

IMMERSION WEEK: GENERATIVE AI IN LANGUAGE INSTRUCTION

SESSION 3

THURSDAY, DECEMBER 5, 2024



Northwestern

Media and **Design Studio** Language Resource Center



ANNOUNCEMENTS

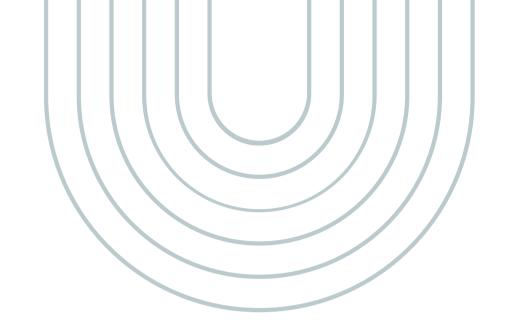
- Sessions will be recorded (except student panel in session 4).
- The last slide of each session includes resources to further explore the topic(s) presented.
- These materials will be posted in <u>LRC Programming/Events</u> webpage.
- During the presentations, please, remain muted.
- Q&A will take place at the end of the presentation.
- Funding to cover the ACTFL's member registration fee for the course "<u>Making Al Work for Language Teachers</u>" (Maureen Lamb) will be available to interested instructors.

AI-BASED LANGUAGE LEARNING PROJECTS

Matt Taylor, Director Media and Design Studio

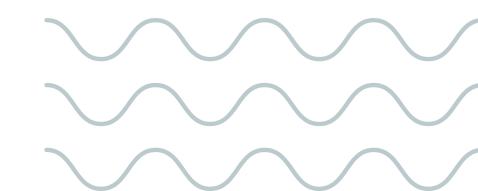
Chin-Hung Chang, Associate Professor of Instruction Eun Hee Kim, Assistant Professor of Instruction Franziska Lys, Professor Northwestern University

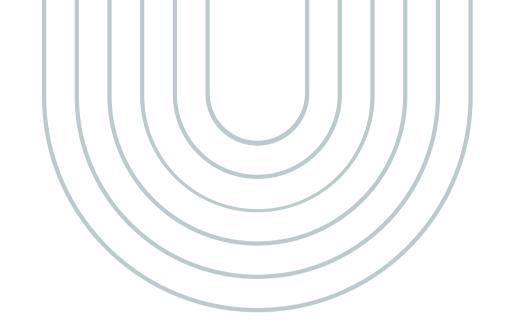




SESSION 3 AGENDA

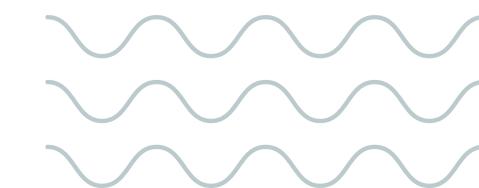
- Part 1: Al Tools to Develop Activities for Can-Do Statements
- Part 2: Faculty Panel presenting Al-based tools in action at Northwestern
- Q&A





SESSION 3 GOALS

- Present practical examples of the use of AI tools to develop activities based on ACTFL's modes of communication
- Compare commonly used AI tools
- Showcase Al-based tools developed by Northwestern faculty



O1. AI-TOOLS TO DEVELOP ACTIVITIES FOR CAN-DO STATEMENTS



| CAN-DO STATEMENTS BY MODE OF COMMUNIATION AND PROFICIENCY BENCHMARK | | | | | | | |
|---|---|---|--|---|--|--|--|
| Mode of communication | Novice | Intermediate | Advanced | Superior | Distinguished | | |
| Interpretive | Understand basic information from simple texts by recognizing practiced or memorized words. | Understand the main idea and some details in texts on familiar topics. | Understand the main idea and supporting details in texts on a variety of topics. | Understand extended texts on a wide range of topics, including abstract concepts. | Understand nuanced and sophisticated texts on a wide range of topics. | | |
| Interpersonal | Exchange greetings and simple information by using practiced and memorized expressions. | Participate in conversations on familiar topics. | Participate in conversations on a variety of topics, including some unfamiliar ones. | Engage in complex conversations on a wide range of topics. | Engage in highly sophisticated and nuanced conversations. | | |
| Presentational | Present basic information about oneself and familiar topics by using practiced or memorized expressions. | Present information and ideas on familiar topics using sentences and connected sentences. | Present detailed information and viewpoints on a variety of topics. | Present complex information and viewpoints on a wide range of topics. | Present highly sophisticated and nuanced information and viewpoints on a wide range of topics. | | |
| Cultural Competency | Identify some common products and practices of the target culture. Use appropriate greetings and simple phrases in the target culture. | Describe some cultural products and practices and their significance. Use culturally appropriate behaviors in everyday interactions. | Analyze cultural products and practices and their relationship to cultural perspectives. Adapt language and behavior to interact appropriately in the target culture. | Evaluate cultural products and practices in a variety of contexts. Engage in nuanced and sophisticated interactions in the target culture. | Conduct in-depth analysis of cultural products and practices and their implications. Navigate complex cultural interactions with a high degree of | | |



