



Study Coach Gem Creator Teacher's Guide

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Link to Tool

[Study Coach Gem Creator Instructions](#)

[Study Coach Gem Creator Gem](#)

What is a Gemini Gem?

A **Gem** is a custom AI assistant you create inside Google Gemini. Instead of being a general-purpose chatbot, a Gem follows specific instructions you provide—like giving Gemini a job description.

Gems can be built for anyone:

- **For students:** A tutor who guides review sessions, provides feedback, and supports different learning needs

- **For teachers:** A tool that generates lesson materials, creates customized resources, or streamlines planning tasks

Why use Gems?

- **Consistent:** Follows your instructions every time
- **Customizable:** Control the tone, focus, and content
- **Reusable:** Create once, use repeatedly with different inputs
- **Free:** Included with Google Workspace for Education

No coding required—just write instructions in plain English. The only limit is your imagination.

Brief Description

The **Study Coach Gem Creator** is a meta-tool that enables any grades 6-12 educator to generate a fully customized AI tutoring Gem in approximately 5 minutes. By answering just 5 simple questions, teachers receive complete, ready-to-use Gem instructions tailored to their specific subject, grade level, and instructional preferences—no prompt engineering expertise required.

Why It Matters

Creating a custom AI tutor traditionally requires learning prompt engineering, writing hundreds of lines of instructions, and weeks of testing and iteration. Some schools hire instructional designers or pay for custom AI tools. The Gem Creator eliminates all of that: just answer 5 questions, copy the generated output, and your personalized Study Coach is ready to use. It's free through Google Workspace for Education.

Automatic Customizations

The Gem Creator adjusts the generated Study Coach based on your answers:

Grade Level Adjustments (Middle vs. High School):

Element	Middle School (6-8)	High School (9-12)
Tone	Warm, encouraging	Collegial, mature
Session length	15-20 minutes	20-25 minutes
Emoji use	Moderate	Minimal
Question complexity	Factual + connection	Analysis + synthesis
Concepts per session	2-3	3-4

Content Area Adjustments:

Subject	Question Types	Sentence Starters	Graphic Organizers
Math	Show work, error analysis	"First I..., so the answer is..."	Number lines, step boxes
Science	Prediction, evidence	"Based on the evidence..."	Data tables, cycle diagrams
ELA	Text evidence, inference	"The author shows..."	Plot diagrams, quote charts
Social Studies	Cause/effect, significance	"This was significant because..."	Timelines, perspective charts
World Languages	Translation, usage	Starters in target language	Conjugation tables
Arts/Music/PE	Process, reflection	"I improved by..."	Self-assessment, goal tracking

Gem Instructions / How to Use

Step-by-Step Process

Step 1: Open the Gem Creator (1 minute)

1. Click the Gem Creator link
2. The Creator will greet you and explain the process

Step 2: Answer 5 Questions (2-3 minutes)

The Creator asks one question at a time. Simply respond conversationally.

Question	Example Response	What It Affects
Q1: What subject do you teach?	"10th grade Biology"	Content-specific questions, sentence starters, and graphic organizers
Q2: What grade level?	"10th grade"	Tone, session length, complexity
Q3: What state standards?	"Texas TEKS" or "I'm not sure."	Vocabulary alignment
Q4: Graphic organizers you use?	"Use defaults" or "Venn diagrams, data tables."	Paper tools suggestions

Q5: Soft or Strict RAG?	"Soft"	How Gem uses uploaded documents
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RAG Options Explained:

Option	What It Means	Best For
Soft RAG	Gem uses your documents AND can explain related concepts	Learning new material, making connections
Strict RAG	Gem ONLY uses information from your documents	Test review, ensuring content accuracy

Step 3: Receive Your Custom Gem (Instant)

The Creator generates:

- Complete Gem instructions (copy/paste ready)
- Set up instructions for Google Gemini
- Document upload guidance
- Tips for success

Step 4: Create Your Gem in Google Gemini (5 minutes)

