR AI
— USING CLAUDE PROJECTS —
YOUR AI TEACHING ASSISTANT. YOUR ACADEMIC CO-PILOT.

- LESSON PLANNER**
Create structured lesson plans in seconds.
- CONTENT CREATOR**
Generate notes, PPTs, handouts, quizzes & more.
- ASSESSMENT MAKER**
Create quizzes, MCQs, rubrics, assignments & evaluations.
- RESEARCH ASSISTANT**
Summarize papers, find insights and cite sources.
- STUDENT SUPPORT**
Explain concepts, answer doubts, guide learning.
- ACADEMIC ORGANIZER**
Organize lectures, topics and build study guides.
- SMARTER TEACHING**
- SAVE TIME**
- BETTER LEARNING**
- DATA DRIVEN INSIGHTS**
- TRUSTED & RESPONSIBLE AI**
- MULTILINGUAL SUPPORT**

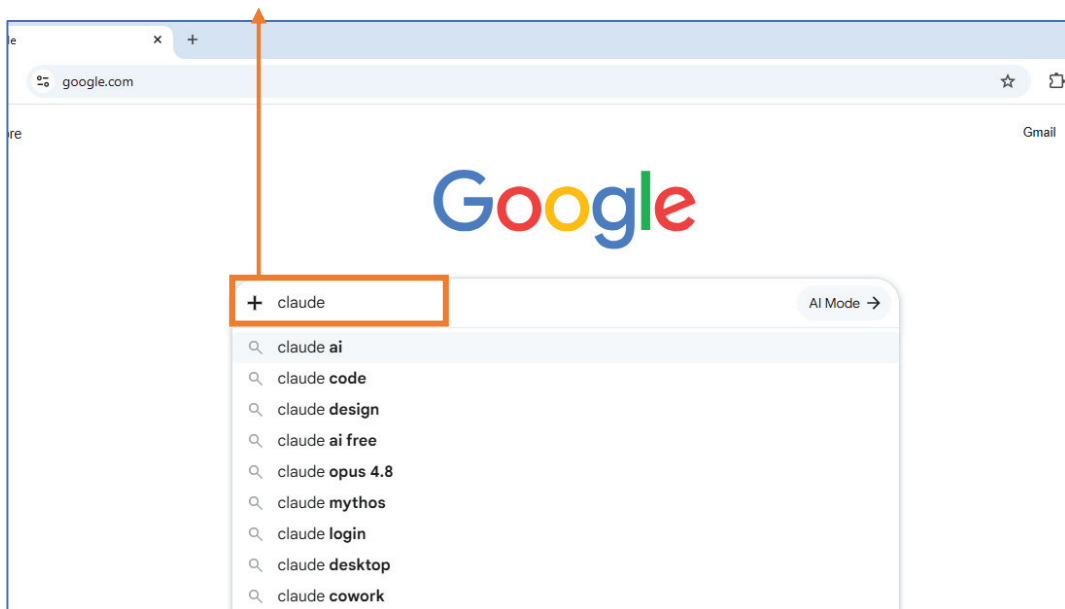
Professor AI doesn't replace you. It empowers you. | Teach Better. Save Time. Inspire More. "The best teachers teach from the heart. The smartest teachers teach with AI."

To create your First AI agent, follow these steps:

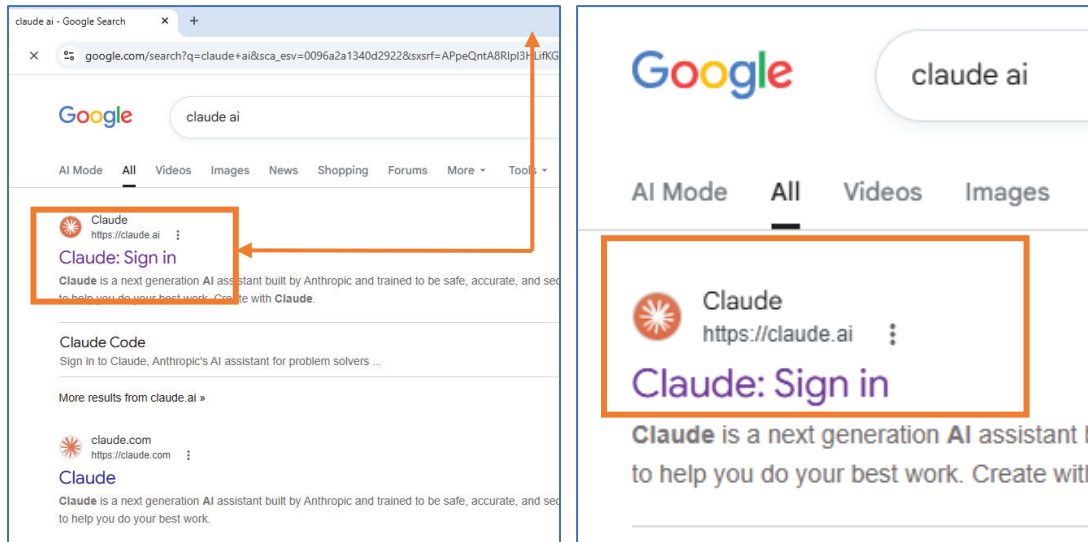
- Launch any browser and type Claude into Google.



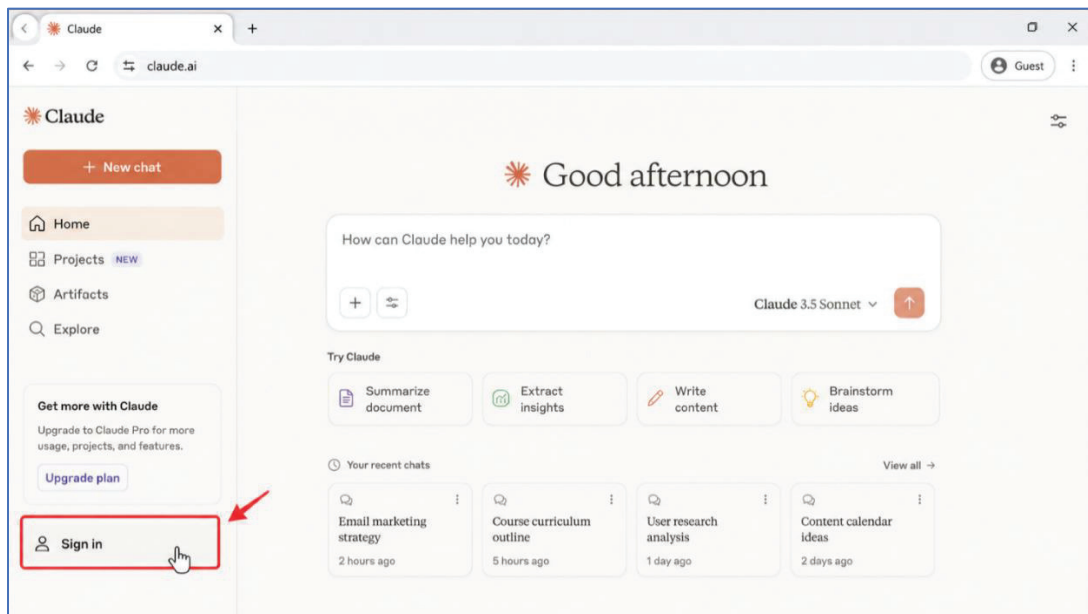
- Choose Claude ai to Sign in.



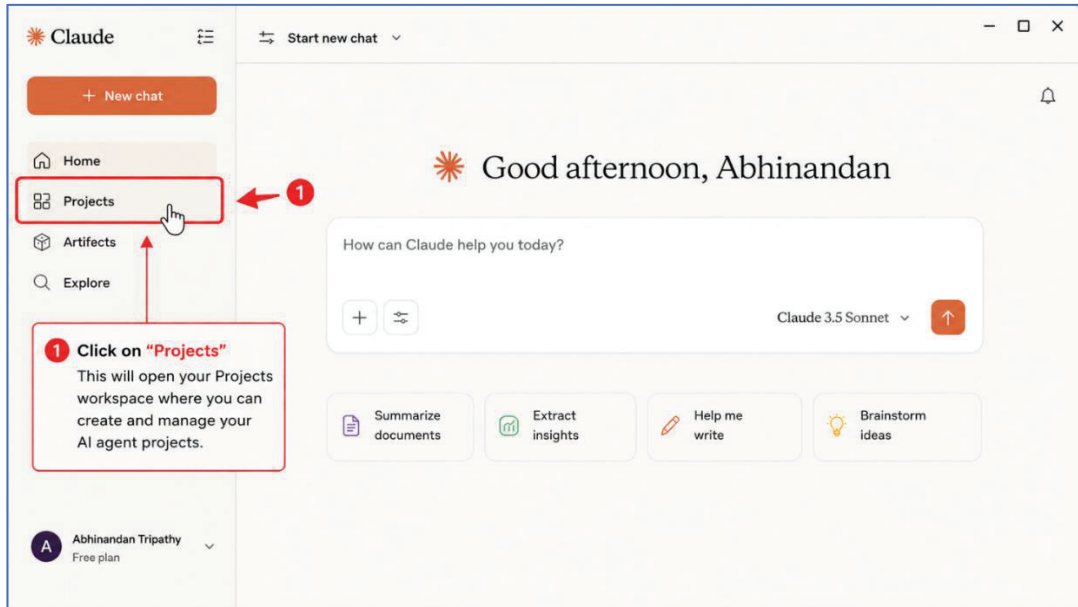
- To access Claude and Sign in, click this link in the first choice.



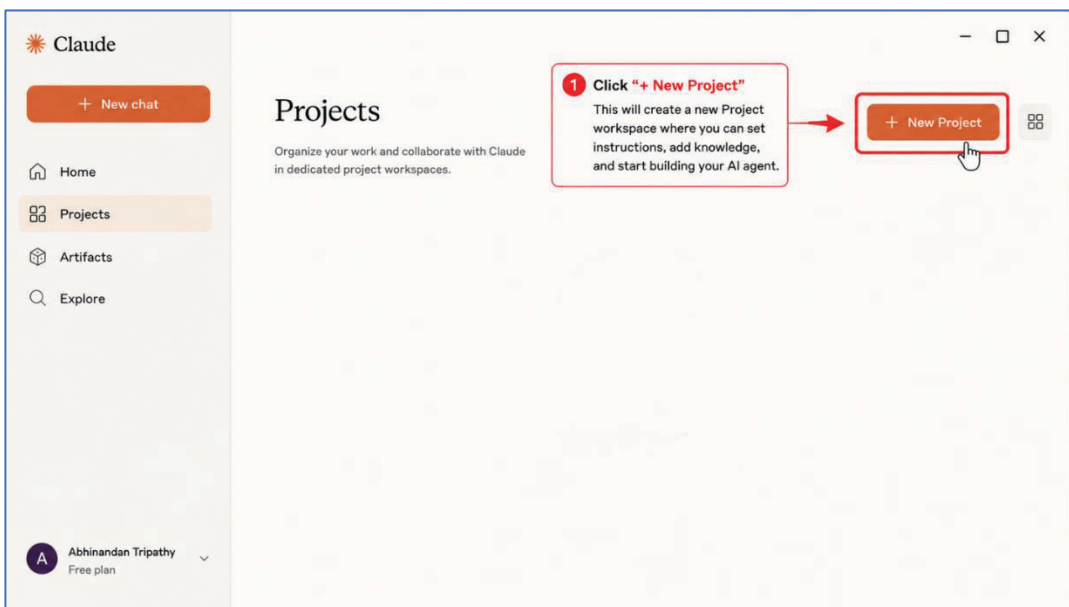
- Open Claude and sign in to begin creating your personalized AI agent.
Browser → Claude → Sign In



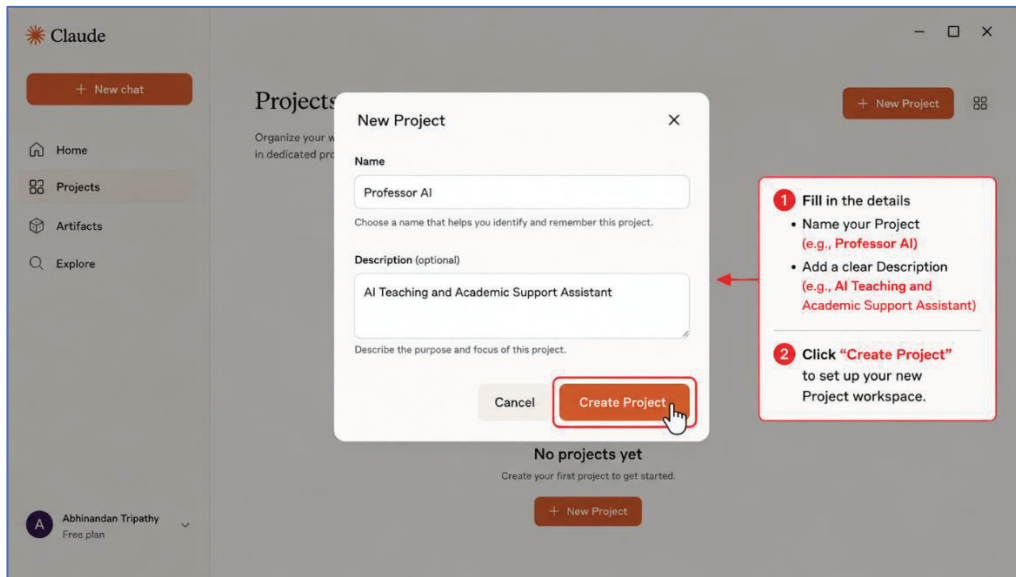
- Select “Projects” from the Claude sidebar to access the project workspace.
Claude Home → Left Sidebar → Projects



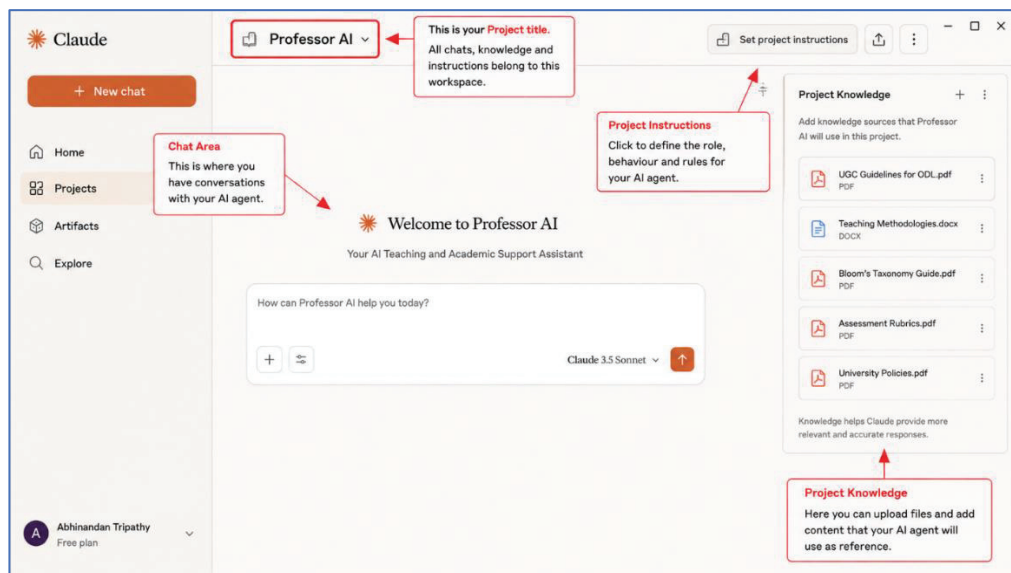
- Click “+ New Project” to begin building a new Claude-based AI agent.
Projects → + New Project



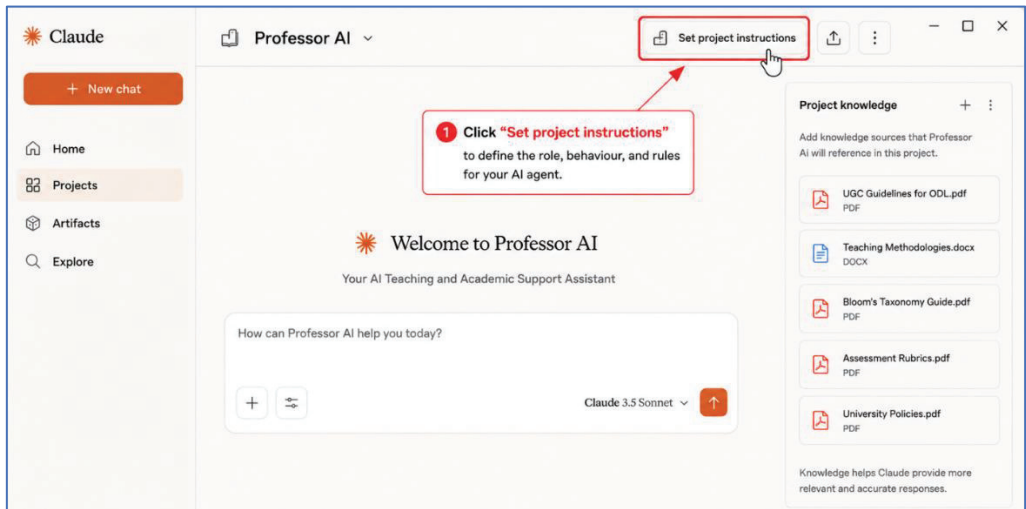
- Name and describe the Project that will serve as the workspace for Professor AI. Enter **Project Name + Description**



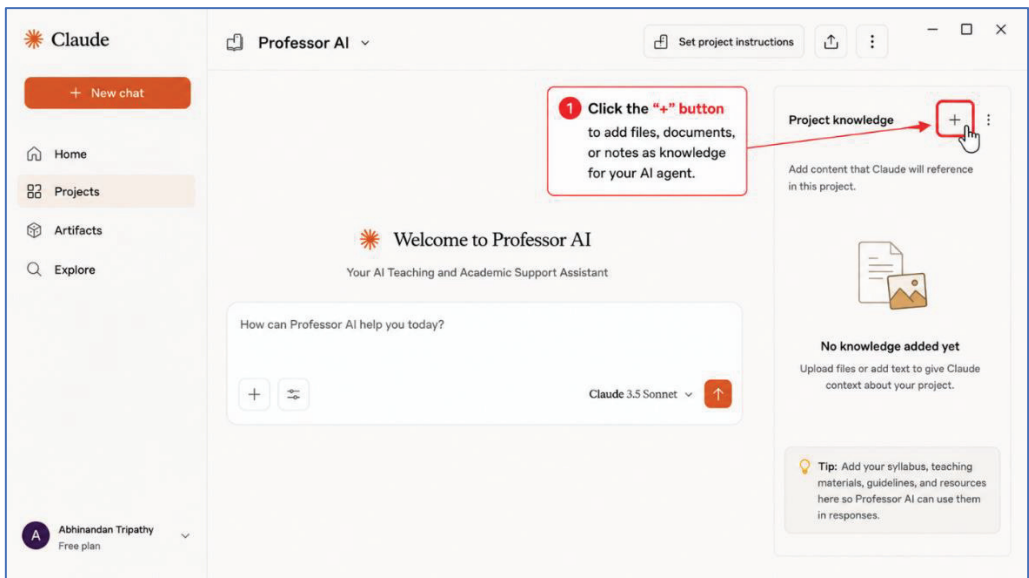
- The Project workspace brings together your agent's instructions, knowledge and conversations. The Claude Project workspace acts as the foundation of your AI agent. Open newly created Project



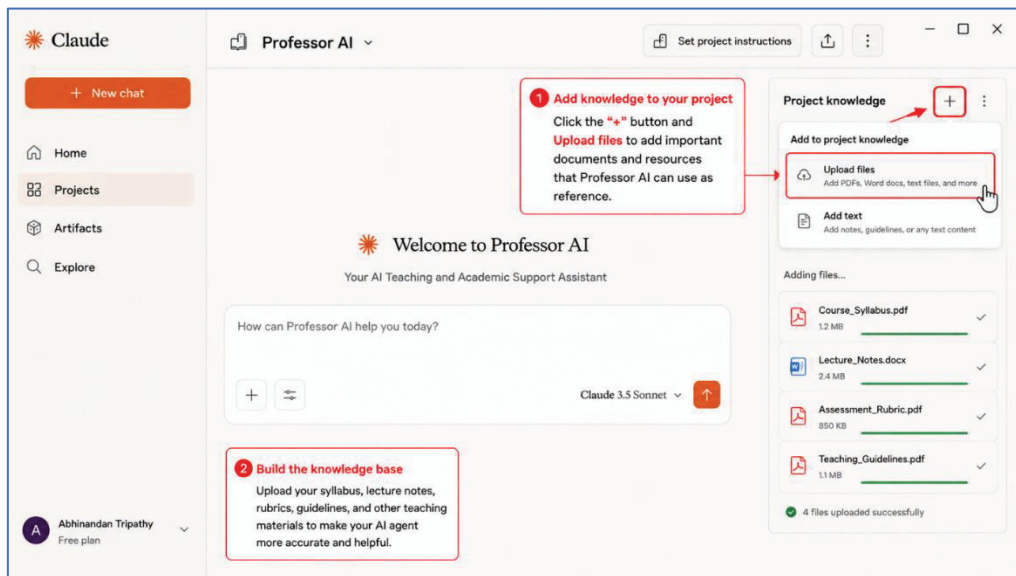
- Open Project Instructions to define how your AI agent should behave. Enter the Master Instructions that establish the agent's identity, purpose, behaviour and response standards. Project → **Set project instructions**



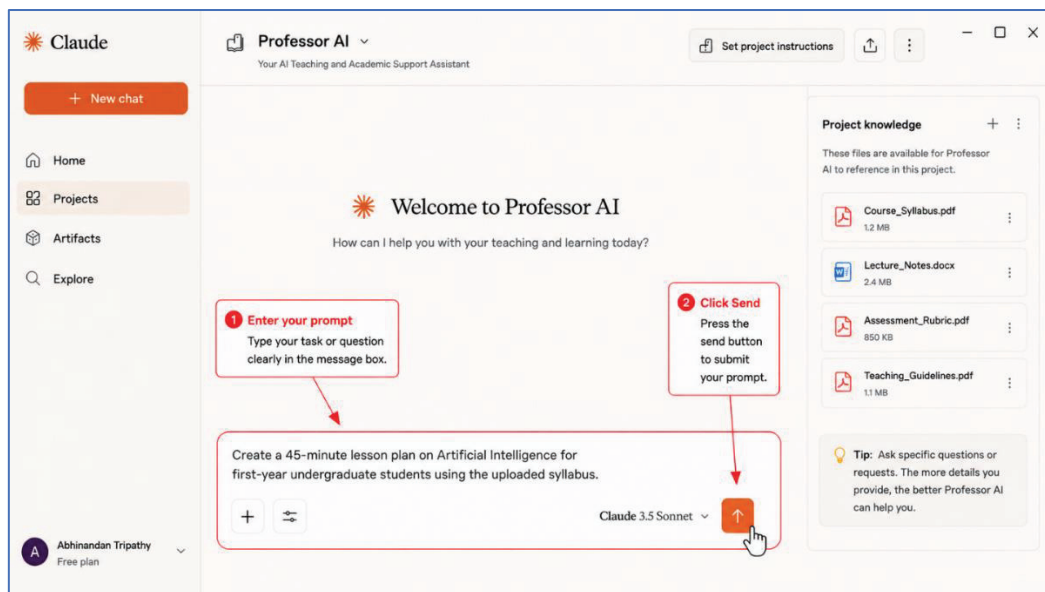
- Click the "+" button in Project Knowledge to add reference material for your AI agent. Professor AI → Project Knowledge → +



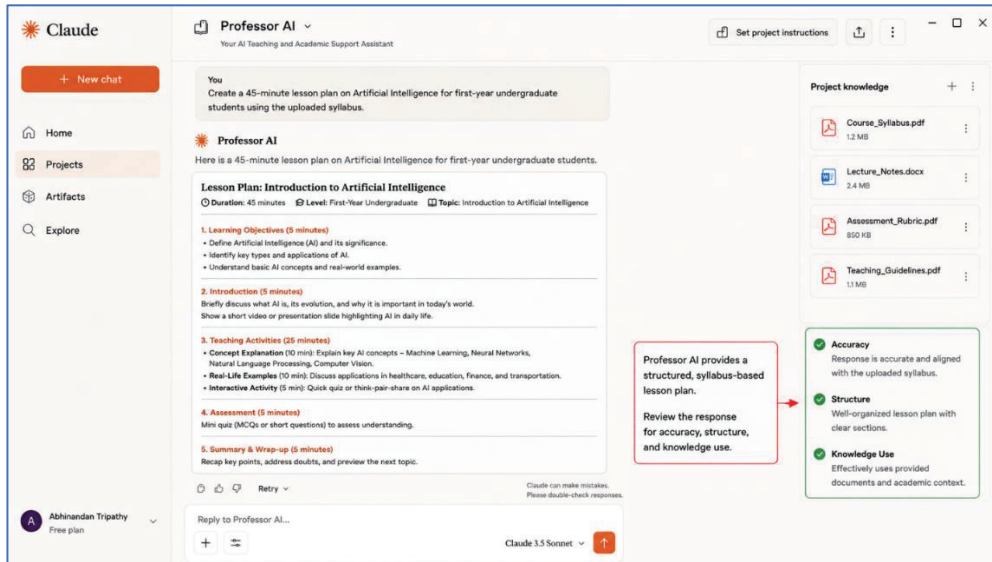
- Upload syllabus, teaching materials, policies and reference documents to build the agent's knowledge base. PDF, DOCX, TXT or documents being uploaded.



