



Integrating AI into a Subject

Week 4 · Your Subject, Your Rules

AI-Integrated Teaching · Fall 2026 · Instructor Yoobinnara Kim

Today, in one sentence: where AI can enter a lesson, and the three questions that tell you if it should.

Three Questions for Today

8 min

Before we design with AI, choose one question to discuss with a partner:



Question 1

Which AI competency matters most in your subject?



Question 2

Where should AI support students—and where should it step back?



Question 3

What evidence would show that AI improved learning?

Share one thought aloud. Keep it in mind as you design and test today's activity.

Growth Goals and Topics on the Table

7 min

Two things came home with you last week: a growth goal and a topic from your subject.



Growth goal shares

Two or three volunteers: which dimension did you choose, and why?



Did you bring a topic?

One lesson or unit from your subject. Show of hands!



No topic yet?

No problem. Choose one right now: any topic you could teach for 10 minutes.

Why the topic matters: it becomes your working material for the next four weeks, all the way to your micro-teaching.

Today's Roadmap: 3 Hours, 3 Sessions



SESSION 1 · 50 MIN

Where AI Can Enter

What "integration" really means, and the four doors of every lesson, one by one



SESSION 2 · 50 MIN

The Golden Filter

Three questions that separate good AI ideas from bad ones, then your first hands-on



SESSION 3 · 50 MIN

Judge and Choose

Test your ideas, play "Strong or Shaky?", and choose your best idea to keep

Two 10-minute breaks, as always. · Note: Chuseok holiday this week (Sep 24 and 25).

Today's Key Words

4 min

Six words carry today's whole class. Read each one, then write it in YOUR language in the empty box:

integrate	to make something a natural working part of a bigger thing	<i>in your language</i>
entry point	a place where something can come in	
learning goal	what students should be able to do after the lesson	
filter	a test that lets good things pass and stops bad things	
risk	something that could go wrong	
draft	a first version, made to be checked and improved	

What Does "Integrating AI" Really Mean?

7 min



IN ONE SENTENCE

Integration means connecting AI to a learning goal, so that learning gets better.



NOT integration

Using AI a lot, because it is new and exciting.

"We used ChatGPT today!" is an activity report, not a learning result.



Real integration

AI has one clear job inside the lesson, and that job serves the learning goal.

If you removed the AI, the lesson would lose something real.



The salt example

Salt in soup: a little, in the right place, makes the soup better.

But the soup is never ABOUT the salt. Your lesson is never about the AI.

Every Lesson Has Four Doors

6 min

Where exactly can AI enter? Think of any lesson as a house with four doors:



Door 1 • Before class

Preparing materials, examples, and plans. Students never see this door: only you use it.



Door 2 • During class

Live moments: showing something, asking AI together, practicing with it.



Door 3 • After class

Practice questions, feedback drafts, review help for students.



Door 4 • For you, the teacher

Your own work: letters to parents, translations, planning documents.

Coming next: we open each door and look inside: what AI can do there, one small example, and one danger to watch.

Before Class: The Preparation Door

6 min



IN ONE SENTENCE

AI helps you prepare: it drafts materials fast, and you improve and approve everything.



WHAT AI CAN DO HERE

Draft a reading text, worksheet, or quiz in seconds. Suggest examples and simple explanations. Offer three activity ideas when your mind is empty at 11 pm.



A TINY EXAMPLE

Mr. Sato needs a short text about volcanoes for tomorrow. AI writes a draft in 20 seconds. He fixes one wrong fact, makes the words easier, and prints it. Total time: 10 minutes instead of 60.



WATCH OUT

The draft looks finished, but it is not. If you print without checking, an AI mistake reaches 30 students with YOUR name on it. Rule: every draft gets your red pen first.

Quick think: could this entry point work for YOUR topic? Yes, maybe, or no?

During Class: The Live Door

6 min



IN ONE SENTENCE

AI joins the lesson in real time, with the teacher directing every moment.



WHAT AI CAN DO HERE

Show something live: "Let us ask AI and check its answer together." Be a practice partner for language or interview training. Give a second explanation when yours did not land.



A TINY EXAMPLE

Ms. Rivera's class asks AI to describe their city. Together they find two mistakes in its answer. The lesson becomes: information must be checked. The AI error WAS the teaching material.



WATCH OUT

The live door is exciting but risky: no internet, strange answers, slow tools. Rule: always carry a plan B (a screenshot of a good answer), and never let the demo replace student thinking.

Quick think: could this entry point work for YOUR topic? Yes, maybe, or no?

After Class, and For You

6 min



IN ONE SENTENCE

AI supports practice and feedback after the lesson, and saves hours in your own paperwork.



WHAT AI CAN DO HERE

Door 3: make practice questions at three levels, draft feedback comments, build review summaries. Door 4: draft parent letters, translate notices, organize your planning documents.



A TINY EXAMPLE

After a grammar lesson, Ms. Novak asks AI for ten extra practice sentences at two difficulty levels. Fast finishers get the hard set. Same evening, AI drafts her field-trip notice, and she edits it in five minutes.