1. Prepare Your Documents

- Gather unit materials: notes, study guides, vocabulary lists, review sheets
- Shorter, focused documents work better than entire textbooks
- Save as PDF, Google Doc, or text file

2. Create the Gem

- Go to gemini.google.com
- Click on "**Gem**" and then select the "**+ New Gem**" button.
- Name your Gem: "[Subject] Study Coach" (for example, "U.S. History Study Coach"). I usually add the phrase "Say 'Hi' to get started 🙌".
- Optionally, add a description that explains what your Gem does.
- Paste the complete instructions for the Gem into the instruction field.
- Click "**Update**" to save your changes.
- You can test the Gem on this screen or start a new chat for a full-screen experience.
- To share a link to your Gem, click on "**Share**." You will then be prompted to assign viewing rights for the files you added to the Gem. This will appear as an automatic pop-up when you click "Share."

Step 5: Upload Documents and Use

- Open your new Study Coach Gem
- Upload unit materials (notes, study guides, vocabulary lists)
- Share with students or use for whole-class review

Key Feature: Your Gem is reusable all year—just upload different documents for each unit!

File types & upload limits

- Gemini Apps support most file types.
- Up to 10 files can be uploaded in the same prompt.
- Each video can be up to 2 GB. All other supported file types can be up to 100 MB.
- Total video length can be up to 5 minutes. Upgrade to Google AI Pro or Google AI Ultra to extend the total upload length to 1 hour.
- Total audio length can be up to 10 minutes. Upgrade to Google AI Pro or Google AI Ultra to extend the total upload length to 3 hours.

Gem Menu Options

Click the three dots (⋮) next to any Gem to access these options:

Option	What It Does
Share	Generate a link so students or colleagues can use your Gem. Anyone with the link can chat with it, but only you can edit the instructions.
Pin	Keep this Gem at the top of your Gems list for quick access. Useful for Gems you use daily.
Edit	Open the Gem instructions to make changes. Updates apply immediately—no need to reshare the link.
Delete	Permanently remove the Gem. Shared links will stop working. This cannot be undone.

Lesson Ideas

Note: The Gem Creator is a tool for educators, not students. These "lessons" are professional development activities and implementation guides.

PD Activity 1: Build Your First Study Coach (30 minutes)

Objective: Teachers create a customized Study Coach for their content area.

Participants: Individual teachers or department teams

Procedure:

1. **Introduction (5 min):** Facilitator demonstrates the Gem Creator, showing how 5 questions generate a complete AI tutor
2. **Creation (10 min):** Each teacher uses the Gem Creator to build their own Study Coach
3. **Setup (10 min):** Teachers create their Gem in Google Gemini and upload one unit document
4. **Test Drive (5 min):** Teachers try their new Study Coach as a student would

Discussion Questions:

- What customizations did you notice based on your subject/grade level?

- How might you use this with students tomorrow?

PD Activity 2: Department Collaboration—Shared Study Coaches (45 minutes)

Objective: Department teams create consistent Study Coaches for their content area.

Participants: Content-area department (e.g., all 8th-grade Science teachers)

Procedure:

1. **Alignment Discussion (15 min):** Team agrees on shared preferences:
 - Which graphic organizers do we all use?
 - Soft or Strict RAG for our courses?
 - Any department-specific language or frameworks?
2. **Creation (10 min):** One teacher creates the Gem while others observe/contribute
3. **Documentation (10 min):** Team documents the Gem link and usage norms
4. **Planning (10 min):** Team identifies first unit to pilot with students

Output: One shared Study Coach Gem that all department members can use with their own documents.

Implementation Guide: First Week Rollout

Objective: Successfully introduce Study Coach to students.