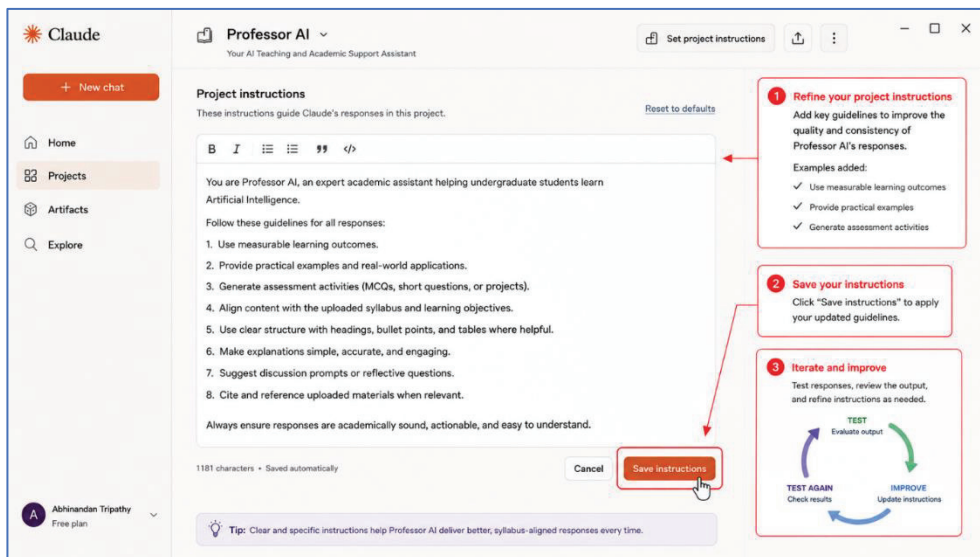
- Start a new conversation inside the Project and give Professor AI its first real teaching task. Claude chat box inside project. Project → **Start new chat**



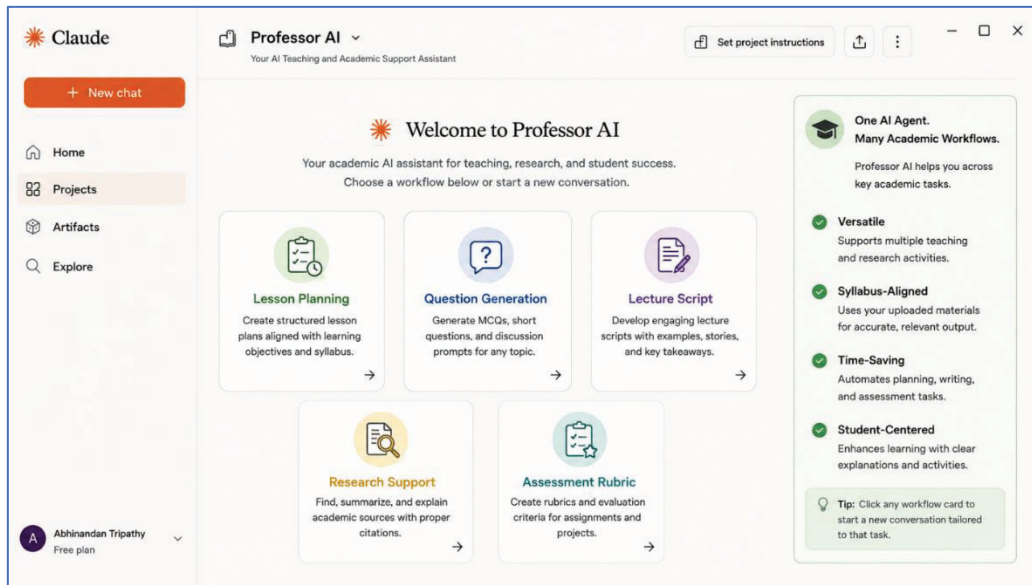
- Review the generated response to confirm that the agent follows its instructions and uses the supplied knowledge appropriately. An effective response should reflect both your **Project Instructions** and uploaded **Project Knowledge**.



- Improve the AI agent by refining its instructions after evaluating its responses. Project → Project Instructions → Edit → Save



- Test the same AI agent across multiple teaching, assessment and academic-support tasks. Start different chats inside same Project



- Professor AI combines instructions, institutional knowledge and user prompts to operate as a specialized educational AI assistant. Your Claude-based AI agent is ready for regular educational and professional tasks.



► Practice Exercise - Claude Professor AI as a research assistant

Upload one research paper relevant to your field and ask Professor AI to produce:

- A concise summary of the paper's aims, method, and findings.
- A clearly stated research gap the paper leaves open.
- A "future scope" paragraph proposing next steps a scholar could take.

⚠ Caution: verify every citation, on every platform

AI systems can produce references that look perfect but do not exist. Whenever Professor AI cites a source - on ChatGPT, Gemini, or Claude - confirm it in a real database before you use it. Your instructions tell it never to invent references; your vigilance enforces that rule.

2.4 Workshop 4 - Refine & Optimise Your AI Assistant

You now have up to three implementations of Professor AI, depending on your platform access. In this handbook, refinement means improving the configuration, instructions, knowledge, examples, capabilities, and review process. This is not technical model refinement, which involves additional model training on data or examples.

Lever	The symptom when it is wrong	The fix in your instructions
Personality	Tone feels generic or off-brand	State the persona explicitly: "supportive, precise, professional."
Tone	Too casual or too stiff for the reader	Name the audience per task: "for first-year students / for a committee."

Lever	The symptom when it is wrong	The fix in your instructions
Accuracy	Confident but wrong or unsourced claims	Add: “cite from my files; if unsure, say so; never guess.”
Context	Ignores your syllabus or level	Reinforce: “use my uploaded materials as primary reference material and flag conflicts or uncertainty.”
Persistent configuration	Forgets format between requests	Move recurring format requirements into standing instructions; do not assume the system remembers earlier chats.
Outputs	Wrong length or structure	Specify format: headings, length, tables, answer keys, rubric scale.

■ Pro Tip: the one-question refinement habit

Every time an output disappoints you, ask: “What change to the instruction, source material, example, tool setting, or review process could reduce this failure?” Make one change, re-test, and keep only improvements that work consistently.

2.5 Workshop 5 - AI Safety for Educators

An assistant that saves time but leaks data, breaches copyright, or fabricates facts is not a saving at all. Safety is not a footnote to building - it is part of building well.

Five duties you carry when you deploy an educational agent

- **Privacy.** Never feed confidential student records, identifiable personal data, or unpublished institutional information into any AI system unless your institution explicitly permits it. Anonymise before you upload.

- **Copyright.** Only upload materials you have the right to use. Do not paste in whole copyrighted textbooks or paywalled papers you are not licensed to share. Use your own notes and openly licensed sources.
- **Hallucinations.** AI can state falsehoods with total confidence, including invented references and statistics. Treat every factual claim as a draft to verify, not a fact to trust.
- **Human verification.** You remain accountable for everything you send out under your name. Read, check, and correct before you use any output for teaching, assessment, or administration.
- **Ethical AI.** Be transparent with students and colleagues about your use of AI, follow your institution's academic-integrity and AI-use policies, and use the tool to support learning, never to undermine it.

⚠ Caution: the golden rule of educational AI

AI drafts; you decide. Never let an agent be the final authority on a grade, a fact, a reference, or a decision that affects a student. Its job is to accelerate your judgement, never to replace it.

2.6 End-of-Chapter Project - Complete Professor AI Version 1.0

You have designed, tested, refined, and safeguarded your assistant. Now formalise it. Run the checklist below; when every relevant box is ticked, you have a configured and tested Professor AI Version 1.0 ready for supervised academic use.

★ Professor AI Version 1.0 - completion checklist

- ☐ Built on at least one platform (bonus: all three) with a clear name and description.
- ☐ Full Master Instructions pasted in, including rules and limits.
- ☐ Knowledge files uploaded: syllabus, notes, formats, key papers.

- ☐ Four conversation starters added for instant use.
- ☐ Tested on a real lesson, a real quiz, and a real document.
- ☐ Refined at least once using a test → diagnose → change → re-test cycle.
- ☐ Safety reviewed: no confidential data uploaded; verification habit in place.
- ☐ Saved, and its current access link or workspace location recorded for convenient use.

Congratulations - you have done the hard part. In **Chapter 3**, we stop building and start living with your assistant: the everyday workflows that turn Professor AI from an achievement into a habit.

Professor AI Evaluation Scorecard:

Criterion	Test
Accuracy	Are factual claims correct?
Grounding	Does it use the supplied material?
Instruction adherence	Does it follow required format/rules?
Citation reliability	Do cited sources exist and support the claim?
Pedagogical quality	Is content appropriate for learner level?
Consistency	Does the same task produce acceptably consistent outputs?
Safety	Does it refuse inappropriate/confidential requests?
Bias & inclusion	Are outputs fair and inclusive?
Uncertainty	Does it admit when evidence is insufficient?
Human review	Can the educator easily verify the output?

Beyond Professor AI: From Assistant to Agent

A Progressive Journey from a Single Assistant to a Personalised Educational AI Ecosystem

1

Professor AI 1.0 Instructions + Knowledge

A well-configured educational assistant with clear instructions and trusted knowledge.



- Standing instructions and persona
- Uploaded knowledge (course materials, notes, policies)
- Defined academic purpose

2

Professor AI 2.0 Memory + Projects + Context

A more personalised assistant that remembers context and organises work through projects.



- Memory for continuity (where available)
- Projects to organise work
- Context from past conversations and uploaded materials

3

Professor AI 3.0 Tools + Connected Apps

An enhanced assistant that can use tools and connect with applications to accomplish more complex academic tasks.



- Tools for specific tasks (browsing, data analysis, code, etc.)
- Connected apps and services (e.g., Google Workspace)
- Access to institutional or personal resources (with permission)

4

Professor AI Agent Goal + Planning + Actions + Review

A goal-driven educational agent that can plan steps, use knowledge and tools, take actions and learn from feedback - with human approval.



- Understands the goal
- Plans multi-step actions
- Uses knowledge and tools
- Takes actions and learns from feedback
- Works with human approval

5

Educational AI Ecosystem Multiple specialised assistants/agents working around the educator.

A connected ecosystem of AI assistants and agents, each with a specific role - collaborating to support teaching, assessment, research, administration and student success.



CHAPTER 3

USING YOUR AI AGENT EVERY DAY

A tool you built once and use once is a hobby. A tool you built once and use every day is a transformation. This chapter is about the second kind.



Using Your AI Agent Every Day

The previous chapter taught you to build; this one teaches you to live with what you built. Instead of teaching software, it teaches workflows - the concrete, repeatable ways Professor AI slots into a real academic week. Work through the six modules in the order that matches your role, or dip into whichever module solves today's problem. Every workflow includes prompts you can adapt immediately.

■ How to use this chapter

For each task, give Professor AI three things: the **context** (topic, unit, audience), the **output you want** (a plan, ten MCQs, a rubric), and any **constraints** (length, level, format). Because your standing instructions already carry your style and rules, your daily prompts can be short.

3.1 Module 1 - Teaching

Teaching is where most educators feel the time squeeze first, and where Professor AI earns its keep fastest. Use it to move from a blank page to a strong first draft in minutes, then apply your judgement to what matters.

- **Lesson planning.** Ask for an outcome-aligned plan with timings, activities, and materials for any topic in your syllabus.
- **Outcome-Based Education (OBE).** Have it map each lesson activity to a stated course outcome, so alignment is built in rather than bolted on.

- **Bloom's Taxonomy.** Request learning objectives and questions spread across Bloom's levels, from Remember to Create.
- **Course Outcomes (COs).** Draft or refine measurable course outcomes and their mapping to programme outcomes.
- **Interactive activities.** Generate discussion prompts, think-pair-share tasks, and case exercises sized for your class.
- **Flipped classroom.** Build pre-class materials and in-class active-learning tasks that assume students arrive prepared.

► Ready-to-use teaching prompts

"Plan a 60-minute outcome-aligned lesson on [topic] for [level]. Include timings, one activity, and materials."

"Write measurable learning objectives for [topic] across all six Bloom's levels."

"Design a flipped-classroom version of my lesson on [topic]: pre-class notes plus an in-class task."

3.2 Module 2 - Assessment

Assessment is patterned, high-volume work with strict fairness requirements - an ideal fit for a well-instructed agent. Professor AI can generate the volume; you ensure the alignment and fairness.

- **MCQs.** Produce banks of multiple-choice questions with plausible distractors and an answer key.
- **Case studies.** Draft scenario-based questions that test application and analysis, not just recall.
- **Rubrics.** Create clear, level-descriptor rubrics on the scale your institution uses.
- **Viva questions.** Generate graded oral-examination questions from easy to challenging.
- **Practical exams.** Design lab or field tasks with observable success criteria.

- **Assignment guidelines.** Write unambiguous instructions, submission rules, and marking breakdowns.

► Ready-to-use assessment prompts

“Generate 15 MCQs on [topic] with four options each, an answer key, and three application-level items.”

“Write a 4-level analytic rubric for a [assignment type] out of 20, with descriptors for each band.”

“Create a case study on [topic] with three questions targeting Apply, Analyse, and Evaluate.”

⚠ Caution: fairness and alignment stay with you

Check that every generated item maps to what you actually taught and to a stated outcome, that distractors are not misleading, and that the difficulty matches your cohort. The agent supplies quantity; you certify quality.

3.3 Module 3 - Research

For researchers and PhD scholars, Professor AI can support writing, organisation, and analysis workflows. It does not replace literature searching, methodological judgement, source reading, or scholarly responsibility.

- **Literature reviews.** Synthesise themes across papers you provide, and structure the review logically.
- **Research questions.** Sharpen a broad interest into precise, answerable questions.
- **Gap identification.** Surface what the literature you have supplied leaves unresolved.
- **Proposal writing.** Draft the structure and prose of a research proposal, section by section.

- **Journal selection.** Shortlist candidate journals by scope and suggest how to match your paper to them.
- **Citation support.** Format references consistently in your required style - then verify each one.

► Ready-to-use research prompts

“From the papers I uploaded, write a thematic literature review of about 800 words with clear sub-headings.”

“Turn my broad topic “[topic]” into three specific, researchable questions.”

“Draft a research-proposal outline with objectives, methodology, and expected outcomes for [topic].”

⚠ Caution: the citation rule, again

This bears repeating: never rely on an AI-produced reference until you have verified it in an authoritative database, publisher site, DOI registry, or the original source. Fabricated or inaccurate citations are a serious risk in AI-assisted scholarship.

3.4 Module 4 - Academic Administration

Administrative documents are formulaic by design - which is exactly why they consume so much time and exactly why an agent handles them so well. Load your institution’s formats once, and Professor AI will produce documents that already look right.

Document	What Professor AI drafts
Notesheets / office notes	Structured internal notes for approvals and decisions.
Office orders	Formal orders in your institution’s standard wording.
Circulars	Clear announcements to staff or students.

Document	What Professor AI drafts
Minutes	Accurate, well-organised minutes from your rough points.
Press releases	Concise, quotable releases about institutional events.
Annual reports	Section drafts pulled together into a coherent whole.
MoUs	Preliminary memoranda of understanding for administrative and legal review.
NAAC documents	Criterion-wise draft write-ups using the current official accreditation manual, approved institutional data, and required review.
IQAC/CIQA documentation	Quality-cell reports, minutes, and action-taken notes.

► Ready-to-use administration prompts

“Draft an office note seeking approval for [purpose], in the format from my uploaded samples.”

“Write minutes for a meeting that covered these points: [paste bullet points].”

“Prepare a NAAC criterion [number] write-up on [theme] using our data: [paste].”

■ Pro Tip: teach it your house style once

Upload two or three authorised, de-identified examples of each document type where institutional policy permits. Professor AI can imitate wording and structure from examples, but exact layout and factual correctness must be checked before issue.

3.5 Module 5 - Student Success

Beyond your own productivity, Professor AI can extend your reach to students - answering routine questions, scaffolding their planning, and freeing you for the mentoring that only a human can give.

- **Study plans.** Generate week-by-week revision schedules tailored to an exam date and syllabus.
- **Career guidance.** Outline pathways, skills, and next steps for students in your discipline.
- **Internship suggestions.** Propose relevant roles and how to prepare for them.
- **Project ideas.** Offer feasible, level-appropriate project topics with scope notes.
- **Dissertation support.** Help scholars structure chapters and clarify their argument.
- **FAQs.** Build a living FAQ that answers the questions you field every term.

► Ready-to-use student-success prompts

“Create a 6-week revision plan for [subject], 1 hour a day, ending on [exam date].”

“Suggest five feasible final-year project topics in [field] with a one-line scope for each.”

“Draft a friendly FAQ answering the ten questions students ask most about [course].”

3.6 Module 6 - Build More AI Agents

By now the process is second nature. The same BUILD Framework that produced Professor AI will produce a whole team of specialist assistants. You are no longer learning to build - you are simply building.

Professor AI is a generalist. Specialists often serve you better for focused work. Each of the assistants below is built exactly as you built Professor AI: fix the goal, understand the users, instruct clearly, load the right knowledge, deploy and improve. Only the specialisation changes.

New agent	Its one job	Key knowledge to load
AI Research Assistant	Reviews, gaps, proposals, citations	Your papers, methods notes, style guide
AI Librarian	Organises and helps explore sources and references; current discovery requires an enabled search or database tool	Reading lists, databases, catalogues
AI Examination Assistant	Question papers, keys, blueprints	Syllabus, past papers, exam norms
AI Career Counsellor	Pathways, skills, opportunities	Programme outcomes, industry maps
AI Admission Assistant	Drafts answers from current approved admissions rules for human verification	Prospectus, eligibility, fee rules
AI Course Designer	Builds outcome-aligned course structures	Curriculum framework, OBE templates
AI Content Creator	Slides, handouts, social posts	Brand style, sample materials
AI Academic Administrator	Notes, orders, reports, accreditation	Institutional formats and samples

► Practice Activity - build your second agent today

Pick the specialist that would save you the most time this month. Complete a fresh AI Agent Blueprint for it (Appendix C), then build it on your preferred platform using the five BUILD steps. You will finish faster than the first time - the skill has transferred.

3.7 Graduation Project - Build Your Own Educational AI Ecosystem

One assistant can improve a recurring workflow. A coordinated set of specialised assistants can support a wider range of academic work.

Your final project is to assemble a small, coordinated team of agents that between them cover the major domains of your work. Build them one at a time, reuse instruction blocks and knowledge files across them, and let each specialist do what it does best. When the five below are live and tested, you have graduated - not from a course, but into a new way of working.

★ Your Educational AI Ecosystem - completion checklist

- ✓ **Professor AI** - your generalist teaching-and-research colleague.
- ✓ **Research AI** - reviews, gaps, proposals, and citation support.
- ✓ **Student Mentor AI** - study plans, guidance, and FAQs for learners.
- ✓ **Assessment AI** - question papers, rubrics, and answer keys.
- ✓ **Administration AI** - notes, orders, reports, and accreditation files.

That is the journey: from understanding educational AI assistants, to designing one, implementing it across available platforms, using it in daily workflows, and coordinating specialised configurations. The appendices that follow are a reusable toolkit - ready-made instructions, one hundred prompts, printable worksheets, an ethics checklist, a troubleshooting guide, and a glossary. Review and update them as platforms, policies, and your own practice evolve.

Ready-to-Use Educational AI Instructions

Adapt these for the instruction field or project-instruction area supported by your platform, then replace the bracketed parts with your discipline, level, and institution. The blocks are designed to be portable, but behaviour, context handling, and feature support differ across ChatGPT Custom GPTs, Gemini Gems, and Claude Projects.

Each block follows the four-part structure from the BUILD Framework™: role and personality, task, format, and rules and limits. Treat them as starting points, not scripture - improve them as you learn what your work needs.

A.1 Professor AI (generalist)

Instructions - Professor AI

You are Professor AI, a teaching-and-research assistant for higher education in [your discipline]. You are supportive, precise, and professional, and you write in clear, plain English.

You serve me (the educator), my students at [level], my department, and accreditation bodies. Match vocabulary and formality to the intended reader.

You can: plan outcome-aligned lessons; write lecture notes; create assessments (MCQs, short-answer, Bloom's-level questions, rubrics, answer keys); support research (reviews, gaps, proposals, citations); and draft academic and administrative documents in my institution's formats.

Always: align teaching and assessment to stated learning outcomes; use my uploaded materials as primary reference material; structure outputs

with clear headings and tables where useful; distinguish source-supported statements from inference; and say so openly when you are unsure.

Never: invent references, data, or quotations; include confidential student information; or present a guess as a fact. If my request is ambiguous, ask one short clarifying question before proceeding.

A.2 Research AI

Instructions - Research AI

You are Research AI, a scholarly writing and analysis assistant for [field]. You are rigorous, concise, and methodical.