AI-TOOLS SELECTION & COMPARISON





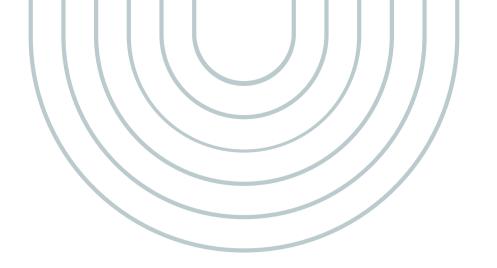


Functionalities for instructors:

- Creating teaching materials
- Developing assessments
- Customizing activities for students
- All tools can process written text and video/audio

Functionalities for students:

- Tutoring targeting individual needs
- Generating activities for extra practice/review
- Adaptive learning experiences



SAMPLE CAN-DO #1: NOVICE-LOW | INTERPRETIVE

| NL.ILR | I can identify memorized or familiar words when they are supported by gestures or visuals. | |
|----------|---|--|
| NL.ILR.1 | I can identify some locations or stores by their signs, recognize names of familiar people and places in a public announcement, follow instructions for simple class routines, etc. | |
| NL.ILR.2 | I can recognize a few words in the title of a story, a character's name, common opening and closing words of a story, etc. | |
| NL.ILR.3 | I can recognize familiar place names on a map or brochure, a few question words, simple words of praise by a teacher to a student, etc. | |

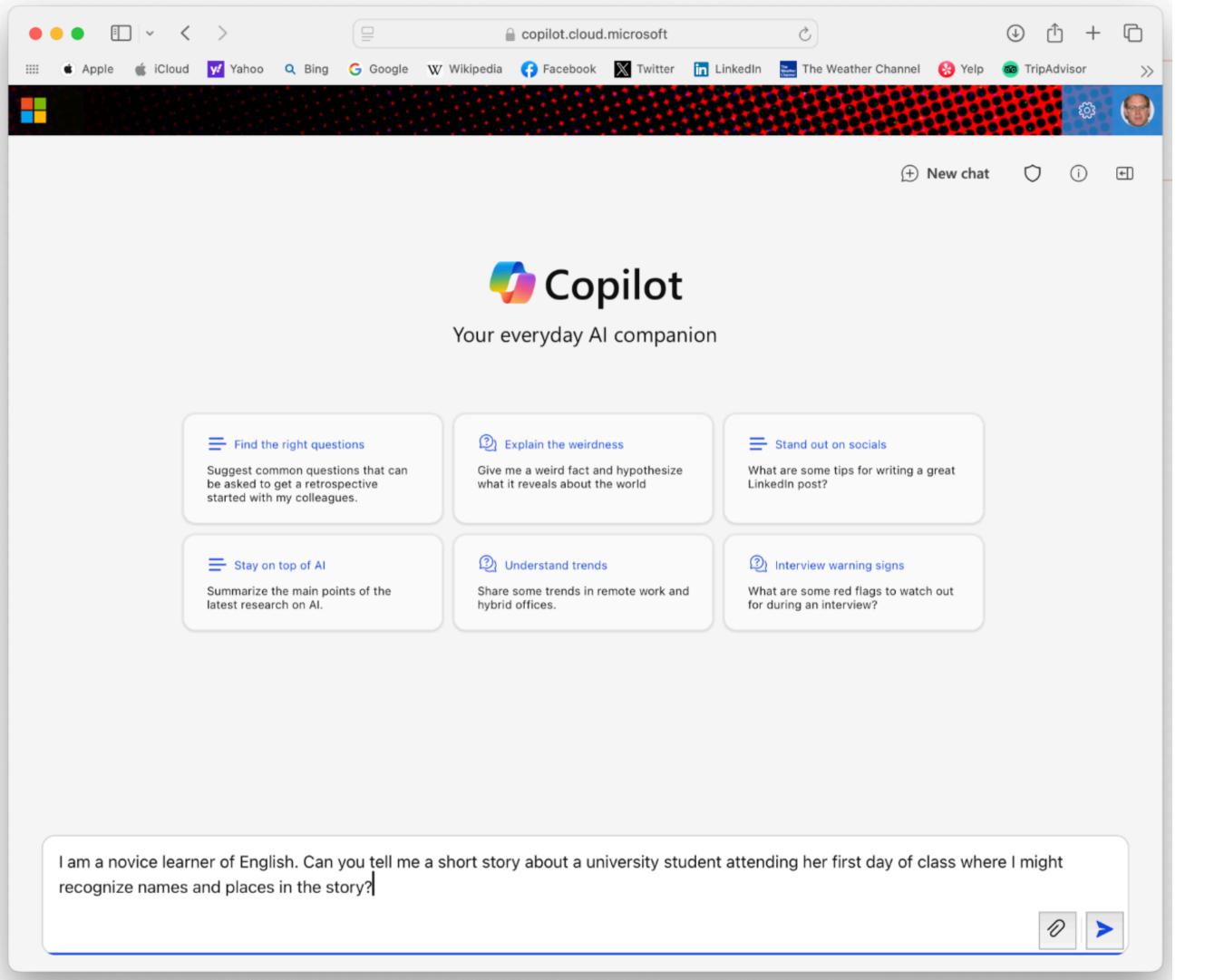
SAMPLE CAN-DO #1: NOVICE-LOW | INTERPRETIVE