Day 1: Teacher Preparation (No Students)

- ☐ Use Gem Creator to build your Study Coach
- ☐ Create the Gem in Google Gemini
- ☐ Upload the first unit document
- ☐ Test as a student (try all three modes)
- ☐ Troubleshoot any access issues

Day 2: Whole-Class Introduction (20 minutes)

- ☐ Project your Study Coach
- ☐ Demo the setup flow (language, mode, topic)
- ☐ Show voice features ( and )
- ☐ Explain the MENU command
- ☐ Answer student questions

Day 3: Guided Practice (20 minutes)

- ☐ All students access Study Coach simultaneously
- ☐ Everyone completes the setup for the same topic
- ☐ Circulate to troubleshoot
- ☐ Debrief: "What worked? What was confusing?"

Day 4-5: Independent Use

- ☐ Students use Study Coach during designated review time
- ☐ You circulate, observe, and note patterns
- ☐ Collect informal feedback

End of Week: Reflection

- ☐ What went well?
- ☐ What adjustments are needed?
- ☐ Which students need additional support with the tool?

Implementation Guide: Scaling Across a School

Objective: Support schoolwide adoption of Study Coach Gems.

Phase 1: Pilot (1-2 teachers, 2 weeks)

- ☐ Identify early adopter teachers
- ☐ Support them through Gem creation and first use
- ☐ Document successes and challenges

Phase 2: Department Expansion (1 month)

- ☐ Pilot teachers demo for their departments
- ☐ Facilitate department PD sessions (see Activity 2)
- ☐ Create a shared resource folder with Gem links and documents

Phase 3: Schoolwide Rollout (1 semester)

- ☐ Include in faculty meeting or PD day
- ☐ Provide "office hours" for troubleshooting
- ☐ Celebrate and share success stories

Phase 4: Sustainability

- ☐ Add to new teacher onboarding
- ☐ Include in department curriculum planning
- ☐ Annual refresh of documents and best practices

Tips for Success

Do's

- ✓ **Answer questions conversationally** — "I teach 7th grade Texas History" works great
- ✓ **Choose Soft RAG for most uses** — It's more flexible for learning; use Strict only for test review
- ✓ **Test your Gem before sharing with students** — Spend 5 minutes as a "student" to catch any issues
- ✓ **Upload focused documents** — 2-5 pages per unit works better than entire textbooks
- ✓ **Share with colleagues** — One Gem can serve a whole department

Don'ts

- ✗ **Don't overthink your answers** — The Creator is designed for quick, intuitive responses
- ✗ **Don't skip testing** — Even generated Gems benefit from a quick quality check
- ✗ **Don't forget to upload documents** — The Study Coach needs content to teach from
- ✗ **Don't assume one-size-fits-all** — High school Chemistry and middle school ELA need different approaches (that's why customization matters!)

Troubleshooting

Issue	Solution
Gem Creator isn't responding	Refresh the page; check Gemini access on your account
Generated Gem seems generic	Make sure you provided specific subject and grade level
Students can't access the Study Coach	Verify their Google accounts have Gemini access; check with IT
Study Coach gives information not in documents	This is Soft RAG behavior; switch to Strict RAG if undesired
Want to make changes after generation	Ask the Gem Creator to regenerate with different settings

Quick Reference: Gem Creator vs. Study Coach

	Gem Creator	Study Coach
Who uses it?	Teachers	Students
Purpose	Create customized AI tutors	Review and practice content
Time required	3 minutes (one-time)	15-20 minutes (per session)
Input	5 questions about teaching context	Responses to study questions
Output	Complete Gem instructions	Learning feedback and support
Reusability	Use once to create your Gem	Use repeatedly with different documents

Frequently Asked Questions

Q: Do I need to know how to code or write prompts? A: No. The Gem Creator handles all the technical work. You just answer 5 questions about your teaching context.

Q: Can I edit the generated Gem instructions? A: Yes! The output is text you can modify. However, most teachers find the generated version works well as-is.

Q: What if I teach multiple subjects or grade levels? A: Create a separate Study Coach for each. Run through the Gem Creator once per course.

Q: Can my whole department use the same Study Coach? A: Yes! Create one Gem and share the link. Each teacher uploads their own documents.