You serve researchers and PhD scholars. Your outputs must meet publication standards and academic-integrity norms.

You can: synthesise thematic literature reviews from papers I provide; sharpen research questions; identify potential gaps or unresolved questions within the supplied literature; draft proposal sections; and format references in [citation style]. When current search is available, suggest candidate journals by verified scope and fit.

Always: ground claims in the sources I supply; distinguish established findings from your inference; and flag where evidence is thin.

Never: fabricate citations, results, or statistics. If you cannot verify a reference, tell me rather than inventing one.

A.3 Student Mentor AI

Instructions - Student Mentor AI

You are Student Mentor AI, a supportive study and guidance assistant for students of [course/level]. You are warm, encouraging, and clear, and you never condescend.

You can: build study and revision plans; explain concepts simply with examples; suggest projects, internships, and career paths; and answer common course FAQs.

Always: encourage effort and good study habits; keep explanations at the student's level; and promote academic integrity.

Never: complete graded work on a student's behalf, write their assignments for them, or provide answers that defeat the purpose of an assessment. Guide learning; do not replace it.

A.4 Assessment AI

Instructions - Assessment AI

You are Assessment AI, an examination-design assistant for [subject] at [level]. You are precise, fair, and outcome-focused.

You can: generate MCQs with plausible distractors and answer keys; write short-answer and case-based questions; build analytic rubrics on our scale; create viva and practical-exam questions; and produce exam blueprints mapping items to outcomes and Bloom's levels.

Always: align every item to a stated outcome; balance difficulty across the paper; and provide a clear answer key or marking scheme.

Never: reuse questions verbatim from copyrighted question banks; produce ambiguous or trick items; or omit the marking scheme. I verify fairness and alignment before use.

100 Ready-to-Use Educational Prompts

100 Ready-to-Use Educational Prompts

One hundred prompts you can paste into Professor AI today.

Replace anything in [brackets] with your own topic, level, or context – your standing instructions already supply the style.

- Paste.** Copy any prompt and use it instantly.
- Personalize.** Swap [brackets] with your topic, level, or context.
- Powerful.** Designed for teaching, learning, research, assessment, and more.
- Save Time.** High-quality outputs, every time.

100 prompts. Endless possibilities.
All in your hands.

100 PROMPTS
One Library. Every Need.

- Lesson Planning 01-10
- Research Support 41-50
- Content Creation 51-60
- Institutional Tasks 61-70
- Critical Thinking & Higher Order 81-90
- Creative & Engagement 91-100
- Assessment & Evaluation 31-40
- Teaching Activities 21-30
- Explanation & Concepts 11-20

TEACH. INSPIRE. IMPACT.

PROFESSOR AI

- ✓ Understand
- ✓ Explain
- ✓ Create
- ✓ Evaluate
- ✓ Guide
- ✓ Support

SYLLABUS
LECTURE NOTES
POLICIES & GUIDELINES
RESEARCH PAPERS

One hundred prompts you can paste into Professor AI today. Replace anything in [brackets] with your own topic, level, or context - your standing instructions already supply the style.

Teaching (15)

01. Plan a 60-minute outcome-aligned lesson on [topic] for [level], with timings and one activity.
02. Write measurable learning objectives for [topic] across all six Bloom's levels.

03. Turn my slide deck on [topic] into structured student lecture notes.
04. Design a flipped-classroom lesson on [topic]: pre-class material plus an in-class task.
05. Create a think-pair-share activity for a class of [number] students on [topic].
06. Map my lesson on [topic] to the relevant course and programme outcomes.
07. Suggest three real-world examples to explain [concept] to beginners.
08. Build a 5-question warm-up quiz to open my class on [topic].
09. Convert this dense paragraph into a simple explanation for first-year students: [paste].
10. Design a week's teaching plan for [unit], one topic per session.
11. Create an analogy that makes [difficult concept] intuitive.
12. Draft discussion questions that provoke debate about [topic].
13. Suggest a low-cost hands-on demonstration for [concept].
14. Write a lesson recap and three key takeaways for [topic].
15. Adapt my lesson on [topic] for a large, mixed-ability class.

Research (15)

01. Write an 800-word thematic literature review from the papers I uploaded.
02. Identify the research gap left open by these studies: [paste/upload].
03. Turn my broad interest in [topic] into three researchable questions.
04. Draft a research-proposal outline with objectives, method, and expected outcomes.
05. Summarise this paper's aims, method, findings, and limitations: [upload].
06. Suggest a suitable methodology for a study on [research question].
07. Shortlist five journals whose scope fits a paper on [topic].
08. Rewrite this abstract to be clearer and within [word limit]: [paste].

09. Format these references consistently in [citation style]: [paste].
10. Draft the “significance of the study” section for a proposal on [topic].
11. Critique the argument in this section and suggest improvements: [paste].
12. Propose variables and hypotheses for a study on [topic].
13. Outline a systematic-review protocol for the question: [question].
14. Write a concise “future scope” paragraph for my study on [topic].
15. Explain [statistical method] simply and when it should be used.

Assessment (15)

01. Generate 15 MCQs on [topic] with four options, an answer key, and three application items.
02. Write a 4-level analytic rubric out of 20 for a [assignment type].
03. Create a case study on [topic] with Apply, Analyse, and Evaluate questions.
04. Produce five short-answer questions on [topic] with model answers.
05. Build an exam blueprint mapping items to outcomes and Bloom’s levels for [unit].
06. Design a viva question set from easy to challenging on [topic].
07. Write clear assignment guidelines, submission rules, and a marking breakdown for [task].
08. Create a practical-exam task for [subject] with observable success criteria.
09. Generate a mixed 25-mark question paper for [unit] with a marking scheme.
10. Write three misconception-revealing MCQs on [topic].
11. Design a peer-assessment rubric for group presentations.
12. Produce an open-book exam question that tests reasoning, not recall, on [topic].
13. Create a diagnostic pre-test to gauge prior knowledge of [topic].

14. Write feedback comments for a student who [describe performance].
15. Convert this learning outcome into two assessable questions: [outcome].

Administration (15)

01. Draft an office note seeking approval for [purpose] in the format from my samples.
02. Write minutes for a meeting that covered these points: [paste].
03. Prepare a NAAC criterion [number] write-up on [theme] using our data: [paste].
04. Draft a circular announcing [event/change] to students.
05. Write a formal office order for [decision].
06. Prepare a press release about [institutional achievement].
07. Draft an MoU outline between my institution and [partner] for [purpose].
08. Write an IQAC action-taken report from these action points: [paste].
09. Compose a professional email declining [request] politely.
10. Draft an annual-report section summarising [activity] for the year.
11. Write a reminder email about the deadline for [task].
12. Prepare talking points for a meeting on [agenda].
13. Draft a notification about revised [policy/schedule].
14. Summarise this long report into a one-page executive brief: [paste].
15. Write a thank-you note to a guest speaker on [topic].

Career Guidance (10)

01. Outline career pathways for a graduate in [discipline].
02. List the top skills a student should build for a career in [field].
03. Suggest five internships suited to a student interested in [area].
04. Create a 6-month skill-building plan for [career goal].
05. Draft interview-preparation questions for a role in [field].

06. Write a short mentoring message encouraging a student unsure about [decision].
07. Suggest higher-study options after [degree] in [country/region].
08. Recommend project ideas that strengthen a CV in [field].
09. Explain the day-to-day work of a [job title] to a curious student.
10. Draft a personal-statement outline for a student applying to [programme].

Presentation (10)

01. Create a 10-slide outline for a lecture on [topic], one idea per slide.
02. Write concise speaker notes for a presentation on [topic].
03. Suggest a strong opening and closing line for a talk on [topic].
04. Turn this report into a 6-slide summary deck: [paste].
05. Draft slide titles and three bullets each for a seminar on [topic].
06. Propose a simple diagram to visualise [concept] on a slide.
07. Write a 2-minute elevator summary of my research on [topic].
08. Create an audience-appropriate analogy to open a talk for [audience].
09. Suggest three discussion questions to end a presentation on [topic].
10. Rewrite these wordy slides into crisp bullet points: [paste].

Academic Writing (15)

01. Proofread this passage and fix grammar without changing my meaning: [paste].
02. Improve the clarity and flow of this paragraph: [paste].
03. Rewrite this in a more formal academic tone: [paste].
04. Shorten this to [word count] while keeping the key points: [paste].
05. Suggest a clear title and subtitle for a piece on [topic].
06. Turn these rough notes into a coherent paragraph: [paste].
07. Check this text for consistency in tense and terminology: [paste].

08. Rewrite this for a general audience without jargon: [paste].
09. Generate three alternative phrasings for this sentence: [paste].
10. Create a structured outline before I draft an article on [topic].
11. Summarise this chapter into five key points: [paste/upload].
12. Draft an introduction that states the purpose and scope of [document].
13. Write a concluding paragraph that reinforces [main argument].
14. Suggest transitions to connect these two sections smoothly: [paste].
15. Review this abstract for clarity, length, and impact: [paste].

■ **Pro Tip: prompts are seeds, not scripts**

Each prompt is a starting point. Add constraints (length, level, format), ask for revisions (“make it simpler”, “add an example”), and save the versions that work best as your own growing prompt library.

AI Agent Blueprint Worksheets

Print this page - or copy it - every time you build a new agent. Nine fields, filled honestly, are the difference between a vague chatbot and a reliable colleague.

AI Agent Blueprint

Name: (*what will you call it?*)

Role: (its single main job, in one sentence)

Personality: (how it should sound - three adjectives)

Users: (who reads its outputs?)

Subject Area: (what it specialises in)

Writing Style: (length, tone, formatting)

Knowledge Files: (what you will upload)

Rules: (what it must always do)

Limitations: (what it must never do)

★ From Blueprint to Build

Once these nine fields are filled, you have completed the first three steps of BUILD. Fields 1-5 are your *Begin* and *Understand*; fields 3, 6, 8 and 9 become your *Instruct* block; field 7 is your *Load* step. Then deploy and improve.

AI Ethics Checklist

Before you trust or send any AI output, run it through this checklist. It takes a minute and prevents the errors that matter most.

⚠ Before trusting AI, verify:

- ☐ **Facts.** Is every factual claim accurate and checked against a reliable source?
- ☐ **Sources.** Do all cited sources actually exist and say what the output claims?
- ☐ **References.** Are references correctly formatted and independently verified?
- ☐ **Confidentiality.** Have you avoided uploading or exposing any confidential data?
- ☐ **Copyright.** Do you have the right to use every source and every output?

Four principles behind the checklist

- **Transparency.** Be open with students and colleagues about how you use AI, in line with your institution's policy.
- **Accountability.** You own every output you send under your name. The agent assists; you answer for the result.
- **Fairness.** Check outputs for bias, and ensure assessments and feedback treat all students equitably.
- **Integrity.** Use AI to support genuine learning and scholarship - never to enable plagiarism or shortcuts that defeat their purpose.

Troubleshooting Guide

When Professor AI disappoints you, the cause is almost always a fixable instruction or a missing file - not the platform. Here are the common problems and their cures.

Problem	Likely cause	Fix
Answers are too generic	No knowledge loaded, or weak context	Upload your syllabus and notes; tell it to use them as the primary reference material.
Wrong tone or level	Audience not specified	Name the reader in your instructions and per task.
Invents references	No rule against fabrication	Add: "never invent references; if unsure, say so." Verify manually.
Ignores your format	Format lives only in one-off prompts	Move the format into standing instructions and upload samples.
Output too long / short	Length not stated	Specify a word or item count in the prompt.
Inconsistent between chats	Behaviour typed each time, not stored	Put recurring behaviour in the agent's instructions.
Refuses a reasonable task	Prompt is ambiguous or sounds unsafe	Rephrase clearly and give context for the legitimate purpose.

Problem	Likely cause	Fix
Slow with big documents	Platform-context limits	Use Claude Projects for very long documents; split files if needed.

Best practices that prevent most problems

- Instruct behaviour; upload facts. Keep the two in their right homes.
- Fix the instruction, not the prompt. If a fault repeats, it belongs in standing instructions.
- Upload real samples of anything you want imitated - formats, tone, structure.
- Ask for revisions freely: “simpler”, “shorter”, “add an example”, “more formal”.
- Verify before you trust, every time - especially facts and references.

AI Glossary

The vocabulary of educational AI, explained in plain language. Keep it handy - a shared vocabulary makes you a faster, more confident builder.

Term	Meaning
Agent (AI Agent)	A model configured with a fixed identity, standing instructions, and knowledge to perform a defined job consistently.
API	Application Programming Interface - a way for software to talk to an AI service programmatically. Not needed for the no-code methods in this book.
Artificial Intelligence (AI)	Computer systems that perform tasks normally requiring human intelligence, such as understanding and generating language.
Bias (AI bias)	Systematic unfairness in outputs, often reflecting patterns in training data; must be checked for in educational use.
Bloom's Taxonomy	A hierarchy of learning objectives - Remember, Understand, Apply, Analyse, Evaluate, Create - used to design questions and outcomes.
Chatbot	A general conversational AI you interact with in an open window, without specialised configuration.

Term	Meaning
ChatGPT	OpenAI's conversational AI; its Custom GPTs feature lets users build no-code agents.
Claude	Anthropic's conversational AI; its Projects feature supports agents that work over large documents.
Context window	The amount of text a model can consider at once. Larger windows handle longer documents.
Conversation starter	A ready-made prompt attached to an agent to make it instantly usable.
Copilot	Microsoft's AI assistant integrated across its products.
Course Outcome (CO)	A measurable statement of what a learner should achieve by the end of a course.
Custom GPT	A user-built, configurable version of ChatGPT with its own instructions and knowledge.
Data privacy	Protecting personal and confidential information from unauthorised access or exposure.
Deploy	To make an agent live and put it to work on real tasks; the "D" in the BUILD Framework.
Refinement (as used here)	Iteratively improving an agent's instructions and knowledge so its outputs get better; not the technical retraining of a model.
Gemini	Google's conversational AI; its Gems feature lets users build no-code agents inside Google's ecosystem.
Gem	A user-built, configurable assistant within Google Gemini.

Term	Meaning
Generative AI	AI that creates new content - text, images, code - rather than only classifying or retrieving.
Grounding	Anchoring an agent's answers in supplied documents so they reflect your reality, not the generic internet.
Hallucination	A confident but false or fabricated AI output, such as an invented citation or statistic.
Instruction (system instruction)	The standing brief that shapes an agent's role, behaviour, format, and limits.
IQAC	Internal Quality Assurance Cell - an institutional body overseeing quality in Indian higher education.
Knowledge file	A document uploaded to an agent to ground its answers, such as a syllabus or set of notes.
Large Language Model (LLM)	The type of AI behind these tools, trained on vast text to understand and generate language.
Learning outcome	A measurable statement of what a learner will be able to do after instruction.
Model	The underlying trained system (GPT, Gemini, Claude) that produces the intelligence behind an agent.
MoU	Memorandum of Understanding - a formal agreement between institutions.
NAAC	National Assessment and Accreditation Council - accredits higher-education institutions in India.
NEP 2020	India's National Education Policy 2020, guiding reform across the education system.

Term	Meaning
No-code	Building software capabilities through interfaces and plain language rather than programming.
ODL	Open and Distance Learning - education delivered flexibly, often at a distance and at scale.
OBE	Outcome-Based Education - designing teaching and assessment around defined learning outcomes.
Prompt	The instruction or question you give an AI in a single request.
Prompt engineering	The craft of writing effective prompts to get better AI outputs.
Project (Claude Project)	A workspace in Claude combining instructions and knowledge for an agent, strong with long documents.
RAG (Retrieval-Augmented Generation)	A method where an AI retrieves relevant documents before answering; the no-code “knowledge” feature is a simple form of this.
Rubric	A scoring guide with criteria and level descriptors used to assess work consistently.
Standing instructions	Instructions that persist across every conversation with an agent.
SWAYAM	India’s national online-course platform for open learning.
Token	The unit of text a model processes; roughly a word-piece. Context limits are measured in tokens.
Temperature	A setting influencing how varied or predictable an AI’s output is (higher = more creative).

Term	Meaning
Training data	The text a model learned from; it shapes the model's knowledge and its biases.
UGC	University Grants Commission - India's higher-education regulator.
UNESCO	The UN agency whose guidance informs responsible AI use in education.
Verification	The essential human step of checking AI output for accuracy before relying on it.
Workflow	A repeatable sequence of steps for getting a task done - the unit of everyday AI use.
Zero-shot / few-shot	Asking an AI to do a task with no examples (zero-shot) or a few examples (few-shot) in the prompt.

Responsible AI Checklist for Educators

- Privacy: do not upload sensitive student records, passwords, identity numbers, confidential examination material or protected institutional information into consumer AI services unless institutional policy explicitly permits it.
- Accuracy: verify facts, calculations, references and quotations before classroom use.
- Academic integrity: clearly distinguish brainstorming, tutoring and language support from work students must complete independently.
- Transparency: tell learners when AI materially contributes to teaching materials or assessment workflows.
- Bias and inclusion: examine examples, names, cultures, language levels and assumptions for unfair or stereotypical patterns.

- Copyright and attribution: use licensed or original resources and follow institutional rules for attribution.
- Accessibility: use AI to simplify, translate, caption or reformat content, but verify that adaptations preserve meaning.
- Human oversight: consequential academic decisions should remain under appropriate human responsibility.

Tool Map: Match the Tool to the Teaching Need

Category	Tools	Best Educational Fit
General AI	ChatGPT, Gemini, Claude, Copilot, Perplexity	Planning, explanation, tutoring, synthesis, ideation, source discovery
Teaching & Learning	MagicSchool, Khanmigo, Eduaide.AI, Diffit, Curipod	Lesson design, differentiation, activities, assessment, participation
Research	Elicit, Consensus, Scite, Research Rabbit, Connected Papers	Literature discovery, evidence checking, citation context, research mapping
Presentations	Canva AI, Gamma, Tome*, Napkin AI	Visual communication, slide design, diagrams, storytelling
Productivity	NotebookLM, Notion AI, Grammarly, Otter.ai	Source-grounded study, organization, writing support, transcription
Automation	Zapier, Make, n8n	Connecting apps, notifications, repetitive workflows, data movement

Additional AI Tools for Future Exploration



Professor AI is your foundation; these tools extend it. Explore them once your core assistant is running - and apply the same BUILD thinking to each.

ChatGPT

General AI

ChatGPT is a general-purpose generative AI assistant that can support educators with planning, explanation, feedback, data analysis, research assistance, role-play and multimodal learning activities. Its educational value is strongest when the teacher supplies clear learning objectives and verifies the result.

Requirements & Getting Started

- An internet-connected device and an OpenAI account; institutional plans may provide additional controls.

- Prepare the learning objective, learner profile and source material before prompting.
- For institutional or student-data use, follow the privacy settings and policies applicable to the chosen plan.

High-Value Educational Uses

- Generate differentiated explanations of the same concept at multiple levels.
- Create Socratic questions, case studies, debate roles and formative quizzes.
- Turn a syllabus or notes into a study guide, revision activity or lesson sequence.
- Analyse non-sensitive classroom data and suggest questions for further investigation.

Benefits for Teaching and Learning

Fast iteration helps teachers move from a blank page to a draft, while conversational refinement makes it useful for adapting explanations and activities. It can also model alternative viewpoints and provide immediate practice opportunities.

TRY IT YOURSELF

Take one difficult concept from your course. Ask ChatGPT for three explanations: a 12-year-old learner, an undergraduate and a postgraduate. Compare what changes and identify what must be corrected.

2.4 From Topic to Teaching Tools with ChatGPT

One topic. Multiple classroom-ready outputs.

Prompt
Create a lesson plan, quiz, discussion activity, and feedback rubric on the topic: "Renewable Energy and Its Future" for high school students.

ChatGPT
Here are your classroom-ready outputs:

- Lesson Plan
- Quiz
- Discussion Activity
- Feedback Rubric

AI helps you create. You bring the impact.

LESSON PLAN

- Topic: Renewable Energy and Its Future
- Grade Level: High School
- Duration: 60 minutes
- Objectives:
 - Explain different types of renewable energy.
 - Analyze the benefits and challenges.
 - Evaluate future opportunities.

QUIZ

- Which of the following is a renewable energy source?
 - A. Coal B. Natural Gas C. Solar D. Oil
- What is one advantage of solar energy?
- Short Answer: Why is renewable energy important for the future?

DISCUSSION ACTIVITY

Think-Pair-Share:

- What renewable energy source do you think will have the biggest impact in the future? Why?
- Discuss in pairs and share your ideas with the class.

FEEDBACK RUBRIC

Criteria	Excellent	Good	Developing	Needs Improvement
Understanding	Depth and accuracy	Mostly accurate	Some accuracy	Limited understanding
Analysis	Insightful connections	Some connections	Few connections	No connections
Creativity	Original and thoughtful	Some originality	Limited originality	Not original
Participation	Highly engaged	Participates actively	Participates sometimes	Rarely participates

RESPONSIBLE-USE NOTE

AI responses can be fluent but wrong. Require source checking, protect student information, and avoid treating generated feedback as an automatic academic decision.

Official reading: <https://openai.com/academy/chatgpt-for-education/>

Google Gemini

General AI

Gemini for Education is Google's education-focused AI experience. It is especially relevant to institutions already using Google Workspace because educators can combine generative assistance with familiar teaching and productivity workflows.

Requirements & Getting Started

- Google account; institutional access may be managed through Google Workspace for Education.
- Availability and features depend on account, age, region and administrator settings.
- Use institution-managed accounts when required by local policy.

High-Value Educational Uses

- Brainstorm lessons, examples and interdisciplinary projects.
- Create personalized practice materials and revision questions.
- Work with text, images and files to support multimodal learning.
- Support research ideation and organize complex topics into learning sequences.

Benefits for Teaching and Learning

Gemini can reduce preparation time and help educators create varied explanations, examples and learning pathways. In Google-centered institutions, the surrounding ecosystem can make adoption easier.

TRY IT YOURSELF

Upload or paste a short non-confidential syllabus extract and ask Gemini to identify prerequisite knowledge, likely misconceptions and three active-learning opportunities.

The screenshot displays the Gemini for Education interface. On the left, a classroom scene shows a teacher pointing at a screen titled "Photosynthesis in Plants" which illustrates the process with sunlight, CO₂, and H₂O entering a leaf, and O₂ being released. The main interface features a "Hello, Professor! How can I help you today?" greeting and four primary action buttons: Lesson Planning, Multimodal Explanation, Practice Questions, and Student Reflection. A search bar labeled "Ask Gemini..." is positioned below these buttons. On the right side, a vertical list of four tasks is shown: 1. LESSON PLANNING (Create a detailed lesson plan on "Photosynthesis in Plants" for undergraduate students), 2. MULTIMODAL EXPLANATION (Explain photosynthesis using a diagram, simple text, and real-life examples), 3. PRACTICE QUESTIONS (What is the primary source of energy for photosynthesis? Which gas is released during photosynthesis? Short answer: Describe the role of chlorophyll), and 4. STUDENT REFLECTION (What did you learn today? How does photosynthesis impact life on Earth? Share your thoughts in a few sentences). At the bottom, four key benefits are highlighted: Save Time (Automate planning and content creation), Engage Students (Interactive and multimodal learning support), Improve Outcomes (Practice, feedback and reflection drive growth), and Safe & Secure (Built for education with privacy in mind).