WATCH OUT

Door 3 danger: AI feedback without your voice feels cold and generic to students. Door 4 danger: never put real student names or private family information into any AI tool.

Quick think: could this entry point work for YOUR topic? Yes, maybe, or no?



Break Time!

10 minutes. We restart at __ : __

Stretch, get a coffee, tell a neighbor which door you like best.

Coming up: the Golden Filter, three questions that judge every AI idea.

Four Doors Are Open. Should You Walk In?

5 min

Here is the honest problem with AI ideas:



AI ideas are cheap now

You can get twenty ideas in one minute. Having ideas is no longer the hard part.



"Cool" is a trap

Some ideas look exciting but teach nothing. New is not the same as good.



Your time is expensive

Every AI activity costs preparation and class time. Bad ideas steal both.



So professionals use a filter: three short questions. Ask them about ANY AI idea, in any subject, at any door. If the idea fails one question, fix it or drop it. We call it the Golden Filter: Goal. Human. Risk.

Goal: Does It Serve MY Learning Goal?

5 min

1

ASK YOURSELF

Does this AI idea help students reach THIS lesson's goal, or is it just decoration?



PASSES THE QUESTION

Goal: students can describe a food chain. AI idea: AI drafts three food-chain examples from the students' own region, and students check them against the textbook. The idea works FOR the goal.



FAILS THE QUESTION

Same goal. AI idea: students make funny AI pictures of animals. Fun for ten minutes, and it teaches nothing about food chains. Decoration, not education.

Why this question matters: a lesson has one job. Every activity, including AI, must push toward that job. "Interesting" is not enough.

Human: What Do Humans Do Better Here?

5 min

2

ASK YOURSELF

In this moment of the lesson, would a human (you, or the students) teach or learn better than the AI?



PASSES THE QUESTION

A debate lesson: AI generates arguments as raw material, and STUDENTS do the debating, judging, and thinking. The human moments stay human; AI only carries bags.



FAILS THE QUESTION

A writing lesson where AI writes the essays and students only copy them. The exact skill the lesson exists to build (writing!) is given away to a machine. The learning quietly disappears.

Why this question matters: some moments NEED humans: real discussion, empathy, culture, personal stories, and any thinking students must practice themselves.

Risk: What Could Go Wrong, and What Is My Plan?

5 min

3

ASK YOURSELF

Name the biggest risk of this idea out loud, and decide your answer to it BEFORE class.



PASSES THE QUESTION

Idea: live AI demo about local history. Named risk: AI may invent facts. Plan: we fact-check together as part of the lesson, and I carry a checked screenshot as plan B. Risk becomes teaching material.



FAILS THE QUESTION

Same idea, no risk thinking. The AI confidently invents a false local hero, the class believes it, and it spreads. Nobody planned for it, so nobody caught it.

Why this question matters: a named risk is a managed risk. Problems only become disasters when nobody thought about them first.

One Idea Walks Through the Filter, Live

5 min

THE IDEA: "For my science class, AI drafts a short reading text about volcanoes, and I edit it before printing." (Door 1)



1 • Goal?

Goal: students can explain how volcanoes form. A short, level-right reading text serves it directly. PASS.



2 • Human?

The teacher still leads the discussion and answers questions; students still read and think. AI only drafts. PASS.



3 • Risk?

Risk: a wrong fact in the draft. Plan: check every fact against the textbook before printing. Named and managed. PASS.

Three passes: this idea earns its place in class. Now it is your turn: your topic, your ideas, same filter.

Three Doors for Your Topic

25 min



Step 1 • Ask for three ideas (8 min)

Copy the prompt. Fill the two blanks with YOUR topic and YOUR students. Send it.



Step 2 • Run the filter (9 min)

For each of the three ideas, ask: Goal? Human? Risk? Write PASS or FAIL next to each one. Cross out any idea that fails.



Step 3 • Choose one winner (6 min)

Choose the one idea you would really try. Tell your partner in two sentences: the idea, and why it passed.

Finding weak ideas is normal. Finding them is the skill.

COPY THIS PROMPT

"I teach [topic] to [age] students. Suggest 3 different ways to use AI in this lesson: one for making materials, one for student practice, one for feedback. Keep each idea under 3 sentences."

Want more choices?

Ask: "Give me 3 more ideas, but simpler." You are interviewing the AI. You are the boss of this conversation.

Keep your winner idea safe. You will need it after the break.



Break Time, Round 2!

10 minutes. We restart at __ : __

Walk, stretch, drink some water. Your winner idea is waiting.

Coming up: what we all discovered, a judgment game, and your final pick.

What Did the Three Doors Show Us?

8 min

First: three or four volunteers share their winner idea. As we listen, watch for these patterns:



Clear ideas win

"AI drafts three word problems about soccer scores" is stronger than "use AI for math."
Details make ideas real.



Weak ideas replace students

If the AI does the thinking that students should practice, the idea fails Question 2. Every time.