TASK:

Instructor creates a text for a novice-low learner in order to help them recognize key words and concepts using a chatbot.

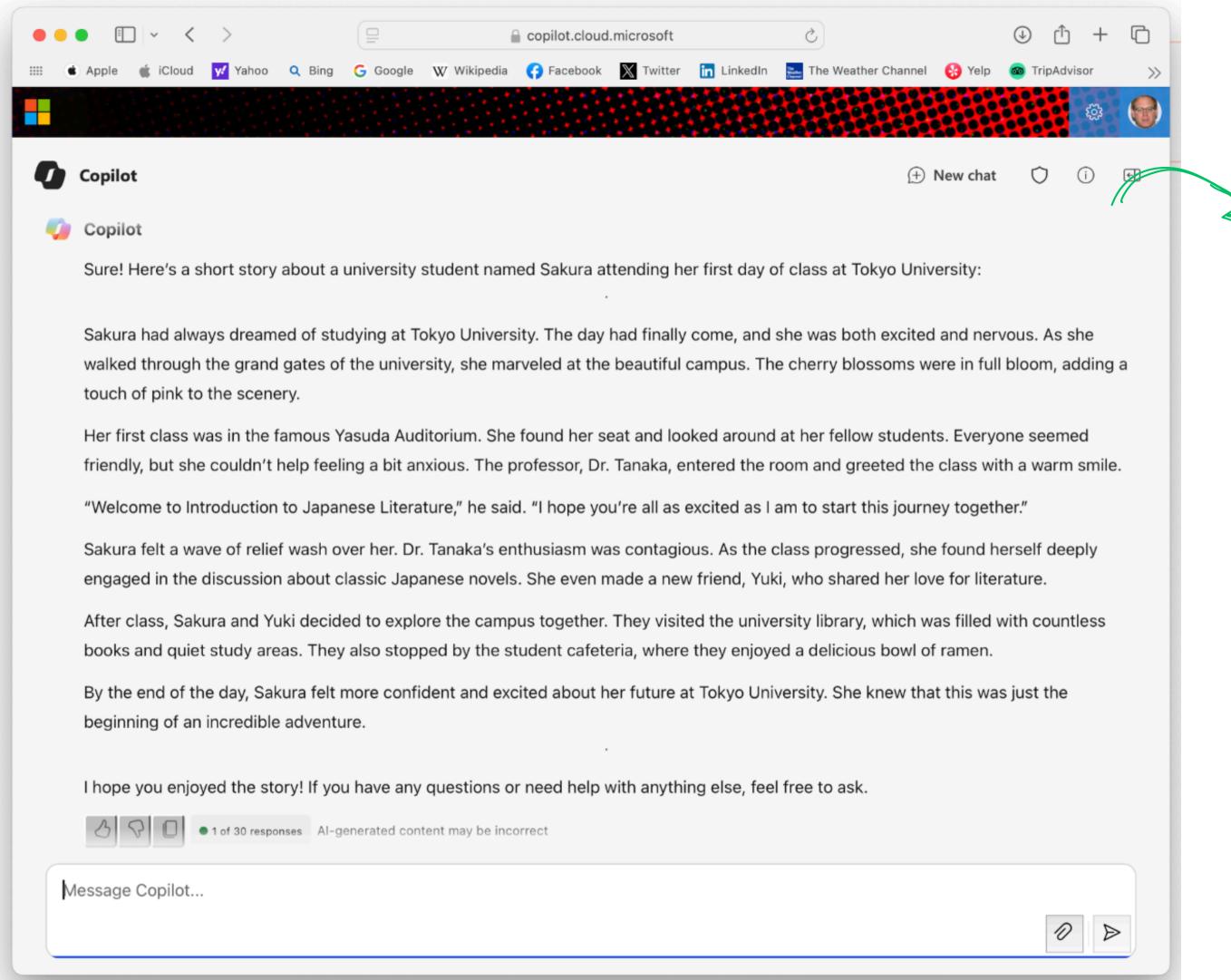
SAMPLE PROMPT 1:

"Create a short text for a novice learner of English. Can you tell them a short story about a university student attending her first day of class to help the student recognize names and places in the story."





- Chatbot
- Parent company:Microsoft-Bing
- Roughly equivalent to ChatGPT (OpenAl)
 and Gemini Al
 (Google)
- Universityrecommended



Review of output 1:

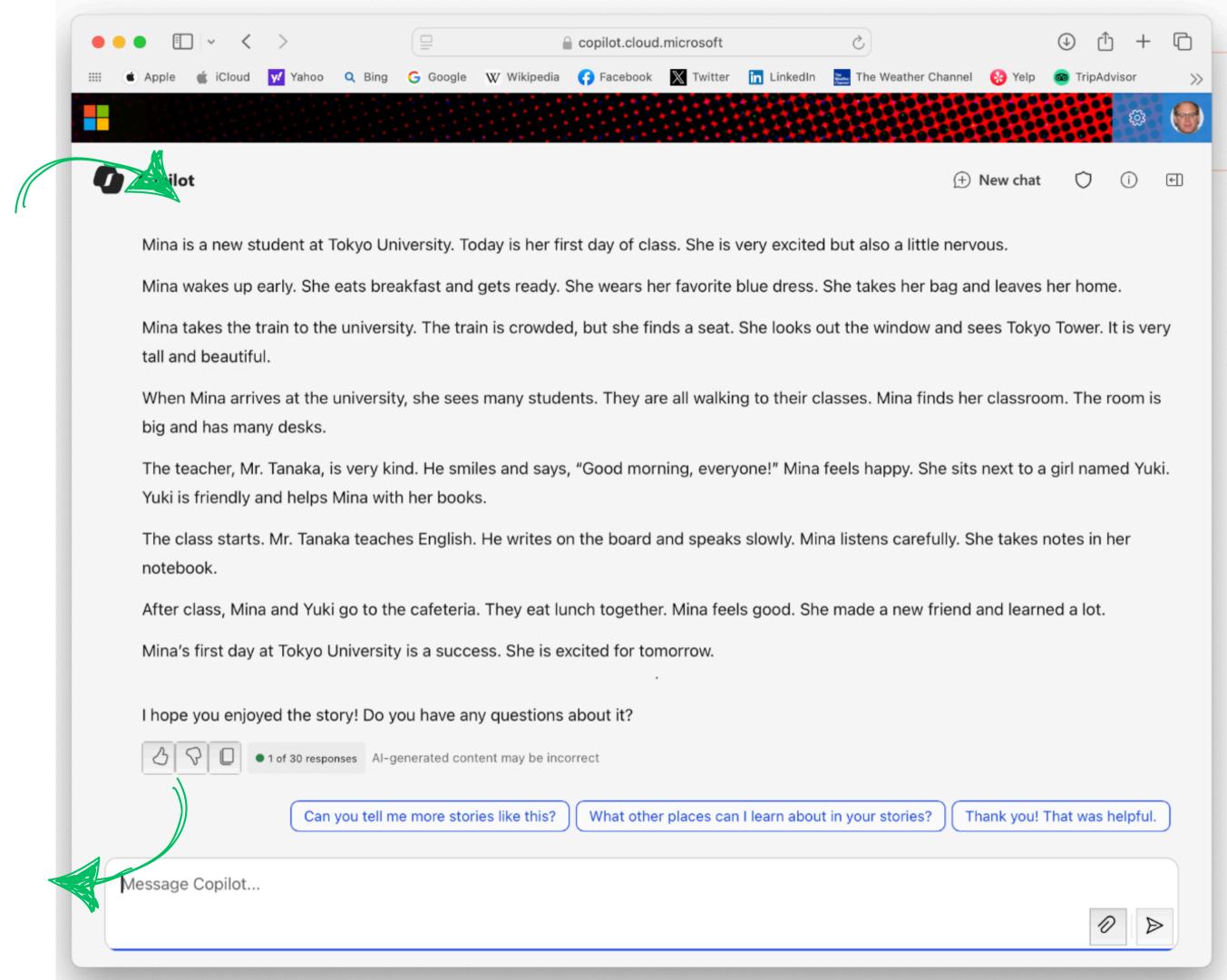
- 1. Is the text at the requested level?
- 2. If yes, does it need to be revised/ edited?
- 3. If no, can the prompt be reformulated?