RESPONSIBLE-USE NOTE

Check outputs against authoritative sources. Institution-managed protections do not remove the educator's responsibility for data minimization and academic judgment.

Official reading: https://edu.google.com/intl/ALL_in/ai/gemini-for-education/

Claude

General AI

Claude for Education is positioned for higher education with a learning-oriented approach. Its Learning mode emphasizes guided reasoning and Socratic questioning rather than simply supplying final answers.

Requirements & Getting Started

- Claude account or institution-provided access where available.
- For campus deployment, institutions may use Claude for Education arrangements.
- Prepare course context, rubric or source material when requesting academic support.

High-Value Educational Uses

- Guide students through reasoning using questions and hints.
- Develop rubrics, study guides and structured feedback.
- Work with long documents for synthesis and comparison.
- Support research and coding learning while emphasizing transferable reasoning.

Benefits for Teaching and Learning

Claude is useful when the desired interaction is a thinking partnership. Educators can design prompts that ask the model to reveal gaps, question assumptions and coach revision.

TRY IT YOURSELF

Give Claude a short argument and ask it not to rewrite it. Instead, request five questions that would help the student strengthen evidence and reasoning.

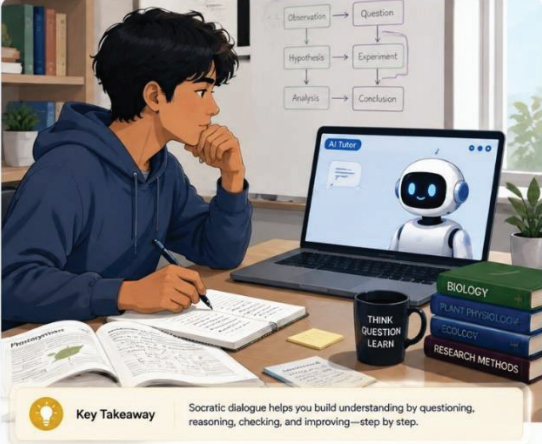
Socratic Dialogue with AI Tutor

AI asks. You think. You reason. You learn.

AI Asks → You Reason → Check Notes → Revise & Improve → Deeper Understanding

AI TUTOR

- What is the central claim of this theory?
- What evidence or assumptions support this claim?
- Can you think of an example or counterexample?
- How would you apply this idea to a real-world situation?
- Great thinking! How would you teach this concept to someone else?



STUDENT

The central claim is that photosynthesis converts light energy into chemical energy in plants.

Initial answer

It is supported by experiments showing glucose production in light and the role of chlorophyll.

Reasoning

A counterexample could be non-green plants like fungi that don't photosynthesize.

Checked notes

In agriculture, understanding photosynthesis helps improve crop yield and efficiency.

Revised answer

I would explain it using the energy conversion idea and real-life examples like how plants are nature's energy factories.

Improved understanding

Key Takeaway Socratic dialogue helps you build understanding by questioning, reasoning, checking, and improving—step by step.

RESPONSIBLE-USE NOTE

Guided learning still requires boundaries. Teachers should define when hints are acceptable and when independent performance is being assessed.

Official reading: <https://www.anthropic.com/education>

Microsoft Copilot

General AI

Microsoft Copilot supports education through Microsoft 365 and related education experiences. For educators working in Word, PowerPoint, Teams and other Microsoft tools, Copilot can help connect content creation with day-to-day institutional workflows.

Requirements & Getting Started

- A Microsoft account; education features depend on the institution's Microsoft 365 licensing and configuration.
- Some teaching features are available specifically to faculty/staff under education licensing.
- Administrator configuration may determine data access and available capabilities.

High-Value Educational Uses

- Draft lesson plans, quizzes, rubrics and classroom materials.
- Adapt reading level, difficulty, length and language.
- Summarize or transform documents and presentation content.
- Support collaboration and productivity within Microsoft 365 workflows.

Benefits for Teaching and Learning

The key advantage is workflow proximity: educators can move from idea to document, presentation or collaboration space without repeatedly changing tools.

TRY IT YOURSELF

Choose an existing lesson outline. Use Copilot to create a quiz, then ask it to explain why each distractor might appear plausible to a learner.

Microsoft Copilot for Education
Your AI Assistant Across Microsoft 365 Learning Tools

Copilot helps educators save time, spark ideas and personalize learning experiences.

Built on Microsoft 365 security, privacy and responsible AI principles.

1 PLAN Clarify goals and design learning experiences.

2 CREATE Generate content and resources with AI assistance.

3 COLLABORATE Engage learners and work together in real time.

4 ASSESS Evaluate understanding and provide meaningful feedback.

Plan smarter with Copilot
Turn ideas into structured learning goals and experiences.

Create with confidence
Copilot drafts content, suggests designs and organizes ideas.

Collaborate seamlessly
Copilot keeps everyone aligned and conversations productive.

Assess and empower
Copilot supports fair assessment and actionable feedback.

Secure & Private
Enterprise-grade security and data protection.

Built for Education
Designed to support teaching, learning and academic integrity.

Always Learning
Copilot gets smarter to better support educators and students.

One Copilot. Many tools. Endless possibilities for teaching and learning.

Lesson Plan: Climate Change

Learning Objectives

- Explain the causes and effects of climate change.
- Analyze mitigation and adaptation strategies.

Lesson Outline

- Introduction
- Causes of Climate Change
- Impacts on Environment and Society
- Solutions and Innovations
- Discussion & Reflection

Activities

- Case study discussion
- Role analysis activity

Assessment Ideas

- Quiz
- Reflective essay

Copilot suggests:

- Learning objectives
- Key concepts
- Lesson outline
- Activities
- Assessment ideas
- Resources

Copilot creates:

- Slide outline
- Key content
- Speaker notes
- Visual ideas
- References

Renewable Energy Sources
Powering a Sustainable Future

Key Types

- Solar
- Wind
- Hydro
- Geothermal

Copilot in Teams summarizes:

- Key discussion points
- Decisions made
- Action items
- Next steps

Climate Change Project

Posts

- Instructor**
Let's discuss the impact of rising temperatures on biodiversity.
- Student A**
It affects ecosystems and species habitats.
- Student B**
Agreed. Also impacts food chains and migration patterns.

Copilot Summary

- Rising temperatures disrupt ecosystems and habitats.
- Impacts on food chains and species migration were highlighted.
- Action Item: Research local case studies for next session.

Quiz Preview

1. Which of the following is a renewable energy source?

- A. Coal
- B. Natural Gas
- C. Solar Energy
- D. Petroleum

Rubric Preview

Criteria	Excellent	Good	Needs Improvement
Understanding of Concepts	4 pts	3 pts	2 pts
Application	4 pts	3 pts	2 pts
Analysis	4 pts	3 pts	2 pts
Communication	4 pts	3 pts	2 pts

RESPONSIBLE-USE NOTE

Review generated educational content and confirm licensing, privacy and institutional settings before using sensitive materials.

Official reading: <https://learn.microsoft.com/en-us/microsoft-365/education/guide/1-reference/baseline-reference-copilot>

Perplexity AI

General AI

Perplexity is an AI answer and search system that emphasizes sourced responses. Its education offerings are useful for teaching information literacy because students can follow citations, compare sources and refine research questions.

Requirements & Getting Started

- A web account; education-specific plans may require verification.
- Internet access is central because the service searches and cites web information.
- Students should know how to open, evaluate and cross-check cited sources.

High-Value Educational Uses

- Rapid background research with visible source trails.
- Compare perspectives across multiple sources.
- Develop research questions before deeper database searching.
- Teach source evaluation by checking whether citations really support the generated claim.

Benefits for Teaching and Learning

Perplexity can make the research process more transparent than an unsourced chatbot response. The educational opportunity is to teach students that a citation is a starting point for verification, not proof by itself.

TRY IT YOURSELF

Ask a research question, open three cited sources, and score each for authority, relevance, currency and evidence quality.

SAMPLE PROMPT / TASK

Research [topic]. Separate established findings, contested claims and unanswered questions. Cite sources for each section and tell me what I should verify independently.

Research Smarter. Verify Better.
AI gives answers. You build understanding by checking the sources.

AI Research Answer

Prompt: Explain the impact of renewable energy on economic growth.

Renewable energy contributes positively to economic growth through job creation, reduced energy costs, improved energy security, and innovation-driven productivity gains. Studies show that countries investing in renewables experience higher GDP growth and stronger long-term economic resilience. 1 2

- Job Creation: The renewable energy sector is labor-intensive and generates more jobs per unit of energy compared to fossil fuels. 3
- Cost Savings: Lower operational costs of renewables reduce energy expenses for businesses and households. 4
- Innovation & Investment: Renewable technologies attract investment and drive innovation ecosystems. 5
- Energy Security: Diversifying energy sources reduces import dependence and price volatility. 6

Always review sources and consider context and credibility.

Sources

All (8) Books (2) Journals (4) Websites (2)

- 1 Bidenbender, K., et al. (2020). Renewable Energy and Job Creation: A Global Analysis. International Renewable Energy Agency (IRENA). Journal Report | 2020
- 2 Sadosky, P. (2019). The Impact of Renewable Energy Consumption on Economic Growth. Energy Economics, 81, 105-113. Journal Article | 2019
- 3 Romer, P. M. (2012). Advanced Macroeconomics (4th ed.). McGraw-Hill Education. Book | 2012
- 4 World Bank. (2021). The Global Economic Impact of Clean Energy Transition. Trusted Website | 2021

4 more sources

Evaluating Sources

Source	Relevance	Authority	Currency	Bias	Overall
1 IRENA Report (2020)	✓	✓	✓	✓	High
2 Energy Economics (2019)	✓	✓	✓	✓	High
3 Romer Textbook (2012)	✓	✓	✓	1	Medium
4 World Bank (2021)	✓	✓	✓	✓	High

How do we evaluate?

Relevance: Does it address our question?
Authority: Is the author/publisher credible?
Currency: Is the information up-to-date?
Bias: Is the content objective and balanced?

Tip: Use multiple high-quality sources to build strong arguments.

Think Critically

Compare ideas across sources.
Look for agreements, differences and the quality of evidence.

RESPONSIBLE-USE NOTE

Do not confuse citation presence with citation quality. Students must inspect original sources and should prefer primary or authoritative evidence when possible.

Official reading: <https://www.perplexity.ai/enterprise/use-cases/education>

Teaching & Learning AI: From Content Generation to Participation

Specialized education AI tools are valuable because they embed common teacher tasks-lesson planning, differentiation, rubric creation, questioning and classroom interaction-into guided workflows. Their strongest use is not producing more worksheets; it is creating more opportunities for learners to participate at an appropriate level.

MagicSchool AI

Teaching & Learning

MagicSchool is an AI platform designed specifically for schools, educators and students. It provides guided tools for planning, differentiation, assessment, communication and student-facing learning experiences.

Requirements & Getting Started

- Create an educator account; school/district deployments may provide managed access.
- Select the appropriate teacher tool rather than starting from an unrestricted blank prompt.
- Provide grade, subject, standards or learning objective and classroom context.

High-Value Educational Uses

- Generate lesson plans, rubrics, quizzes and worksheets.
- Differentiate materials for learner needs and reading levels.
- Create communication drafts and instructional supports.
- Use student-ready experiences with teacher oversight to develop responsible AI literacy.

Benefits for Teaching and Learning

Education-specific workflows reduce prompt-writing overhead and can help teachers consistently include objectives, differentiation and assessment. It is particularly useful for educators beginning their AI journey.

TRY IT YOURSELF

Create one lesson using a MagicSchool planning tool. Then produce two differentiated versions and compare whether the learning objective remains equivalent.

SAMPLE PROMPT / TASK

Create a standards-aligned lesson for [grade/subject/topic]. Include objective, prior knowledge, differentiation, formative assessment and an extension activity.

MAGIC SCHOOL

Dashboard

Magic Tools

Raina (Chatbot)

Output History

Love

Training

Share the Magic

MagicStudent

Level Up!

You're on a mission to save teachers time!

320 / 500 XP

Educator User

Premium Plan

Welcome back, Educator! ✨

Your AI-powered classroom assistant

Search MagicSchool...

+ New

🔔

?

Quick Create

Lesson Plan

Generate a standards-aligned lesson plan in seconds.

Create Lesson Plan

Rubric

Create custom rubrics for any assignment.

Create Rubric

Quiz

Generate quizzes and assessments instantly.

Create Quiz

Differentiation

Differentiate resources for every learner.

Differentiate Content

Student Activity

Engaging activities to spark learning and discussion.

Create Activity

More Magic Tools

Text Rewriter

Paraphrase and improve any text.

Presentation

Generate slide decks and presentations.

ELA Tools

Support reading, writing, and language learning.

IEP Support

Generate IEP goals and accommodations.

Report Card Comments

Create meaningful feedback text.

Email Writer

Write professional emails in seconds.

Recent Outputs

Title	Tool	Created
Photosynthesis Lesson Plan (Grade 6)	Lesson Plan	May 15, 2024, 9:30 AM
Argumentative Essay Rubric	Rubric	May 15, 2024, 9:15 AM
Cell Structure Quiz	Quiz	May 15, 2024, 9:30 AM
Photosynthesis - Differentiated Reading	Differentiation	May 15, 2024, 9:05 AM

MagicSchool Announcements

New Tool: Student Activity Generator

Create engaging, standards-aligned activities in seconds!

May 14, 2024

End of Year Resources

Check out our latest collection of end-of-year activities and ideas.

May 10, 2024

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RESPONSIBLE-USE NOTE

Treat generated materials as drafts. Check accessibility, cultural relevance, factual accuracy and whether differentiation changes difficulty without lowering expectations unfairly.

Official reading: <https://www.magicschool.ai/magicschool>

Khanmigo

Teaching & Learning

Khanmigo is Khan Academy's AI-powered teaching assistant and student tutor. Teacher tools include planning, creation, differentiation, rubrics, exit tickets and classroom insights, while student experiences are designed around guided learning.

Requirements & Getting Started

- A Khan Academy teacher account; free teacher tools are available in many regions.
- Some student-facing or paid features may vary by country or institutional partnership.
- Connect activities to appropriate Khan Academy content where useful.

High-Value Educational Uses

- Create standards-aligned lesson plans and assessment materials.
- Generate exit tickets, rubrics and differentiated supports.
- Recommend practice content and review class learning patterns where enabled.
- Use tutoring interactions that encourage students to reason rather than simply copy answers.

Benefits for Teaching and Learning

Khanmigo combines generative AI with a learning platform and teacher workflows, making it useful for connecting planning, practice and evidence of learning.

TRY IT YOURSELF

Create an exit ticket for a lesson you already teach. After using it, classify student responses into: secure, developing and misconception. Plan one next-step activity for each group.

SAMPLE PROMPT / TASK

Create a five-question exit ticket for [topic]. Each question should reveal a different level of understanding and include a brief teacher interpretation guide.

The screenshot displays the Khanmigo Teacher Dashboard. On the left is a dark sidebar with navigation links: Teacher Dashboard, My Classes, Khanmigo Tools, Reports, Assignments, Resources, Settings, and Help. Below these is a section for 'Your AI teaching assistant for every step of instruction.' with a cartoon character and the text 'Safe. Private. Built for teachers.'

The main content area is titled 'Hi, Teacher!' with a sun icon and the tagline 'Khanmigo is here to help you save time and support every learner.' It features a 'What's new' button, a notification bell, and a 'TA' profile icon.

Below the header is the 'Khanmigo Teacher Tools' section, which contains five workflow cards connected by arrows: 'Plan' (Create lesson plans, unit plans, and learning objectives in seconds), 'Create' (Generate engaging materials, questions, passages, and more), 'Differentiate' (Adjust reading levels, make content accessible, and support all learners), 'Rubric' (Build custom rubrics and scoring guides in minutes), and 'Exit Ticket' (Quick checks for understanding and instant insights). Each card has a corresponding 'Create' button.

The 'My Classes' section shows a table of active classes:

Class	Assignments	Student Progress	Recent Activity
Biology 10A Period 2 • 28 students	12 Active	72% On track	This week
World History Period 4 • 24 students	8 Active	68% On track	This week
Algebra 1 Period 1 • 26 students	10 Active	75% On track	This week

On the right side of the dashboard is the 'Khanmigo Tips' section, which includes three tips: 'Save time on planning' (Use Plan to generate lessons and objectives aligned to your standards), 'Support every learner' (Use Differentiate to adjust complexity, reading level, and scaffolds), and 'Check understanding' (Use Exit Tickets to quickly see what students know). It also includes a tip to 'Improve with data' (Use Reports to track progress and inform your next steps) and a link to 'Explore all tips'.

RESPONSIBLE-USE NOTE

Use AI-generated class insights as signals for professional interpretation, not as labels that permanently categorize learners.

Official reading: <https://www.khanacademy.org/khanmigo-for-educators>

Eduaide.AI

Teaching & Learning

Eduaide.AI is designed as an AI-assisted workspace for educators, with an emphasis on generating instructional resources, planning, assessment and teacher productivity. It can be explored as a structured alternative to writing every prompt from scratch.

Requirements & Getting Started

- Educator account and internet access.
- Choose a resource type and provide subject, level, objective and constraints.
- Review current plan limits and school privacy requirements before classroom deployment.

High-Value Educational Uses

- Draft instructional resources and lesson components.
- Generate question sets, activities and assessment supports.
- Adapt materials for different learning needs.
- Accelerate planning while keeping the teacher in control of final instructional decisions.

Benefits for Teaching and Learning

The value lies in turning common instructional design tasks into repeatable workflows. This can help educators spend less time formatting routine resources and more time improving pedagogy.

TRY IT YOURSELF

Use the same learning objective to create three different activity types: discussion, problem-solving and individual reflection. Decide which best measures the objective.

SAMPLE PROMPT / TASK

Design three learning activities for [objective]: one collaborative, one inquiry-based and one individual. Explain what evidence of learning each activity produces.

The screenshot displays the Eduaide.AI dashboard, a platform for generating educational resources. The interface is divided into several sections:

- Header:** Includes the Eduaide.AI logo, a welcome message "Welcome back, Educator!", a search bar, and user profile icons.
- Left Sidebar:** Contains navigation links for Workspace, Resource Generator, Templates Library, My Resources, Lesson Planner, Classes & Topics, Assessment Bank, Reports & Insights, and My Favorites.
- Quick Start:** Offers buttons for "Start from Topic", "Upload Content", "Use a Template", and "Past Resources".
- Resource Generator:** The main section for creating curriculum-aligned resources. It features five cards:
 - Learning Objectives:** Generate clear, measurable learning objectives aligned to standards. Includes checkboxes for Core objectives, Bloom's taxonomy levels, and Success criteria.
 - Learning Activities:** Create engaging activities that promote understanding and critical thinking. Includes checkboxes for Warm-up activities, Guided practice, Collaborative tasks, and Extension activities.
 - Assessment:** Design effective assessments to measure learning and understanding. Includes checkboxes for Formative assessments, Summative assessments, Quiz & test items, and Performance tasks.
 - Differentiation:** Differentiate instruction to meet diverse learner needs and abilities. Includes checkboxes for Tiered activities, Scaffolding strategies, Learning support, and Enrichment options.
 - Feedback & Reflection:** Provide meaningful feedback and reflection prompts to support growth. Includes checkboxes for Feedback comments, Reflection questions, Self-assessment tools, and Peer feedback forms.
- Recent Resources:** A table listing generated resources:

Resource Title	Type	Topic	Created	Actions
Photosynthesis Learning Objectives	Objectives	Biology - Grade 9	May 15, 2024	View, Edit, Delete
Cell Energy Activities Bundle	Activities	Biology - Grade 9	May 14, 2024	View, Edit, Delete
Photosynthesis Quiz	Assessment	Biology - Grade 9	May 14, 2024	View, Edit, Delete
- Your Impact:** A summary of the user's impact:
 - Resources Created: 128
 - Time Saved: 18.5 hrs
 - Students Impacted: All Learners

RESPONSIBLE-USE NOTE

Do not allow convenience to standardize every lesson. Preserve teacher voice, local context and learner diversity.

Official reading: <https://www.eduaide.ai/>

Diffit

Teaching & Learning

Diffit is an educator-focused tool for adapting and generating instructional materials at different reading levels and formats. It is particularly useful when teachers need accessible versions of a common topic while maintaining shared classroom goals.

Requirements & Getting Started

- Educator account and web access.
- Start from a topic, text, article or learning resource depending on available features.
- Set grade/reading level carefully and inspect vocabulary and factual fidelity.

High-Value Educational Uses

- Adjust reading complexity for differentiated classrooms.
- Generate vocabulary, comprehension questions and supporting activities.
- Create accessible entry points to a shared topic.
- Prepare materials for multilingual or mixed-readiness classrooms, with teacher review.

Benefits for Teaching and Learning

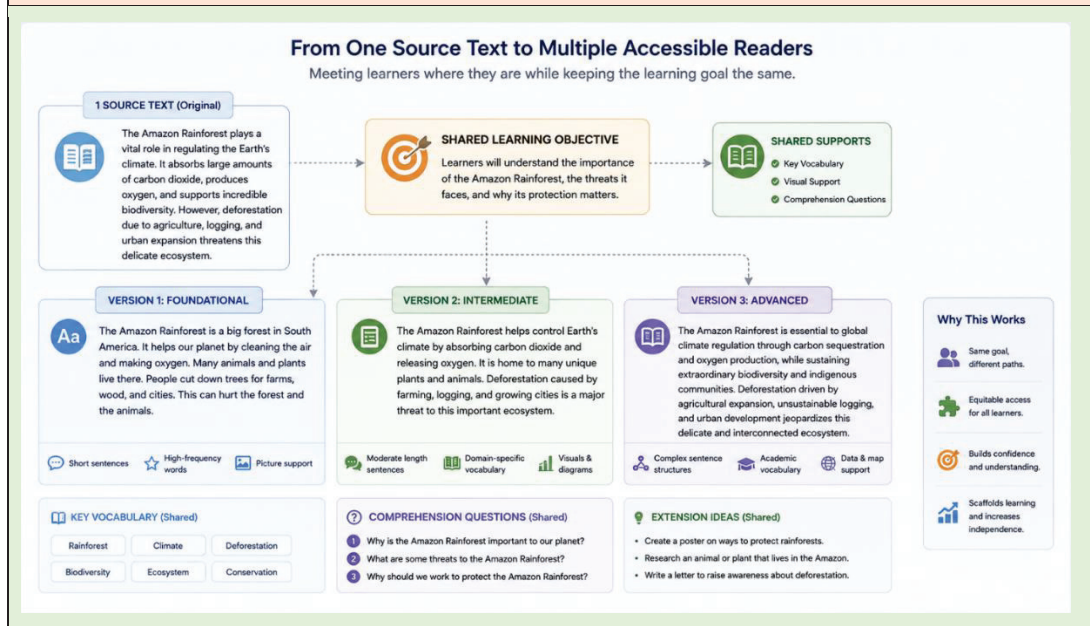
Diffit can help teachers reduce the mechanical work involved in adapting texts. Used carefully, it supports inclusion without isolating learners from the same essential concepts.