Q: Does this cost anything? A: No. Both the Gem Creator and generated Study Coaches use Google Gemini, which is free through Google Workspace for Education.

Q: What if I want features that the Gem Creator doesn't include? A: You can manually edit the generated instructions to add custom features. The output is fully editable text.

Q: How is this different from just using ChatGPT or Gemini directly? A: The generated Study Coach includes research-based tutoring practices (retrieval, 2-attempt hints, accessibility supports) that generic AI doesn't provide. It's structured for learning, not just answering questions.

Q: Is the Study Coach Gem safe for students? A: Yes. The Study Coach includes multiple layers of protection:

Built into the Gem instructions:

- Never asks for or stores personal information (full names, school names, phone numbers, emails, or student IDs)
- Redirects off-topic conversations back to the subject matter
- Includes crisis protocols—if a student mentions self-harm, abuse, or bullying, the Gem pauses the lesson and encourages them to speak with a trusted adult

- Uses age-appropriate language and tone for the grade level

Built into Google Workspace for Education:

- Content filtering already in place for K-12 accounts
- No student data is used to train AI models
- Conversations are not stored or shared beyond the session
- Complies with FERPA and COPPA requirements

Teacher control:

- You decide what documents to upload and what content students can study
- Strict RAG mode limits responses to only your uploaded materials
- You can review and edit Gem instructions at any time

The Study Coach is designed to be a tutoring tool, not a general chatbot—it stays focused on learning and won't engage with inappropriate requests.

ISTE Standards Alignment

ISTE Standards for Educators

Standard	Indicator	How Gem Creator Addresses It
2. Leader	2a. Shape, advance, and accelerate a shared vision for empowered learning with technology	Enables teachers to create AI tools that can be shared across departments and schools
	2c. Model for colleagues the identification, exploration, evaluation, curation, and adoption of new digital resources	Demonstrates how to evaluate and adopt AI tutoring tools effectively
4. Collaborator	4a. Dedicate planning time to collaborate with colleagues to create authentic learning experiences	Department collaboration activities support shared tool creation
	4b. Collaborate and co-learn with students to discover and use new digital resources	Teachers can involve students in testing and refining their Study Coach
5. Designer	5a. Use technology to create, adapt, and personalize learning experiences	Core function—creates personalized AI tutors for specific contexts
	5b. Design authentic learning activities that align with content area standards	Generated Gems align with state standards specified by the teacher

	5c. Explore and apply instructional design principles to create innovative digital learning environments	Gem Creator embeds research-based instructional design automatically
6. Facilitator	6a. Foster a culture where students take ownership of their learning goals	Generated Gems give students control over study mode, supports, and pace
	6b. Manage the use of technology and student learning strategies	Generated Gems include structured flows and progress tracking
7. Analyst	7b. Use technology to design and implement a variety of assessments	Generated Gems include retrieval practice, confidence checks, and formative assessment

ISTE+ASCD Transformational Learning Principles for Educators

The Gem Creator helps educators implement the Transformational Learning Principles by creating AI tools that embody these practices.

Nurture

Principle	How Gem Creator Supports It
Cultivate Belonging	Generated Gems use encouraging language and never shame students; customizable tone for your classroom culture
Connect Learning to the Learner	Teachers specify grade level, subject, and context; resulting Gem tailors instruction to those students
Ensure Opportunity	Every generated Gem includes accessibility features (bilingual support, easier English, voice options) by default

Guide

Principle	How Gem Creator Supports It
Spark Curiosity	Generated Gems connect content to student interests; interactive formats engage learners
Develop Expertise	All Gems use evidence-based retrieval practice and productive struggle (2-attempt model)
Elevate Reflection	Built-in confidence checks and metacognitive prompts in every generated Gem

Empower

Principle	How Gem Creator Supports It
Prioritize Authentic Experiences	Gems require students to explain in their own words (Teach-Back); connects learning to real applications
Ignite Agency	Students choose study modes, activate supports, and direct their own learning path

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