Small wins

A five-minute AI moment that serves the goal is worth more than a whole lesson of empty AI show.

Keep your winner safe: next week we turn it into real teaching material, step by step, at Door 1.

Pick and Pitch: 60 Seconds

12 min



Step 1 • Write your pitch (5 min)

On paper, four short lines about your winner idea: My topic. My AI idea (one sentence). It passes the filter because... My plan for the biggest risk.



Step 2 • Pitch to your partner (4 min)

Sixty seconds each, standing up if you like. Partner listens, then asks exactly ONE question.



Step 3 • Two pitches for the class (3 min)

Two volunteers pitch to everyone. Applause is required and free.

Why pitch out loud? saying an idea in sixty seconds forces it to become clear. Fuzzy ideas cannot survive a pitch.

The Same Filter Works in Every Subject

5 min

Your classmates just filtered ideas in many different fields. One taste of each family:



Languages

AI as a conversation partner, with an error hunt after. Watch out for answers that are TOO perfect.



Math and science

AI drafts practice problems and real-life examples. Watch out for confident wrong calculations.



Arts and humanities

AI as an idea partner and a voice from history. Watch out for invented facts and one-sided views.

Just a taste today: Week 12 is a FULL class of real case studies, field by field, built by you in subject teams.

Strong or Shaky?

10 min

Four classroom stories. Thumbs UP = strong integration. Thumbs DOWN = shaky. Talk to your neighbor first!

A

A history teacher has AI write essays, and students memorize them for the exam.

B

A science teacher asks AI for 5 everyday examples of friction, checks them, and uses 3.

C

Students ask AI to solve every homework problem and copy the answers.

D

A language teacher lets students interview an AI "pen pal," then find its mistakes together.

Use the filter: Goal. Human. Risk.

Answers on the next slide.

Strong or Shaky? The Answers

in game

A

AI writes, students memorize

Shaky

Students skip the thinking the lesson exists for. Fails Goal and Human.

B

AI suggests, teacher checks

Strong

Serves the goal, teacher verifies, risk managed. All three questions: pass.

C

AI solves all homework

Shaky

Practice disappears. This is the over-use risk from Week 2, live.

D

AI pen pal plus error hunt

Strong

Real practice AND critical checking in one activity. Two skills, one idea.

The pattern: strong integrations make students think MORE, not less. Weak ones quietly remove the learning.

Today's 3 Big Ideas

3 min

If you remember only three things from today, remember these:



Four doors

Before class, during class, after class, and for you. AI can enter a lesson at any of them, with you in control.



Goal. Human. Risk.

The three-question filter for every AI idea, in every subject. If an idea fails one question, fix it or drop it.



You hold a winner

One clear, filtered AI idea for YOUR topic, tested in a real pitch. It is the seed of your micro-teaching.

One-minute paper: write your winner idea in ONE sentence and hand it in. I will write a comment on every single one.

Before Next Week

2 min

SMALL HOMEWORK (15 MIN, GRADED: EFFORT ONLY)

My Mini Integration Plan

- ✓ Take your winner idea from today
- ✓ Write 5 short sentences: the goal, what AI does, what YOU do, what students do, and your plan for one risk
- ✓ Optional: try the AI part once at home and note what happened
- ✓ Bring your plan next week: we build real materials from it

Five sentences, not an essay. Small and clear wins.

NEXT WEEK

Week 5

Designing with Generative AI I: Content and Materials



The prompt recipe: how to ask AI for exactly what you need



Hands-on: build a real worksheet or reading text for your topic



Quality checks: nothing reaches students without your red pen

Extra Round: Fix the Shaky Ideas

spare

Higher difficulty: these ideas are shaky, but not hopeless. In pairs, REDESIGN each one so it passes the filter.

E

Students use AI to write their book reports, then hand them in.

F

A teacher plays 20 minutes of AI-generated videos because students find them fun.

G

A teacher lets AI answer all student questions in class so lessons move faster.

H

Students vote with an AI tool on which classmate gave the best presentation.

Redesign hint: keep the tool, move the thinking back to the students. Example fix for E: AI writes a WRONG book report, and students correct it.

BONUS • IF TIME ALLOWS

Door Hunt: Your Week in Four Doors

spare

A quiet thinking activity. On paper, plan one tiny AI moment for each door, all for YOUR topic:



Door 1 • Before class

One material AI could draft for you this week. (One sentence.)



Door 2 • During class

One 5-minute live moment. What is your plan B if the internet dies?



Door 3 • After class

One practice or feedback task AI could support. Who checks it?



Door 4 • For you

One boring task AI could shorten for you this week. Enjoy the free time.

Four doors, four tiny plans: you just designed a whole AI-supported week. Keep the paper.



You are a judge of AI ideas now!

Goal. Human. Risk. Carry it everywhere.

Mini plan due Week 5 · Enjoy the Chuseok holiday · Your winner idea travels with you

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UNESCO SOURCE

AI competency framework for teachers

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