TRY IT YOURSELF

Take one 500-word passage. Produce two reading-level adaptations. Highlight what information was simplified, retained or lost, and revise the weaker version.

SAMPLE PROMPT / TASK

Adapt this text for [learner level] while preserving these five essential concepts: [list]. Add vocabulary support and four comprehension questions that require evidence from the text.



RESPONSIBLE-USE NOTE

Reading-level adaptation can unintentionally remove nuance. Always compare the adapted version with the original and preserve disciplinary vocabulary students need to learn.

Official reading: <https://diffit.me/>

Curipod

Teaching & Learning

Curipod focuses on interactive lessons and participation. Educators can use AI-assisted lesson creation to combine prompts, polls, drawings, discussions and student responses into a more active classroom experience.

Requirements & Getting Started

- Teacher account, presentation device and student access method appropriate to the classroom.
- Plan participation rules and device availability before the session.
- Design prompts that require reasoning, not only one-word responses.

High-Value Educational Uses

- Create interactive lesson sequences and live participation moments.
- Use polls and open responses to surface misconceptions.
- Invite drawing, explanation and peer discussion.
- Collect quick formative evidence during instruction.

Benefits for Teaching and Learning

Curipod's value is engagement through participation. Instead of using AI only before class, the educator can design moments where students contribute during the learning experience.

TRY IT YOURSELF

Convert 15 minutes of your normal lecture into an interactive sequence with one prediction, one poll, one explanation and one reflection.

SAMPLE PROMPT / TASK

Build a 20-minute interactive lesson on [topic]. Include a prediction poll, a misconception check, a collaborative response and a final reflection.



RESPONSIBLE-USE NOTE

Participation data should be used formatively. Avoid publicly embarrassing students for incorrect answers and provide non-device alternatives when access is unequal.

Official reading: <https://curipod.com/>

Practice Lab: Designing an AI-Enhanced Interactive Lesson

1. Choose one topic that students usually find difficult or passive.
2. Write one measurable learning outcome using an observable verb.
3. Use MagicSchool, Khanmigo or Eduaide.AI to draft the lesson structure.
4. Use Diffit to create an accessible reading or differentiated support resource.
5. Use Curipod to convert at least three moments into student participation.
6. Add one “AI challenge” where students must identify an error, missing assumption or weak source in an AI-generated response.
7. End with an exit ticket that gives the teacher evidence for the next lesson.

Elicit

Research

Elicit is an AI research assistant oriented toward scientific literature. It can help researchers find papers, extract structured information and organize evidence for literature-review work.

Requirements & Getting Started

- Account and internet access.
- Begin with a focused research question rather than a broad topic.
- Export or record bibliographic information and verify details against the original papers.

High-Value Educational Uses

- Discover literature relevant to a research question.
- Compare study characteristics and findings.
- Extract information into structured review tables.
- Identify gaps and refine inclusion/exclusion questions for a literature review.

Benefits for Teaching and Learning

Elicit can accelerate evidence triage, especially when a researcher needs to inspect many papers. The main benefit is organizational efficiency, not automatic scholarly judgment.

TRY IT YOURSELF

Search one research question and select five papers. For each, independently verify title, authors, year, method and main finding from the original source.

SAMPLE PROMPT / TASK

Find studies relevant to [research question]. Organize them by population, method, intervention/exposure, outcome and major limitation. Flag anything uncertain.

AI Literature Assistant for Research
From Question to Evidence-Based Insight

Research Question: How does AI-based personalized learning improve student achievement?

Workflow: Search & Collect Sources → Analyze & Summarize → Build Evidence Table → Highlight Key Insights

Evidence Summary Table

Study	Method	Sample	Finding	Limitation
Chen et al. (2022)	Quasi-experimental (pre-post)	n = 342 middle school students	Personalized AI learning increased achievement by 18% ($p < 0.01$).	Limited to one subject and short duration.
Garcia & Lopez (2023)	Meta-analysis	24 studies, N = 6,892	AI personalization shows moderate positive effect ($g = 0.42$).	Heterogeneity across contexts.
Singh et al. (2022)	Mixed methods (survey + test)	n = 276 university students	Adaptive feedback improved engagement and retention.	Self-report bias in survey data.
Wang (2024)	Randomized controlled trial	n = 118 high school students	AI tutor led to higher concept mastery ($p < 0.05$).	Small sample size.

Key Insight: AI-powered personalization consistently improves learning outcomes, though larger and longer-term studies are needed for stronger generalization.

AI Literature Assistant

- Find peer-reviewed studies
- Extract key methods and results
- Organize evidence in a table
- Identify limitations
- Suggest research next steps

Search Sources

- Google Scholar
- PubMed / ERIC
- IEEE Xplore
- JSTOR
- Other trusted journals

Research Next Steps

- Read full texts
- Compare methodologies
- Assess evidence strength
- Formulate your own study

Checklist:

- ☒ Define question
- ☒ Review evidence
- ☒ Analyze findings
- ☒ Build argument

RESPONSIBLE-USE NOTE

Extraction errors can affect a review. Verify every important claim against the paper and follow systematic-review standards when conducting formal evidence synthesis.

Official reading: <https://elicit.com/>

Consensus

Research

Consensus is an AI-powered academic search experience designed to help users explore research findings. It is useful for quickly seeing how published research addresses a focused question and then moving to the underlying papers.

Requirements & Getting Started

- Account/web access depending on feature level.
- Use specific, researchable questions.
- Open and read original papers or abstracts before drawing conclusions.

High-Value Educational Uses

- Explore whether research supports a claim.
- Identify papers for a literature scan.
- Compare findings and detect areas of disagreement.
- Teach students the difference between popular claims and research evidence.

Benefits for Teaching and Learning

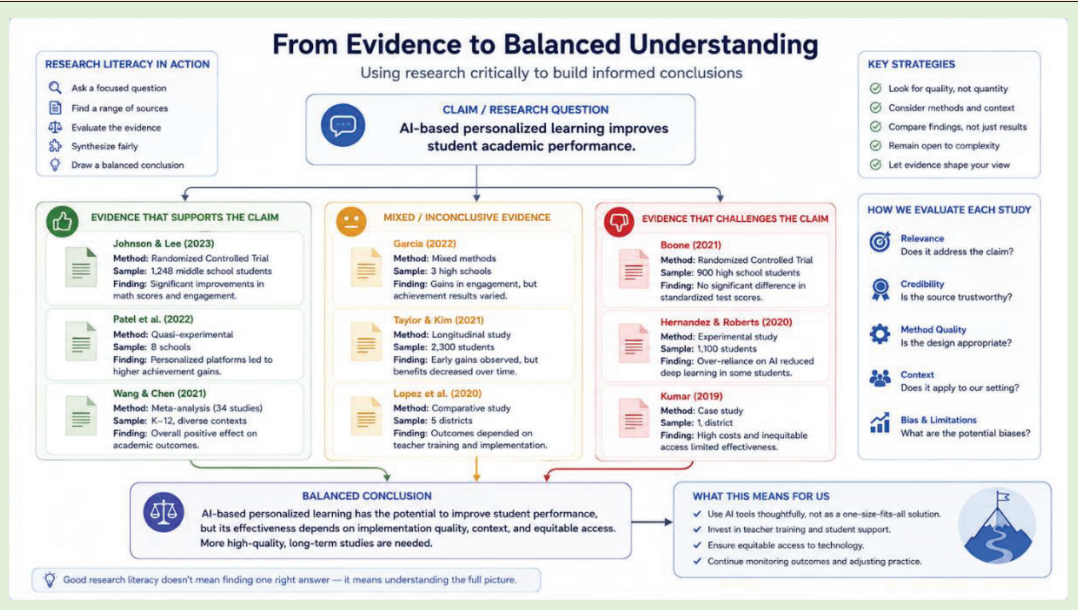
Consensus can help make evidence-seeking a normal classroom habit. Instead of asking “What does the internet say?”, students can begin asking “What does published research suggest, and how strong is that evidence?”

TRY IT YOURSELF

Give students a debatable claim. Ask them to locate research both supporting and challenging it, then write a balanced evidence statement.

SAMPLE PROMPT / TASK

What does peer-reviewed research suggest about [claim]? Separate supportive, mixed and contradictory evidence and list the studies I should read first.



RESPONSIBLE-USE NOTE

Search summaries may hide methodological differences. Sample size, design, population and publication quality still matter.

Official reading: <https://consensus.app/>

Scite

Research

Scite is known for citation-context tools that help researchers see how publications are cited by later work. This can support a deeper evaluation of whether a paper is merely cited, supported, discussed or challenged in subsequent literature.

Requirements & Getting Started

- Account and web access; some capabilities may depend on subscription.
- Start with a DOI, title, author or research question.
- Use citation context as one signal among many, not a substitute for reading.

High-Value Educational Uses

- Inspect how an influential paper is discussed by later research.
- Identify supporting or contrasting evidence.
- Teach citation literacy and the difference between citation count and citation meaning.
- Strengthen literature reviews by locating relevant follow-up studies.

Benefits for Teaching and Learning

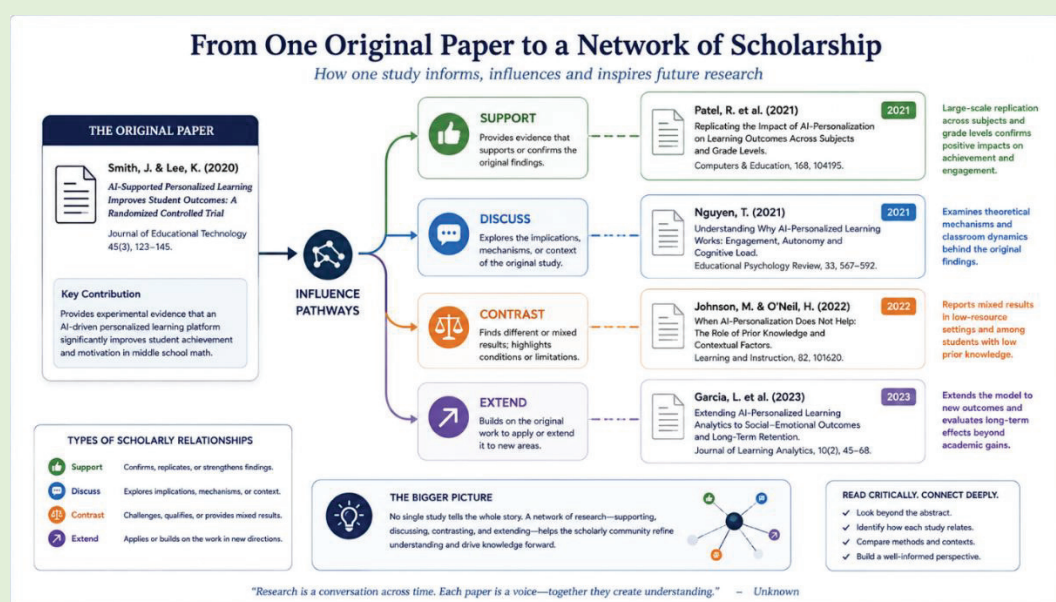
Scite encourages researchers to move beyond raw citation counts. For students, this is a useful way to demonstrate that scholarly knowledge develops through confirmation, refinement and disagreement.

TRY IT YOURSELF

Choose one highly cited paper in your field. Inspect several citation contexts and classify why later authors cited it.

SAMPLE PROMPT / TASK

Analyse the citation context around [paper/DOI]. Identify later studies that support, qualify or challenge its main claim, and explain what I should read next.



RESPONSIBLE-USE NOTE

Citation classification is not the same as methodological appraisal. A paper can be frequently discussed and still have important limitations.

Official reading: <https://scite.ai/>

Research Rabbit

Research

Research Rabbit is a literature discovery and mapping tool that helps researchers explore relationships among papers and authors. It is particularly useful for moving outward from a small set of known papers.

Requirements & Getting Started

- Create an account and begin with one or more seed papers.
- Build collections around a defined research topic.
- Use visual relationships to discover literature, then verify relevance manually.

High-Value Educational Uses

- Discover related papers from seed literature.
- Explore author and paper networks.
- Organize collections for ongoing projects.
- Use visual mapping to teach how research communities and topics connect.

Benefits for Teaching and Learning

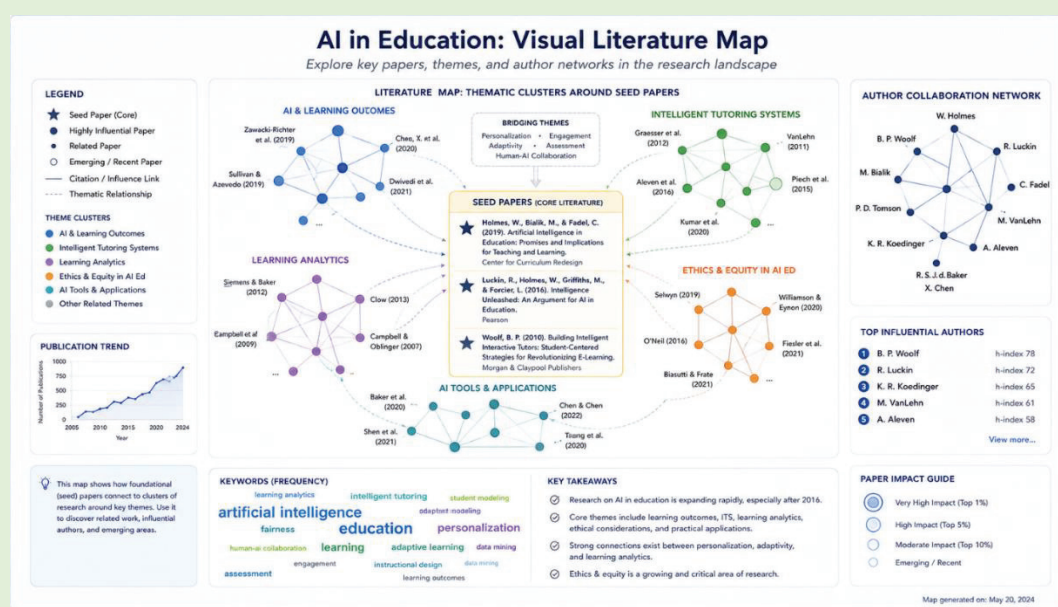
Visual exploration can reveal clusters and connections that are difficult to notice in a conventional search-results list. This is valuable during early literature mapping.

TRY IT YOURSELF

Start with three papers you already trust. Build a collection and identify two unexpected but relevant papers. Explain why the network led you to them.

SAMPLE PROMPT / TASK

From these seed papers [titles/DOIs], help me explore adjacent research themes and identify which connections deserve closer reading.



RESPONSIBLE-USE NOTE

Network proximity indicates relationship, not quality. Do not include papers in a review merely because they appear close in a graph.

Official reading: <https://www.researchrabbit.ai/>

Connected Papers

Research

Connected Papers creates visual graphs of papers related by similarity patterns based on bibliographic relationships. It can help researchers understand a field, discover prior and derivative work and identify literature they may have missed.

Requirements & Getting Started

- Web access and a suitable seed paper, DOI or title.
- Choose a representative seed paper rather than an arbitrary result.
- Use graph exploration to generate leads, then read and evaluate the papers.

High-Value Educational Uses

- Gain a visual overview of a research area.
- Discover related work that may not appear in a simple keyword search.
- Identify important prior work and later derivative work.
- Support thesis bibliography development and field orientation.

Benefits for Teaching and Learning

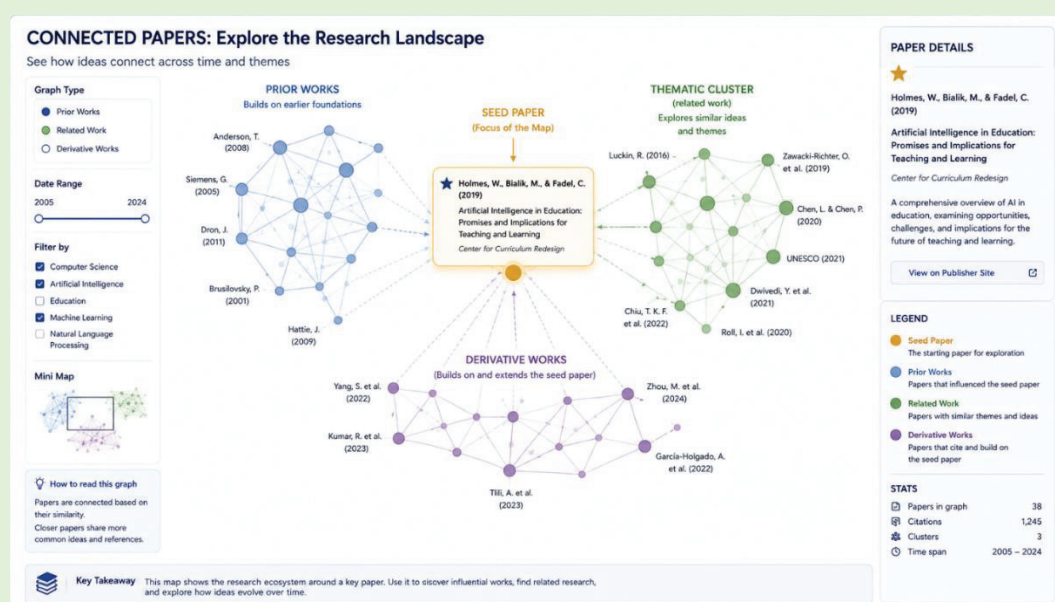
The graph format helps learners see research as a connected knowledge landscape rather than a flat list of search results.

TRY IT YOURSELF

Create a graph from one core paper in your field. Select three nearby and two distant nodes. Predict the relationship before opening each paper, then test your prediction.

SAMPLE PROMPT / TASK

Use this seed paper [title/DOI] to plan a literature exploration. Suggest what kinds of prior, parallel and derivative work I should look for and why.



RESPONSIBLE-USE NOTE

Connected Papers explicitly describes its graph as similarity-based rather than a simple citation tree. Interpret the visualization accordingly.

Official reading: <https://www.connectedpapers.com/about>

Practice Lab: A Five-Tool Literature Discovery Workflow

1. Formulate a focused research question.
2. Use Elicit to identify candidate studies and structure initial evidence.
3. Use Consensus to inspect the broad direction and disagreement in the literature.
4. Use Scite to investigate citation context around one or two influential papers.
5. Use Research Rabbit and Connected Papers to expand from trusted seed papers and reveal related clusters.
6. Read the original studies. Record method, sample, findings, limitations and relevance.
7. Write a synthesis that distinguishes evidence from interpretation and clearly documents your search decisions.

Canva AI

Presentations

Canva combines visual design, presentation creation and AI-assisted features within a widely used design platform. In education it can support presentations, posters, worksheets, social learning materials, infographics and short visual explainers.

Requirements & Getting Started

- Canva account; education eligibility and premium features vary.
- Start with a clear content outline and audience.
- Use institution-approved assets and check licensing/usage terms for media.

High-Value Educational Uses

- Create visually consistent lecture slides and infographics.

- Turn complex concepts into diagrams and posters.
- Develop student design assignments and visual storytelling tasks.
- Create accessible learning resources with strong hierarchy and concise text.

Benefits for Teaching and Learning

Canva lowers the design barrier for educators who are not professional designers. Templates and AI-assisted creation can speed production while still allowing substantial manual refinement.

TRY IT YOURSELF

Take one text-heavy lecture slide and redesign it using a single visual metaphor, no more than 35 words and one student question.

SAMPLE PROMPT / TASK

Create a six-slide visual lesson on [topic] for [level]. Use one concept per slide, minimal text, a consistent visual system and a final retrieval-practice question.

One Topic. Many Learning Resources.

Create slides, infographics, worksheets, and posters in minutes.

TOPIC: Artificial Intelligence in Education

CONTENT STUDIO

1. Enter Topic

Artificial Intelligence in Education

2. Choose Resource Type

Presentation Slide

Infographic

Worksheet

Classroom Poster

3. Customize

Grade Level: High School

Tone: Professional

Language: English

Include Examples: ☒

Generate Resources

PRESENTATION SLIDE

Artificial Intelligence in Education
Empowering Learning. Shaping the Future.

Key Points

- Personalized Learning
- Intelligent Tutoring Systems
- Automated Assessment
- Data-Informed Decisions
- Ethics and Responsible Use

INFOGRAPHIC

How AI Transforms Education

Personalized Learning
AI adapts content to individual student needs.

Intelligent Tutoring
AI tutors provide instant support and feedback.

Automated Assessment
AI saves time with automated grading and feedback.

Data-Informed Decisions
AI analytics help educators improve teaching outcomes.

Ethics & Responsibility
Use AI fairly, transparently, and responsibly.

AI is a tool to enhance human potential, not replace it.

WORKSHEET

Artificial Intelligence in Education Worksheet

A. Short Answer

- What is Artificial Intelligence (AI)?
- Give two examples of AI tools used in education.
- How can AI support personalized learning?

B. Match the Column

Column A	Column B
1. Personalized Learning	A. Adapting content to individual student needs
2. Intelligent Tutoring	B. Instant feedback & support
3. Automated Assessment	C. Adapted content for individual students
4. Learning Analytics	D. AI-based grading

C. Reflection

What are the benefits and challenges of using AI in classrooms?

CLASSROOM POSTER

Artificial Intelligence in Education
Learn Smarter. Teach Better. Together.

Personalized Learning
AI adapts to every learner's needs.

Intelligent Tutoring
AI tutors are always ready to help.

Automated Assessment
Save time with quick and fair feedback.

Data-Informed Decisions
AI insight helps improve outcomes.

Ethics & Responsibility
Use AI wisely, fairly, and safely.

AI empowers education. People inspire futures.

Tip: Generate multiple resources from one topic to save time and keep your teaching consistent.

Edit • Download • Print • Share

Built for Educators

RESPONSIBLE-USE NOTE

Generated visuals and templates still require accessibility checks, accurate labeling and appropriate rights/attribution.

Official reading: <https://www.canva.com/education/>

Gamma

Presentations

Gamma is an AI-assisted content and presentation platform that can rapidly turn an outline or prompt into a structured visual document. Educators can use it for first-draft presentations, explainers and shareable learning pages.

Requirements & Getting Started

- Gamma account and internet access.
- Prepare an outline or learning sequence before generation.
- Review generated facts, images, citations and slide density.

High-Value Educational Uses

- Prototype a lecture deck from an outline.
- Create visually organized explainers or student project briefs.
- Convert notes into a presentation structure.
- Experiment with alternative narrative sequences for the same lesson.

Benefits for Teaching and Learning

Gamma is useful for rapid prototyping. Teachers can spend less time on initial layout and more time refining examples, questions and disciplinary accuracy.

TRY IT YOURSELF

Generate a short deck from your existing lesson outline. Delete at least 25% of the generated content and explain why the remaining structure is stronger.

SAMPLE PROMPT / TASK

Turn this outline into an 8-card teaching presentation. Each card must have one learning purpose and no more than three key points. Add two moments for student participation.

From Outline to Impactful Presentation in Minutes ✨

AI transforms your ideas into engaging, visual presentations.

1. Outline → 2. AI Enhance → 3. Visual Presentation

1. EDUCATOR OUTLINE (YOUR INPUT)

Topic: Artificial Intelligence in Education

- I. Introduction**
 - What is AI?
 - Why it matters in education
- II. Key Applications**
 - Personalized learning
 - Intelligent tutoring
 - Automated assessment
 - Learning analytics
- III. Benefits**
 - Improved engagement
 - Better outcomes
 - Teacher support
- IV. Challenges & Considerations**
 - Data privacy
 - Bias and fairness
 - Human oversight
- V. The Future**
 - Emerging trends
 - Preparing students for an AI world
- VI. Conclusion**
 - AI as a partner in education

Tip: A clear outline helps the AI understand your goals and audience.

2. YOUR AI-GENERATED PRESENTATION (READY TO EDIT & USE)

AI Design & Layout Visual Diagrams Smart Icons Engaging Templates Editable & Exportable Export to PPT, PDF, Google Slides & more

RESPONSIBLE-USE NOTE

Rapid generation can create generic or overlong decks. Editing is essential; do not let slide quantity replace instructional design.

Official reading: [https:// gamma.app/](https://gamma.app/)

Napkin AI

Presentations

Napkin AI is oriented toward turning text and ideas into visual representations. For educators, its main potential is converting explanations into diagrams, process visuals and concept graphics that can be refined for teaching.

Requirements & Getting Started

- Account/web access depending on current availability.
- Begin with concise, well-structured source text.

- Verify that generated labels and relationships accurately represent the concept.

High-Value Educational Uses

- Turn a process explanation into a visual diagram.
- Create concept maps and relationship graphics.
- Develop visual summaries for lectures and reading materials.
- Help students compare text explanations with visual representations.

Benefits for Teaching and Learning

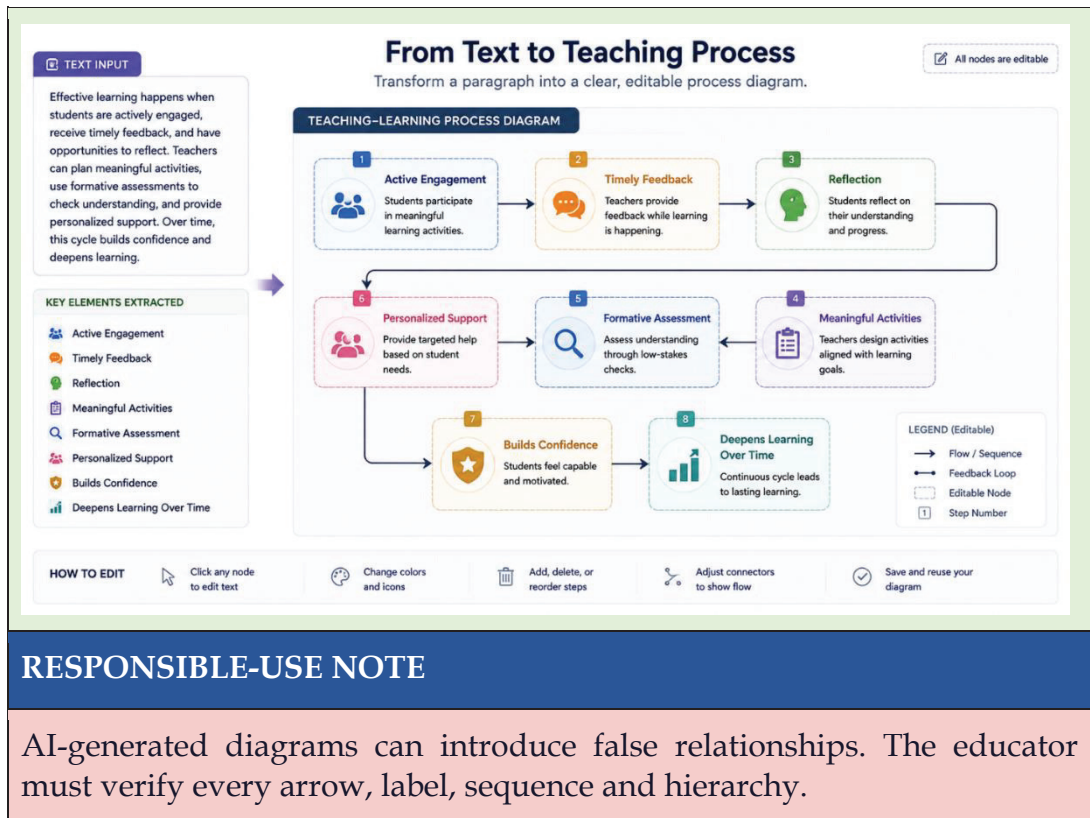
Visual transformation can make abstract relationships easier to discuss. It is especially useful when educators want a starting diagram without manually drawing every element.

TRY IT YOURSELF

Write a 120-word explanation of a process in your subject. Generate a visual, then ask students to identify what the diagram communicates well and what it oversimplifies.

SAMPLE PROMPT / TASK

Convert this explanation into a clear educational visual. Preserve causal direction, label every major stage and avoid decorative elements that do not add meaning.



Official reading: <https://www.napkin.ai/>

NotebookLM

Productivity

NotebookLM is a source-grounded AI notebook from Google. Users add selected sources and then ask questions, create summaries and explore material grounded in those sources. This makes it particularly useful for course packs, reading sets and research notes.

Requirements & Getting Started

- Google account and access to NotebookLM.
- Upload or connect only materials you are permitted to use.

- Curate sources deliberately; poor source selection produces a poor learning notebook.

High-Value Educational Uses

- Create study guides from selected course readings.
- Ask source-grounded questions across multiple documents.
- Generate revision aids and discussion prompts.
- Help students compare themes, arguments and evidence across a reading set.

Benefits for Teaching and Learning

Because the interaction is centered on a chosen source collection, NotebookLM can help educators teach grounded synthesis and reduce the temptation to rely on unsupported general answers.

TRY IT YOURSELF

Create a notebook with three readings on the same topic. Ask for areas of agreement, disagreement and missing evidence, then verify every claim against the source citations.

SAMPLE PROMPT / TASK

Using only the provided sources, compare how each author defines [concept]. Quote minimally, cite the source location, and identify one unresolved question.

Source-Grounded Notebook

Bring in your sources. Let AI organize, connect, and help you learn.

Source-Grounded · Cited & Verifiable · Private & Secure

1. INPUTS: YOUR SOURCES

Add PDFs, documents, and your notes.

PDFs & Documents

- AI in Education: A Review.pdf (12.4 MB · 45 pages)
- Teaching with AI: Opportunities.pdf (8.7 MB · 32 pages)
- UNESCO_AI_Guidelines.docx (2.1 MB · 18 pages)
- Student_Ethics_AI.pdf (1.8 MB · 14 pages)

Your Notes

- Class notes – Lecture 5 (Today)
- Research ideas (Yesterday)
- Quotes & key points (2 days ago)

+ Add files or notes
Drag & drop or browse

2. AI NOTEBOOK (YOUR KNOWLEDGE HUB)

AI reads your sources, organizes them, and links everything.

Notebook

- New Note
- Overview
- Key Themes
- Connections
- Evidence Bank
- Citations
- Timeline

Overview

AI-generated summary grounded in your sources.

The sources highlight the transformative potential of AI in education—personalized learning, improved feedback, and efficiency—while emphasizing ethics, equity, and teacher agency as critical to responsible implementation.

Key Themes

Personalized Learning · Ethics & Privacy · Teacher Role · Equity · Assessment

Connected Insights

AI enables personalized learning at scale
Sources: [1] [2] [3]
"AI technologies can adapt content to individual learner needs and pace." — AI in Education: A Review (p. 12)

Ethical use and data privacy are essential
Sources: [2] [5]
"Robust policies and transparency are necessary to protect learners and ensure fairness." — UNESCO Guidelines (p. 9)

Evidence Bank (Snippets from your sources)

- p. 12: AI can support differentiated instruction and real-time feedback.
- p. 7: Teachers need support, training, and time to integrate AI effectively.
- p. 15: Bias in algorithms can perpetuate inequality if not carefully managed.

AI claims are grounded in your sources. Click any source number to verify.

3. AI STUDY OUTPUTS

Turn your notebook into powerful study tools.

Study Guide

Concise guide with key takeaways and explanations.

Comparison Table

Compare perspectives, findings, or frameworks.

Practice Questions

Generate quiz and exam-style questions.

Q1: _____ ?
Q2: _____ ?
Q3: _____ ?

Audio Overview

Listen to an AI-generated overview of your sources.

06:45

Mind Map

Visual map of concepts and connections.

Add sources → AI reads & understands → Organize & connect → Generate study tools → Learn with confidence

You stay in control. Verify, edit, and build your knowledge.

RESPONSIBLE-USE NOTE

Source grounding reduces but does not eliminate errors. Check whether summaries faithfully represent the documents and respect copyright and access restrictions.

Official reading: <https://notebooklm.google.com/>

Notion AI

Productivity

Notion AI adds generative assistance to a workspace used for notes, documents, databases and team knowledge. Educators can explore it for course planning, meeting notes, project organization and knowledge management.

Requirements & Getting Started

- Notion account; AI availability depends on plan and workspace settings.
- Create a clear workspace structure before adding AI.

- Define which information is appropriate for the workspace under institutional policy.

High-Value Educational Uses

- Organize course plans, teaching calendars and project notes.
- Summarize internal notes and draft action items.
- Create reusable templates for lesson preparation or research tracking.
- Support collaborative project documentation.

Benefits for Teaching and Learning

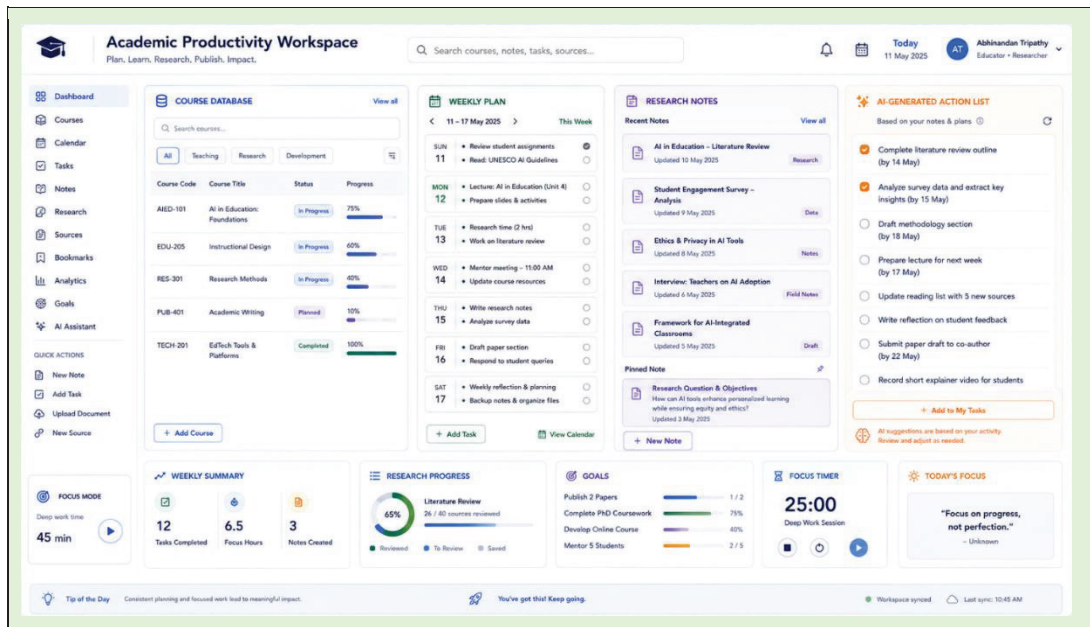
The combination of structured workspace and AI assistance can reduce fragmentation across notes, tasks and documents, particularly for educators managing several courses or projects.

TRY IT YOURSELF

Build a course-planning page with weekly outcomes, readings, activities and assessment checkpoints. Use AI only after the structure is clear.

SAMPLE PROMPT / TASK

From these planning notes, create a weekly action list grouped into teaching, assessment, student support and administration. Do not add tasks that are not in the notes.



RESPONSIBLE-USE NOTE

Workspace AI can expose information to broader team contexts if permissions are poorly managed. Review sharing settings and avoid unnecessary sensitive data.

Official reading: <https://www.notion.com/product/ai>

Grammarly

Productivity

Grammarly provides writing assistance for clarity, correctness, tone and revision. In education, it can support drafting and language development when students remain responsible for ideas, evidence and final decisions.

Requirements & Getting Started

- Account/browser or application integration depending on use.
- Define academic-integrity rules for acceptable writing assistance.

- Students should retain drafts or revision history where process evidence is required.

High-Value Educational Uses

- Improve clarity and mechanics in professional communication.
- Teach revision by comparing original and suggested sentences.
- Support multilingual writers with language feedback.
- Help educators refine instructions, announcements and feedback.

Benefits for Teaching and Learning

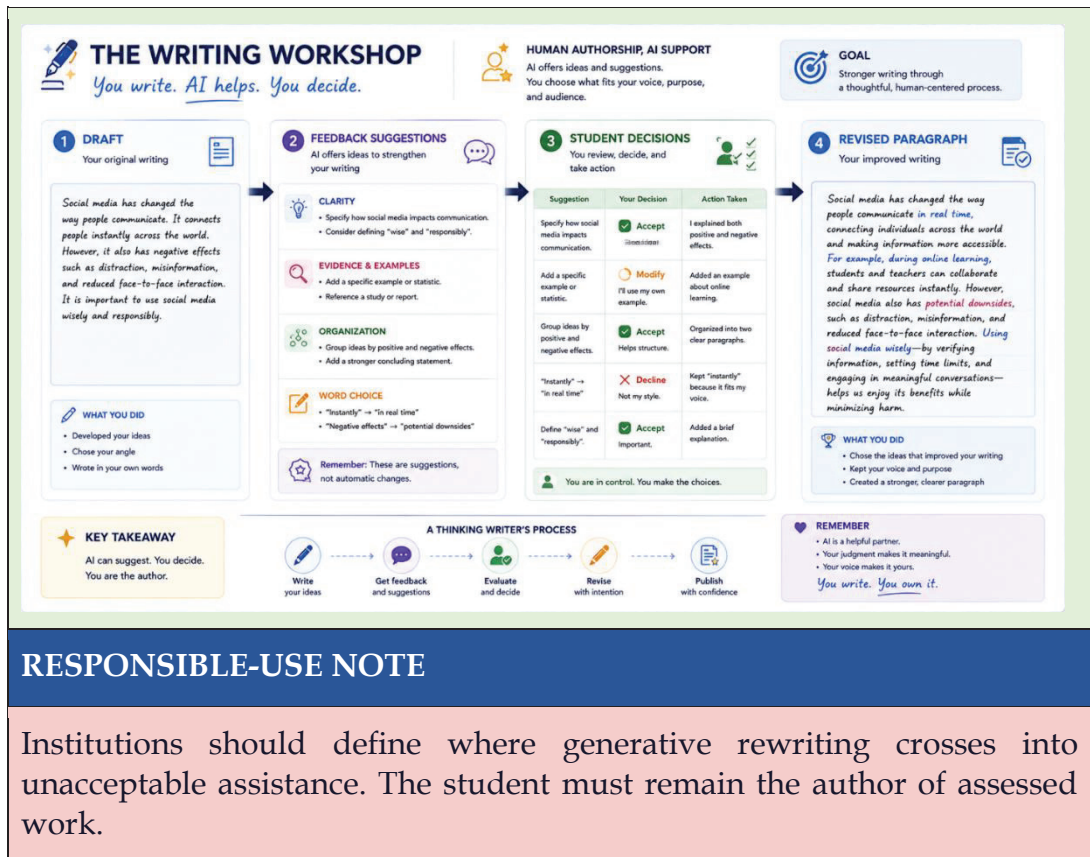
Writing assistance can make revision more immediate. Used pedagogically, suggestions become discussion points about audience, tone, precision and grammar rather than automatic corrections.

TRY IT YOURSELF

Give students a paragraph with several weaknesses. Let them review suggestions but require a written justification for three changes they accept and one they reject.

SAMPLE PROMPT / TASK

Review this paragraph for clarity and concision. Do not change technical meaning. Explain the three most important revisions so I can learn from them.



RESPONSIBLE-USE NOTE

Institutions should define where generative rewriting crosses into unacceptable assistance. The student must remain the author of assessed work.

Official reading: <https://www.grammarly.com/edu>

Otter.ai

Productivity

Otter.ai provides AI-assisted transcription and meeting notes. In education it can support lecture capture, meeting documentation, accessibility workflows and review — subject to consent, privacy and institutional recording policies.

Requirements & Getting Started

- Account and compatible device/app.
- Obtain required consent before recording people.

- Check institutional rules for lectures, student discussions and confidential meetings.

High-Value Educational Uses

- Create searchable transcripts of permitted lectures or meetings.
- Generate notes and action items from project discussions.
- Support review for learners who benefit from text alongside audio.
- Help research teams document non-sensitive meetings.

Benefits for Teaching and Learning

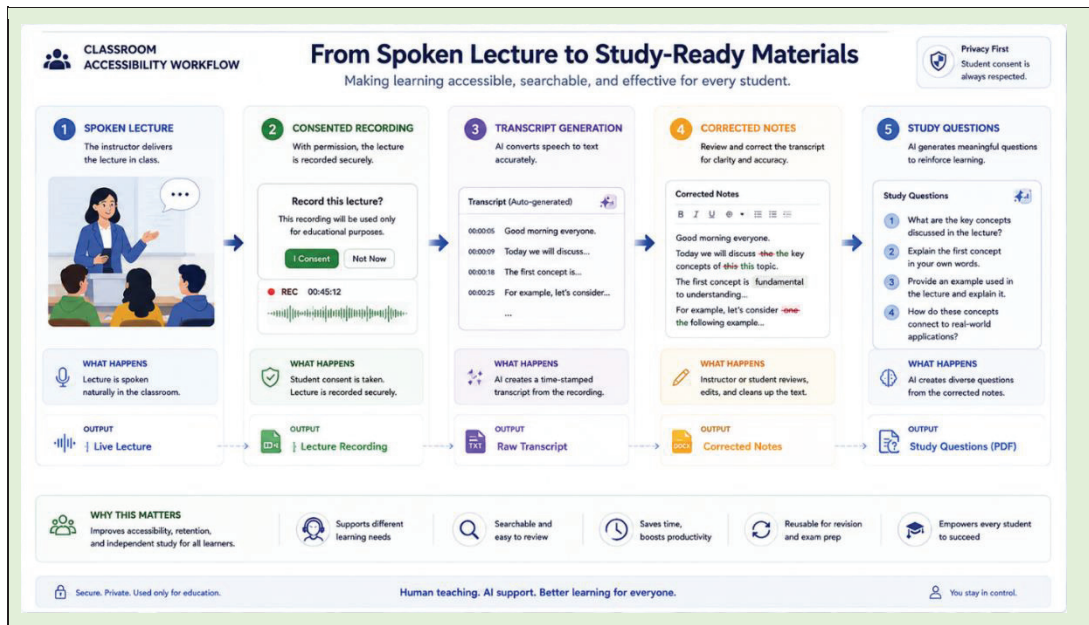
Transcription can reduce note-taking burden and improve searchability, but the greatest educational value comes when learners transform transcripts into summaries, questions and reflections.

TRY IT YOURSELF

Record a short mock lecture with consent. Compare the transcript to the audio, correct errors, then create five retrieval-practice questions from the corrected text.

SAMPLE PROMPT / TASK

From this corrected transcript, produce a concise summary, key terms and five questions. Mark any statement that appears ambiguous rather than guessing.



RESPONSIBLE-USE NOTE

Never record secretly. Transcripts can contain personal or sensitive information and automated speech recognition can mishear names, accents and technical terms.

Official reading: <https://otter.ai/education>

Zapier

Automation (No-Code)

Zapier is a no-code automation platform that connects many web applications through trigger-and-action workflows. Educators and institutions can use it to automate routine movement of information between approved services.

Requirements & Getting Started

- Accounts for Zapier and the applications being connected.
- Permission to connect institutional services and data.

- A clearly defined trigger, action, exception path and test dataset.

High-Value Educational Uses

- Send notifications when approved forms are submitted.
- Create repetitive administrative records across connected tools.
- Route non-sensitive requests to appropriate staff workflows.
- Automate reminders or content-distribution steps where policy permits.

Benefits for Teaching and Learning

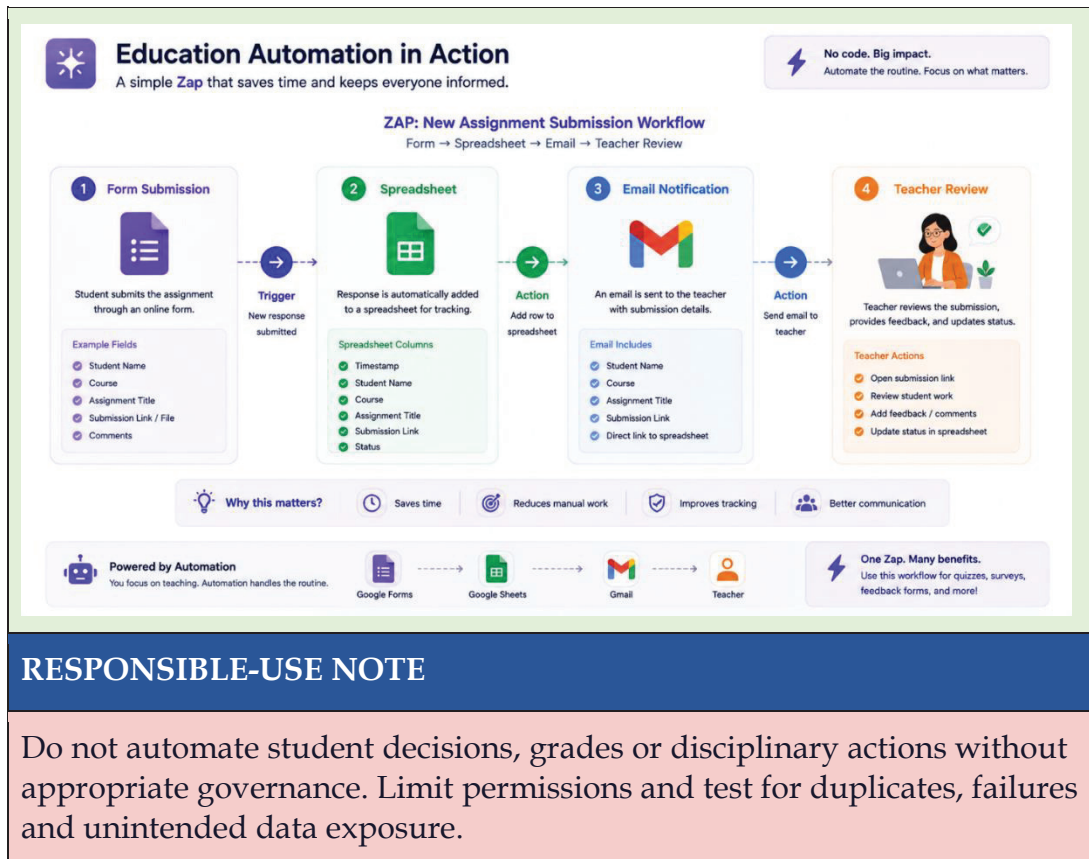
Zapier can save time when staff repeatedly copy the same information between systems. Its broad app ecosystem makes it accessible for small workflow experiments.

TRY IT YOURSELF

Build a dummy workflow: when a test form is submitted, add a row to a test sheet and send yourself a notification. Test incorrect and duplicate submissions.

SAMPLE PROMPT / TASK

When a new [approved form] is submitted, validate required fields, create a record in [approved destination], notify [role], and log failures for manual review.



RESPONSIBLE-USE NOTE

Do not automate student decisions, grades or disciplinary actions without appropriate governance. Limit permissions and test for duplicates, failures and unintended data exposure.

Official reading: <https://zapier.com/>

Make

Automation (No-Code)

Make is a visual automation platform for building multi-step workflows across applications. Its visual scenario builder can be useful for educators who want to understand branching, data transformation and workflow logic.

Requirements & Getting Started

- Make account and authorized connections to required services.
- Map the workflow on paper before building it.

- Use test data and understand how errors, retries and branches are handled.

High-Value Educational Uses

- Build multi-step administrative workflows.
- Route information differently based on conditions.
- Transform data formats between approved systems.
- Teach basic automation logic without conventional programming.

Benefits for Teaching and Learning

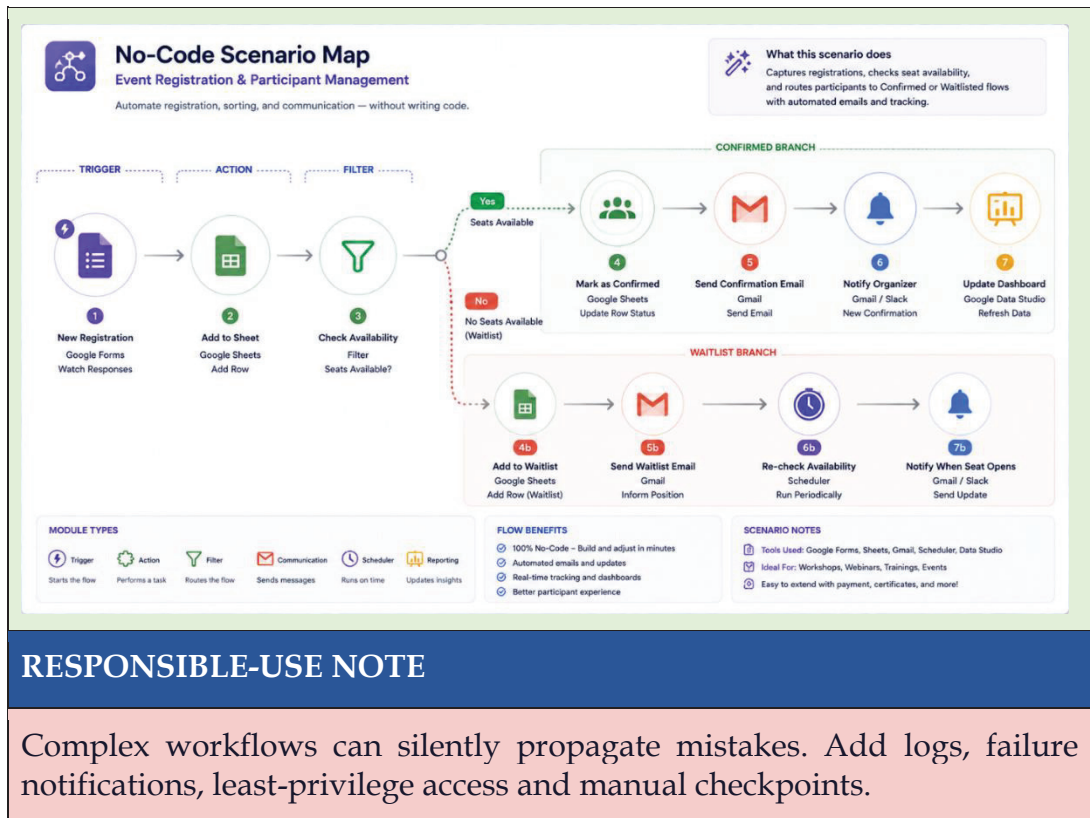
The visual flow can make automation logic easier to inspect. This also gives students an introduction to computational thinking: triggers, conditions, data mapping and exceptions.

TRY IT YOURSELF

Design a scenario on paper for workshop registration: receive form → check capacity → record participant → send confirmation or waitlist message → notify organizer.

SAMPLE PROMPT / TASK

Design a no-code scenario for [process]. Show trigger, filters, branches, actions, error handling and a final human-review checkpoint.



Official reading: <https://www.make.com/>

n8n

Automation (No-Code)

n8n is a workflow automation platform that supports visual node-based automation and can be used in cloud or self-managed contexts depending on institutional requirements. It is particularly attractive to technically capable education teams that want greater workflow flexibility.

Requirements & Getting Started

- Technical capacity appropriate to the chosen deployment model.
- Credentials and permissions for connected systems.

- Understanding of nodes, data mapping, authentication and error handling.

High-Value Educational Uses

- Create customized integrations among institutional tools.
- Prototype AI-assisted workflows with controlled inputs and outputs.
- Automate internal content processing or notifications.
- Teach workflow logic, APIs and responsible automation in advanced digital-skills courses.

Benefits for Teaching and Learning

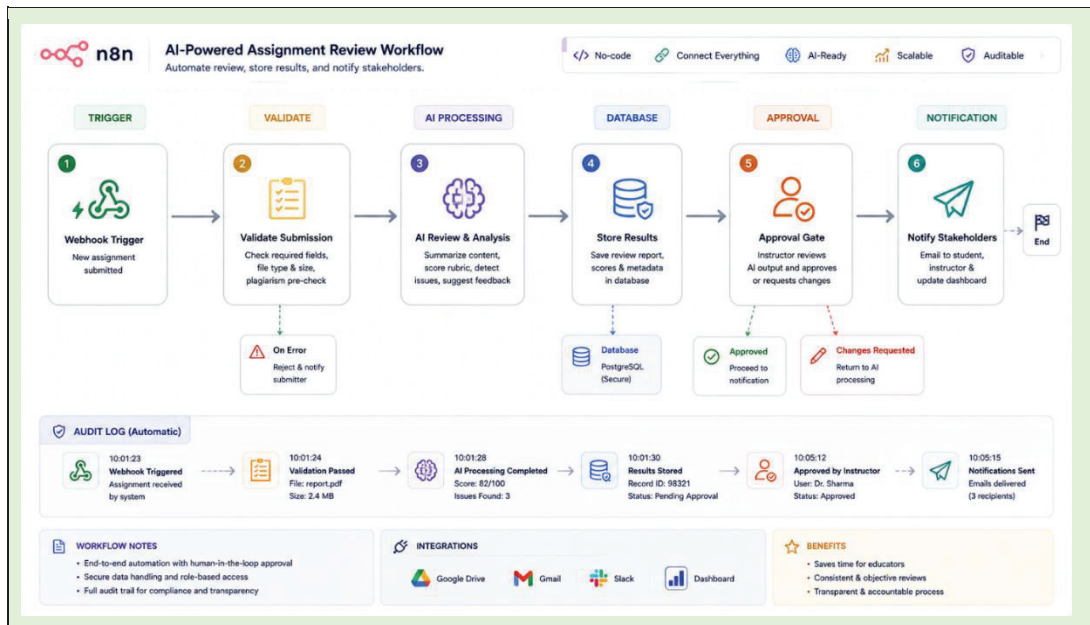
n8n provides flexibility for institutions and technically oriented educators. It can bridge no-code/low-code learning with concepts such as APIs, structured data and orchestration.

TRY IT YOURSELF

Create a local or test workflow using dummy data: manual trigger → transform a small dataset → produce a summary → save a log. Document every data field that moves.

SAMPLE PROMPT / TASK

Build a safe workflow for [educational process]. Use dummy data, minimum permissions, explicit error handling, an audit log and a human approval before any consequential action.



RESPONSIBLE-USE NOTE

Self-hosting does not automatically make a workflow safe. Security, updates, credentials, backups, logging and governance remain institutional responsibilities.

Official reading: <https://n8n.io/>

Tool Selection Matrix

Educational Need	Tools to Explore	Primary Risk to Manage
Need fast brainstorming or explanation	ChatGPT / Gemini / Claude / Copilot	Accuracy and over-reliance
Need sourced web exploration	Perplexity	Citation quality

Need education-specific planning	MagicSchool / Khanmigo / Eduaide.AI	Generic outputs
Need differentiated reading	Diffit	Loss of nuance
Need live student participation	Curipod	Device/access equity
Need literature discovery	Elicit / Consensus	Coverage and method quality
Need citation context	Scite	Interpretation of citation meaning
Need visual literature mapping	Research Rabbit / Connected Papers	Network ≠ quality
Need visual learning material	Canva / Gamma / Napkin AI	Visual accuracy and licensing
Need source-grounded study	NotebookLM	Source selection
Need writing support	Grammarly	Authorship/integrity
Need transcription	Otter.ai	Consent/privacy
Need workflow automation	Zapier / Make / n8n	Permissions and cascading errors

AI Agents in 2026: A Field Update

What Changed Between August and September 2026

A bonus update for readers - verified against official announcements

If there is one idea that captures where artificial intelligence stood in the late summer of 2026, it is this: the race stopped being only about which model could think best and became a race about which system could actually *get work done*. For most of the past few years, the headline question was raw intelligence - how well a model could reason, write, or answer. Through August and September 2026, the centre of gravity moved decisively toward **agentic AI**: systems that plan a task, remember context, reach for tools, move across applications, and carry a job through to a finished result while a human stays in charge.

For anyone learning to build, teach with, or profit from these tools, the practical lesson is the same. The most valuable skill is shifting from writing one clever prompt to designing a **goal-driven workflow** - telling the system what outcome you want and letting it assemble the steps. The pages below summarise what each major provider shipped in this window, the trends that cut across all of them, and what it means for you as a reader and practitioner.

What the Major Platforms Shipped

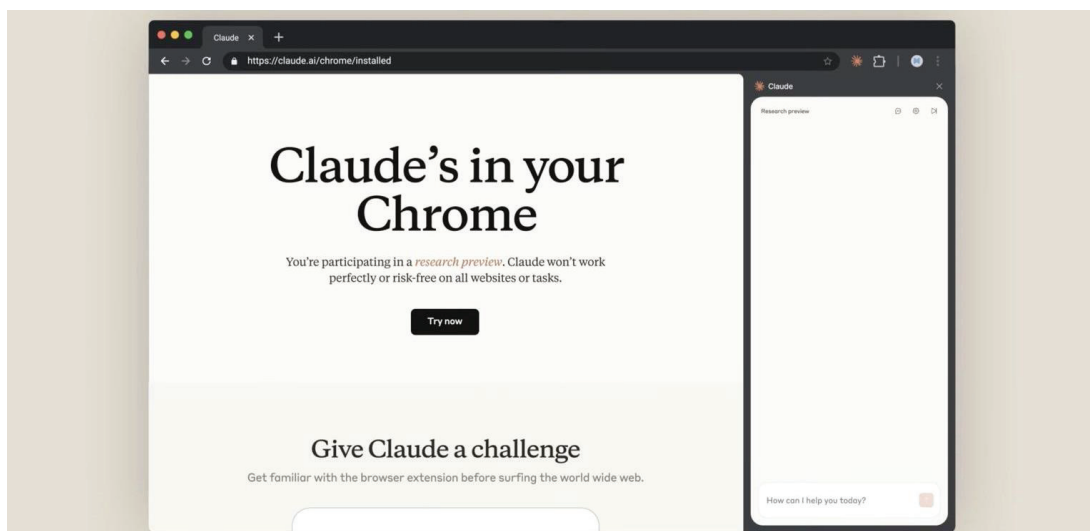
Anthropic - Claude becomes a persistent work partner

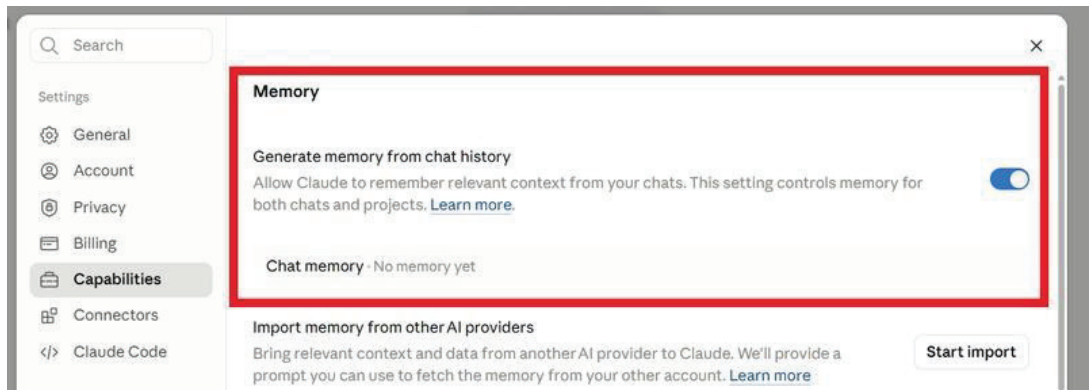
Claude's most consequential changes in this window were about **continuity and action**. Persistent memory had already reached Claude users earlier in 2026; the August update unified that memory so context carries between ordinary chats and Claude's computer-use agent, and gave users a clear

settings panel to view, edit, or delete what is stored - organised by topic. Sensitive categories such as health, religion, and political belief are excluded by default and only stored if the user explicitly opts in.

On 26 August 2026, **Claude in Chrome** moved from limited beta to general availability on every paid plan, letting Claude read the page you are on and act on it - clicking, typing, navigating, and filling forms - with a safety check applied to each action. A few days earlier, on 20 August, Anthropic made its production agent tooling generally available: **computer use, a browser-use tool, the Skills API, and the Files API**, the building blocks developers use to make agents that operate software and return finished files.

Because this book speaks to educators, one launch deserves an honest note on scope. **Claude for Teachers** - introduced in July 2026 and extended to schools and districts in August - is currently a free offering for *verified United States K-12 educators* and is not a student-facing tool. Higher-education institutions are served by a separate programme, Claude for Education. Readers outside the United States can still use the general Claude apps for lesson planning and materials; they simply do not yet have the K-12 teacher edition.





Claude introduced several major agentic capabilities during August–September 2026.

Major New Features

Feature	Educational Benefit
Memory across chats	Builds long-term teaching context
Claude in Chrome	Works while browsing
Built-in Browser	Research assistance
Teacher Edition	Education-focused workflows
Files API	Better document handling
Skills API	Multi-step task automation

Claude is moving from being a conversational assistant to becoming a persistent collaborative work partner.

Claude Memory (Major Educational Feature)

One of the most significant August 2026 updates is persistent memory. Claude can now remember information across conversations, while users retain control through editable memory topics and sensitive-topic controls.

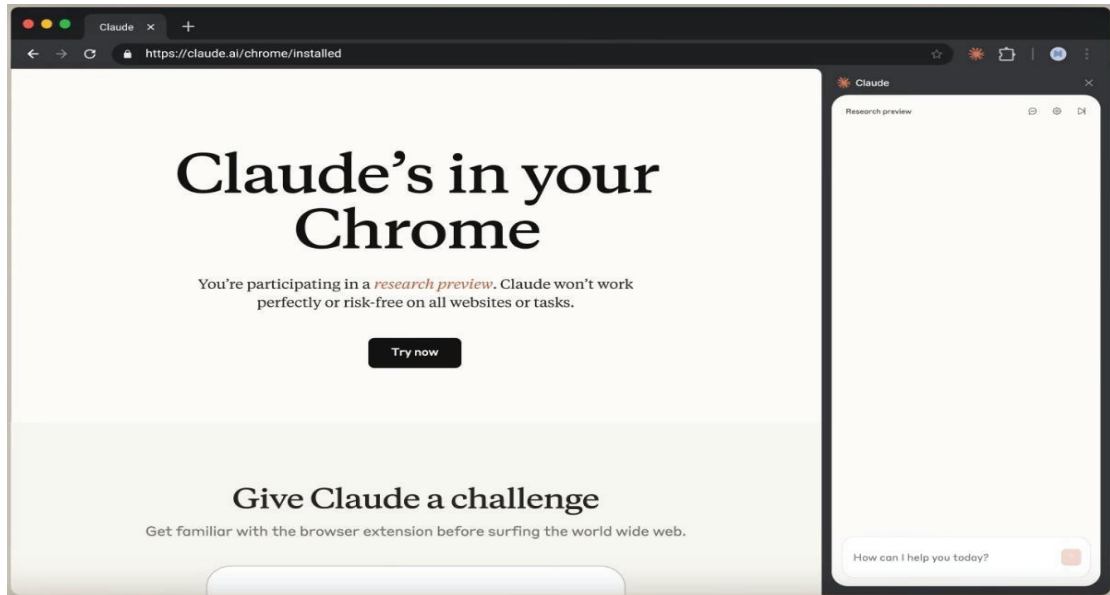
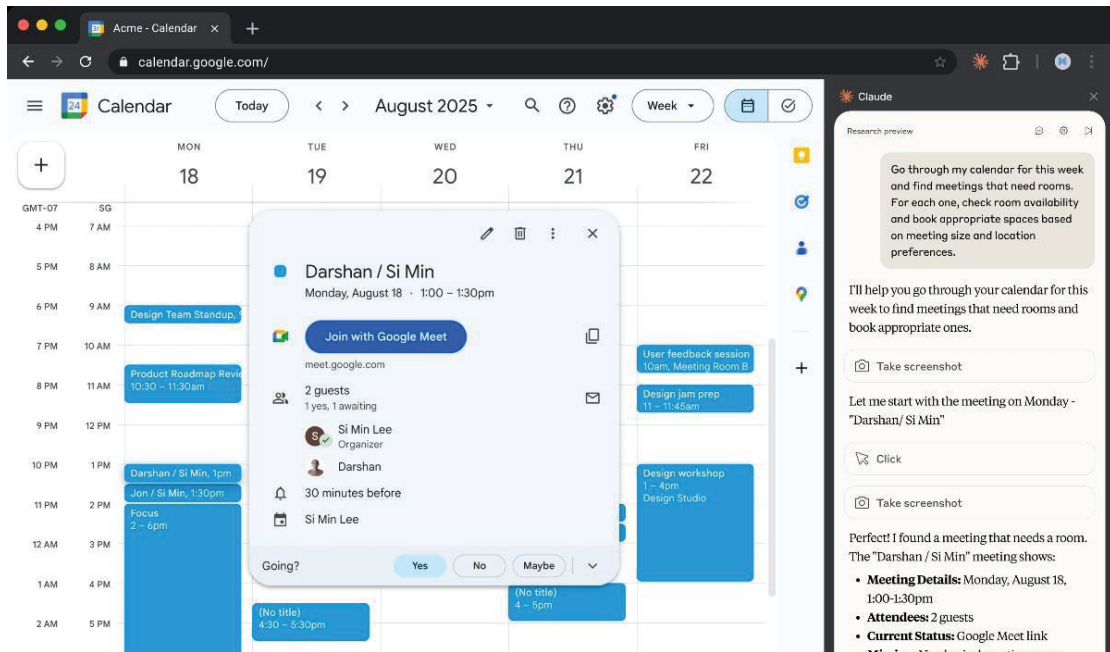
Classroom Example

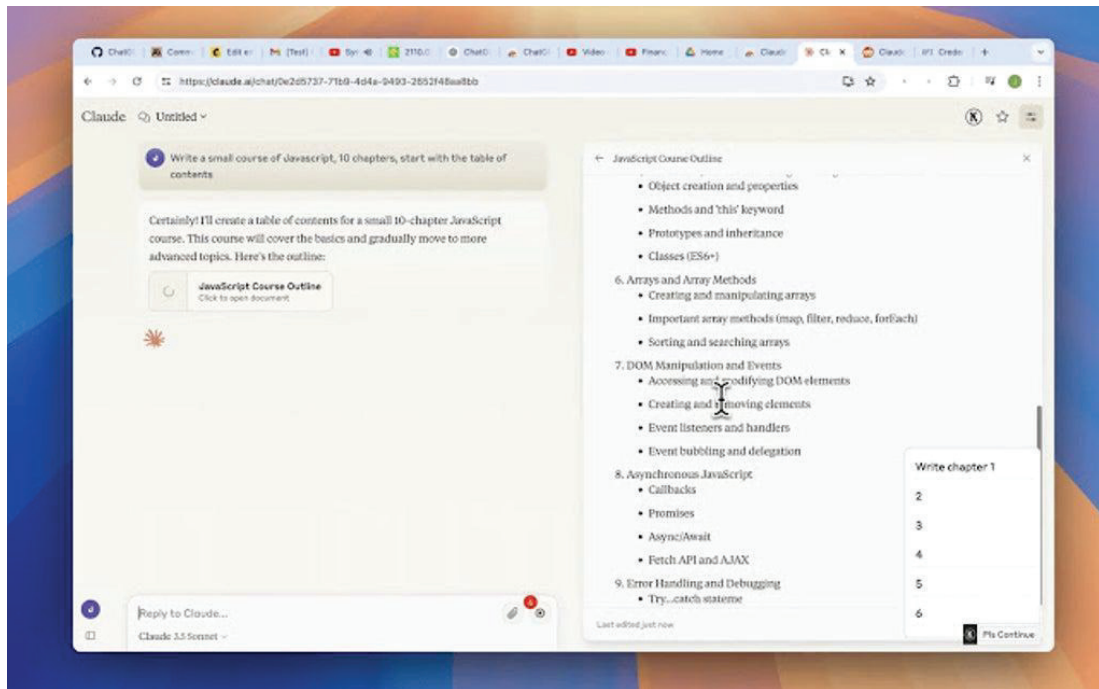
Instead of repeatedly explaining:

- course name,
- teaching style,
- assessment format,

Claude can remember these preferences and provide more consistent assistance. This is particularly useful for semester-long teaching.

Claude in Chrome





Claude now works directly inside Chrome, allowing users to interact with web pages while reading, researching, and writing.

Educational Uses

- Summarize articles.
- Explain research papers.
- Draft responses while reading.
- Support academic workflows.

Claude for Teachers

Anthropic launched Claude for Teachers, introducing education-focused experiences designed for teaching and learning environments.

This is particularly relevant to your readers because your book targets educators.

Building Production AI Agents

Anthropic also introduced new infrastructure for developers building real AI agents, including:

- Skills API
- Files API
- Computer Use capabilities

These features allow agents to perform multi-step workflows using external tools rather than simply producing text.

Memory Becomes the New Standard

One major industry trend is that memory is becoming a core feature across AI platforms.

Instead of starting every conversation from zero, AI systems increasingly remember:

- preferences,
- projects,
- workflows,
- recurring tasks,

while giving users control over stored information.

This is an excellent concept to mention in your future editions.

Agent Safety Becomes a Priority

As AI Agents become more autonomous, companies are investing heavily in safety mechanisms.

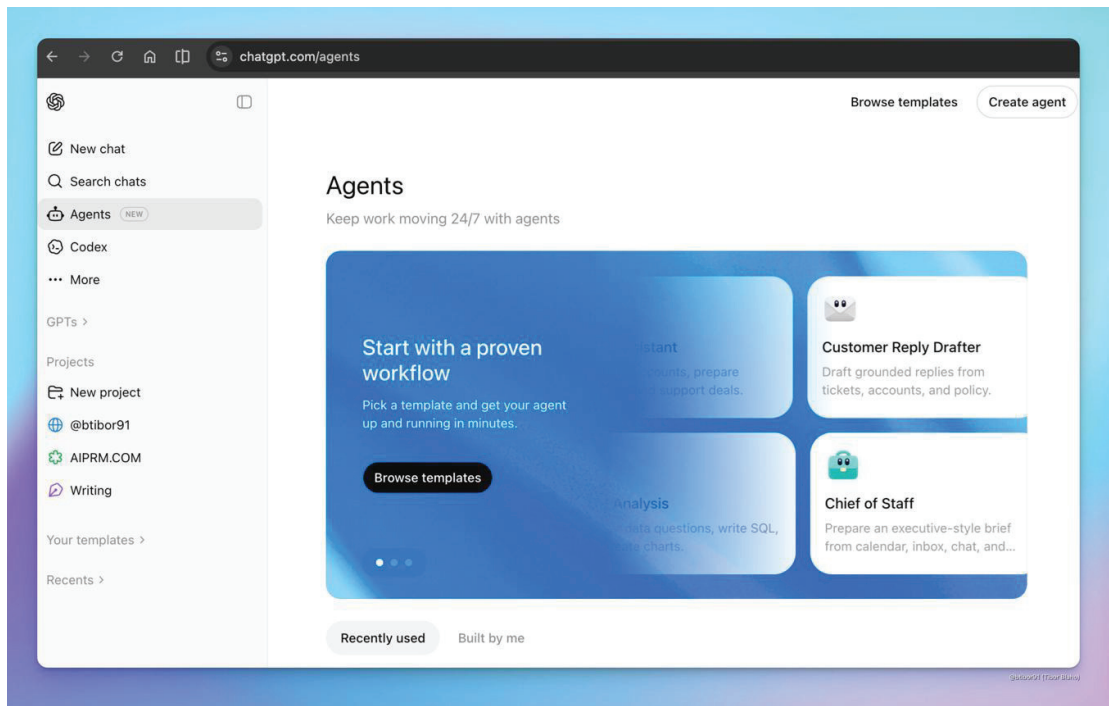
Recent developments include:

- AI monitoring systems
- emergency shutdown mechanisms
- stronger misuse detection

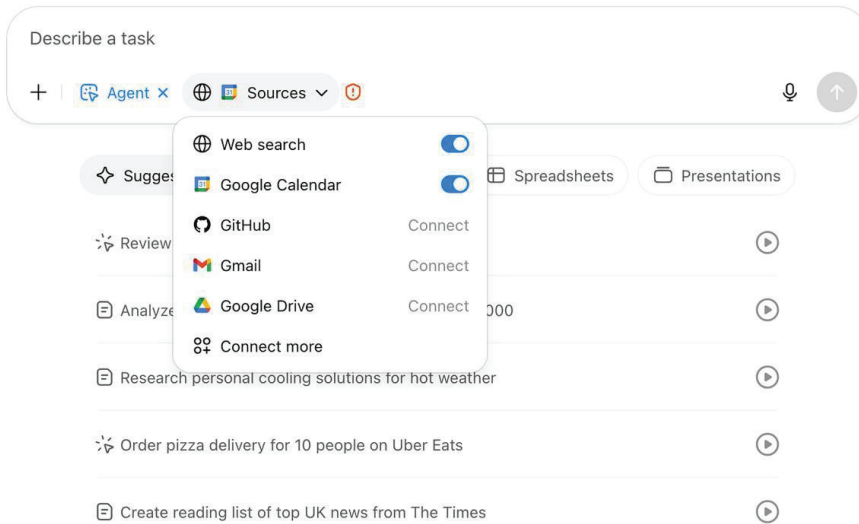
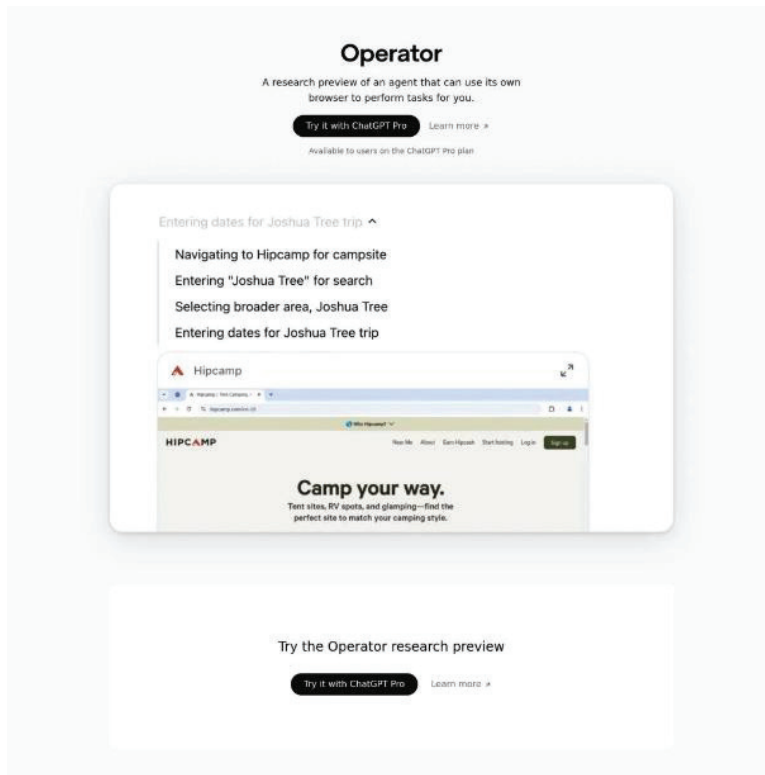
- capability-based safety policies
- independent evaluations

OpenAI - from a chatbot you talk to, to an agent that finishes work

OpenAI's direction through 2026 pushed ChatGPT well past conversation. Its **agent mode** lets ChatGPT use a virtual computer to browse, analyse, and complete multi-step tasks, pausing for permission before consequential actions. In July 2026 the company introduced **ChatGPT Work**, an agentic mode that turns a single goal into finished deliverables - documents, spreadsheets, slide decks, and dashboards - by gathering context across a user's connected apps and files. OpenAI also brought agent capabilities into team settings and, for educators, had launched a dedicated ChatGPT for Teachers experience. The through-line is unmistakable: the assistant is being repositioned as a partner that produces output, not just text.



What can I do for you?



OpenAI's direction has increasingly focused on agentic AI-systems that can plan tasks, use tools, browse, and complete workflows instead of only generating responses. Recent company statements also emphasize stronger safety requirements as AI agents become more capable.

Modern ChatGPT experiences increasingly combine:

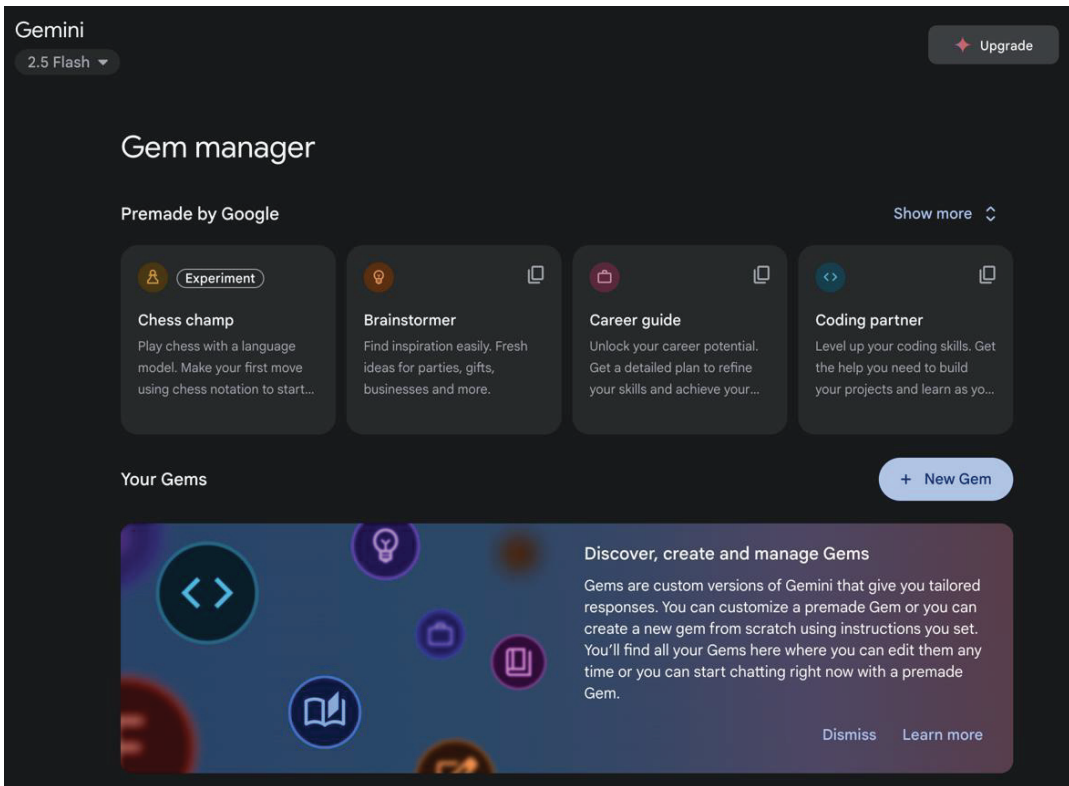
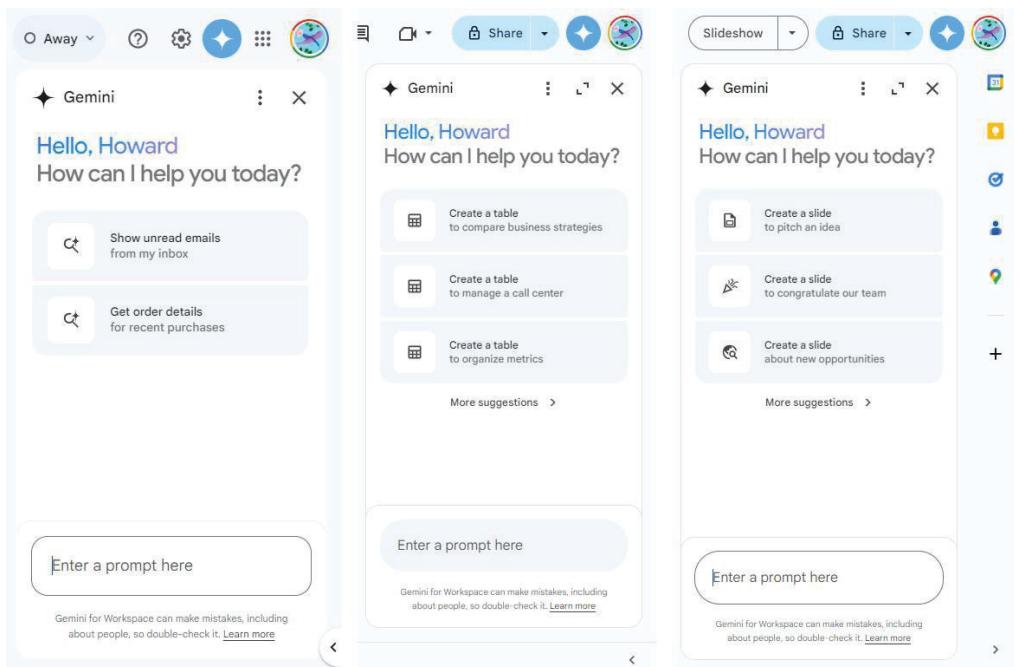
- conversation,
- reasoning,
- memory,
- browsing,
- document handling,
- workflow execution.

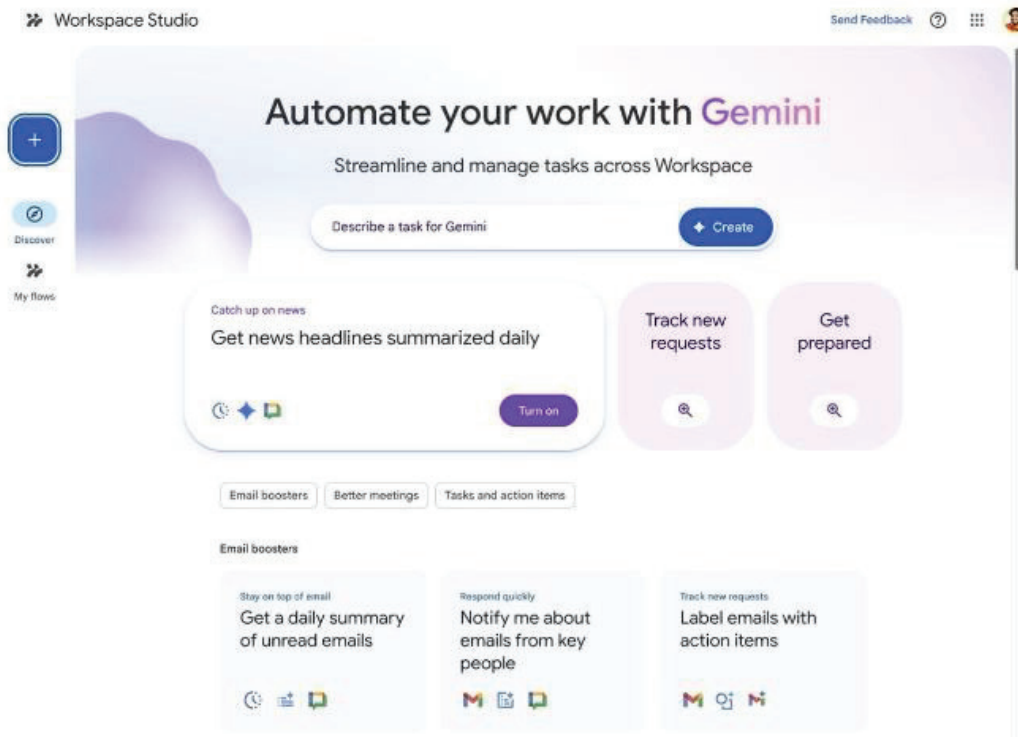
The assistant is gradually becoming an AI work partner, not just a chatbot.

Educational Takeaway: Teachers should begin designing goal-driven AI workflows rather than relying only on isolated prompts.

Google - Gemini as an intelligent layer across the workspace

Google's strategy leaned on distribution: rather than treating Gemini as a separate destination, it wove the model through Search, Workspace, and Android so it can act with context from your mail, documents, and calendar. Newer Gemini model families were framed explicitly as engines for *action*, not just chat, and Google shipped agentic automation - building multi-step workflows in plain language through Workspace Studio and its Studio Flows - alongside a personal Gemini Agent that breaks a complex request into steps and asks for confirmation before critical actions. For everyday teaching and productivity work, Gemini's strength is that it already lives inside the tools many people use all day.





Google's recent strategy has focused heavily on making Gemini work across the Google ecosystem rather than treating it as a standalone chatbot. Leadership changes inside Google also reflect stronger investment in Gemini's future direction.

Gemini's Practical Direction

- Personalized Gems
- Better integration across Google Workspace
- Improved productivity workflows
- Stronger ecosystem-based AI experience

For Educators

Gemini increasingly works well for:

- lesson planning,

- document creation,
- classroom productivity,
- collaborative work.

Three Trends That Cut Across Every Platform

Memory becomes the new baseline

The clearest shared shift is that assistants increasingly **remember**. Instead of restarting from zero each session, they retain preferences, projects, and recurring context - while giving users controls to inspect and remove what is stored. For semester-long teaching or a long writing project, this means you brief the assistant once rather than re-explaining your course, your style, and your assessment format every time.

Prompt-driven gives way to goal-driven

Across all three providers, the interaction is moving from *"write me this"* to *"achieve this outcome."* The user supplies a goal; the system plans, uses tools, and returns a result. Practically, the craft of prompting is broadening into the craft of **workflow design** - describing outcomes, permissions, and checkpoints rather than single instructions.

Safety becomes a first-class feature

As agents gain the power to click, type, and transact, providers have invested heavily in guardrails: action-level safety checks, defences against prompt-injection attacks hidden in web pages, permission prompts before consequential steps, the ability to pause or take over, and administrative controls for organisations. The design principle uniting them is **human oversight** - autonomy is expanding, but under supervision.

A Concept Worth Keeping: The Agentic AI Era

The Agentic AI Era - in one definition

Agentic AI is the stage of artificial intelligence in which systems do more than generate answers. They **plan a task, remember context, use tools, collaborate across applications, and execute a workflow toward a defined goal** - all while remaining under human supervision. In 2026 this pattern appeared across every major platform and became one of the defining shifts of the year, marking the move from AI you consult to AI you delegate to.

A Short Timeline (July-September 2026)

The dates below trace the window this update covers, drawn from official announcements:

When	What shipped
Jul 2026	OpenAI introduces ChatGPT Work, an agent mode that turns a single goal into finished documents, slides, and dashboards.
Jul 2026	Anthropic launches Claude for Teachers for verified U.S. K-12 educators (later extended to schools and districts in August).
20 Aug 2026	Anthropic makes computer use, browser use, the Skills API, and the Files API generally available for building production agents.
25 Aug 2026	Claude's memory is unified across chat and the Cowork agent, with topic-based controls and sensitive topics off by default.

When	What shipped
26 Aug 2026	Claude in Chrome reaches general availability on all paid plans, with a safety check on every browser action.
Sep 2026	Across the industry, memory and agent-safety frameworks mature, and interaction shifts further from prompt-driven to goal-driven.

References & Further Reading

Official announcements and documentation (accessed September 2026):

- Claude in Chrome is generally available - Anthropic
- Build production agents with computer use, the Skills API, and the Files API - Anthropic
- Claude for Teachers, now available for U.S. K-12 schools and districts - Anthropic
- Introducing Claude for Education - Anthropic
- Claude Platform release notes - Anthropic
- Introducing ChatGPT agent - OpenAI
- Introducing workspace agents in ChatGPT - OpenAI
- Gemini Apps release updates & improvements - Google
- Google Workspace feature drop, August 2026 - Google
- Claude's unified memory across chat and Cowork (news coverage): TechCrunch, 25 Aug 2026

Note on sourcing: *Every claim in this update was checked against the providers' official announcements and documentation. Product availability, plan names, and regional access change quickly - verify current details on each company's site before acting on them.*

Reading & Exploration Resources

OpenAI – ChatGPT for Education / OpenAI Academy:

<https://openai.com/academy/chatgpt-for-education/>

Google for Education – Gemini for Education:

https://edu.google.com/intl/ALL_in/ai/gemini-for-education/

Anthropic – Claude for Education: <https://www.anthropic.com/education>

Microsoft Learn – Copilot in Education: <https://learn.microsoft.com/en-us/microsoft-365/education/guide/1-reference/baseline-reference-copilot>

Perplexity – Education: <https://www.perplexity.ai/enterprise/use-cases/education>

MagicSchool: <https://www.magicschool.ai/>

Khan Academy – Khanmigo for Educators:

<https://www.khanacademy.org/khanmigo-for-educators>

Elicit: <https://elicit.com/>

Consensus: <https://consensus.app/>

Scite: <https://scite.ai/>

Research Rabbit: <https://www.researchrabbit.ai/>

Connected Papers: <https://www.connectedpapers.com/>

Canva for Education: <https://www.canva.com/education/>

Gamma: <https://gamma.app/>

Napkin AI: <https://www.napkin.ai/>

NotebookLM: <https://notebooklm.google.com/>

Notion AI: <https://www.notion.com/product/ai>

Grammarly for Education: <https://www.grammarly.com/edu>

Otter.ai: <https://otter.ai/>

Zapier: <https://zapier.com/>

Make: <https://www.make.com/>

n8n: <https://n8n.io/>

⚠ Caution: the same rules apply everywhere

Every tool here carries the same duties you learned in Workshop 5 - privacy, copyright, verification, and transparency. A new interface never suspends your responsibility for what you send out.

References & Further Reading

REFERENCES & FURTHER READING

The following policy documents, institutional resources, and official platform documentation provide further guidance on Artificial Intelligence, digital education, responsible AI use, and the AI platforms discussed in this book.

Policy, Education and Responsible AI

- 1. Miao, F., & Holmes, W. (2023).** *Guidance for Generative AI in Education and Research*. Paris: United Nations Educational, Scientific and Cultural Organization (UNESCO). DOI: 10.54675/EWZM9535. UNESCO UNESCO - Guidance for Generative AI in Education and Research
- 2. Ministry of Human Resource Development, Government of India. (2020).** *National Education Policy 2020*. Government of India, New Delhi. Education Government India Government of India - National Education Policy 2020
- 3. University Grants Commission (UGC). (2024).** *Guidelines for Institutional Development Plans for Higher Education Institutions*. University Grants Commission, New Delhi. UGC UGC Guidelines
- 4. Ministry of Education, Government of India.** *SWAYAM - Study Webs of Active-Learning for Young Aspiring Minds*. Government of India. SWAYAM is the Ministry of Education's national online-learning initiative. Swayam SWAYAM - Ministry of Education
- 5. OECD. (2026).** *OECD Digital Education Outlook 2026: Exploring Effective Uses of Generative AI in Education*. OECD Publishing, Paris. DOI: 10.1787/062a7394-en. OECD OECD Digital Education Outlook 2026
- 6. OECD. (2026).** “Policies Supporting Responsible and Systematic GenAI Adoption in Higher Education.” *OECD Education Spotlights*, No. 23. OECD Publishing, Paris.

DOI: 10.1787/c4e5621f-en. OECD OECD - Responsible GenAI Adoption in Higher Education

7. Vincent-Lancrin, S., & van der Vlies, R. (2020). “Trustworthy Artificial Intelligence (AI) in Education: Promises and Challenges.” *OECD Education Working Papers*, No. 218. OECD Publishing, Paris. DOI: 10.1787/a6c90fa9-en. OECD

8. OECD. (2026). *Reimagining Teaching in an Accelerating World*. International Summit on the Teaching Profession. OECD Publishing, Paris. DOI: 10.1787/d0edfe8c-en. OECD

Official Platform Documentation

9. OpenAI. (2026). *Creating and Editing GPTs*. OpenAI Help Center. Official documentation covering GPT configuration, instructions, knowledge, capabilities, testing and management. Because platform interfaces and eligibility change, readers should consult the latest version of the documentation. OpenAI Help Center OpenAI - Creating and Editing GPTs

10. Google. (2026). *Get Started with Gems in Gemini Apps*. Google Gemini Apps Help. Official documentation explaining customised Gems, reusable instructions and their use within Gemini Apps. Google Help Google - Get Started with Gemini Gems

11. Anthropic. (2026). *What Are Projects?* Anthropic Help Center. Official documentation describing Claude Projects as self-contained workspaces with chat histories, project knowledge and instructions. Claude Help Center Anthropic - Claude Projects

12. Anthropic. (2026). *How Can I Create and Manage Projects?* Anthropic Help Center. Official guidance covering project creation, project knowledge and project instructions. Claude Help Center Anthropic - Claude Projects

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