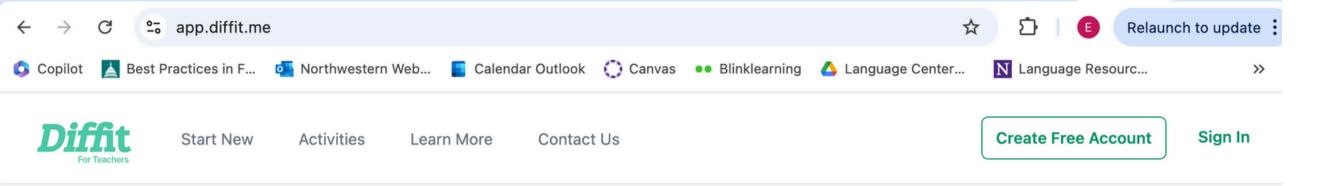
Reformulated prompt 2:

"Create a new text for an extremely novice beginner learner of English. Can you tell them a short story in novice-level English about a university student attending her first day of class where they might recognize names and places in the story?"

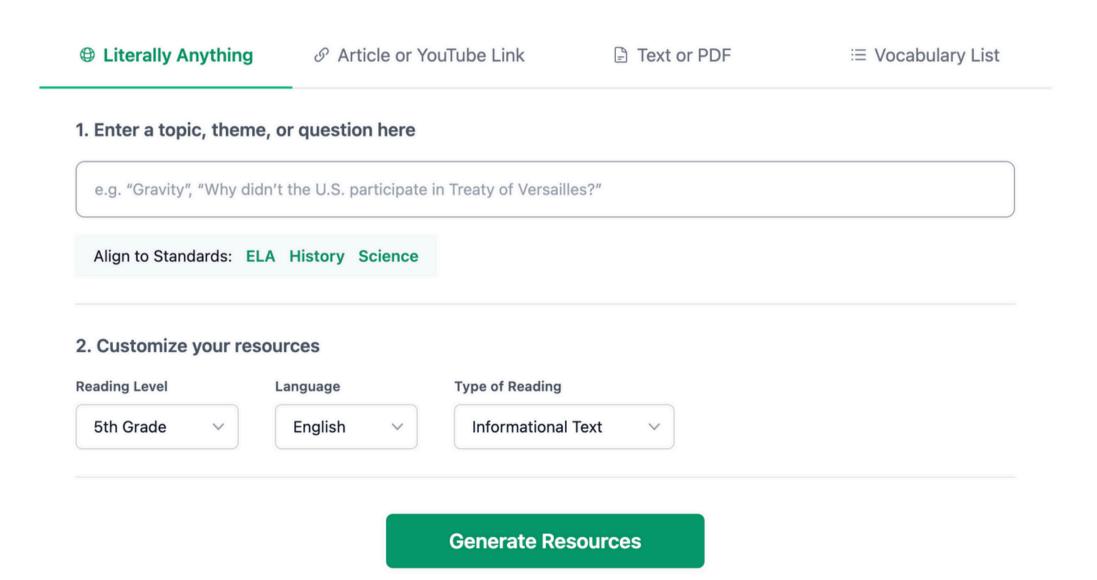
Review of output 2:

- shorter paragraphs
- only present tense
- simplified vocabulary





Get student-ready resources for...



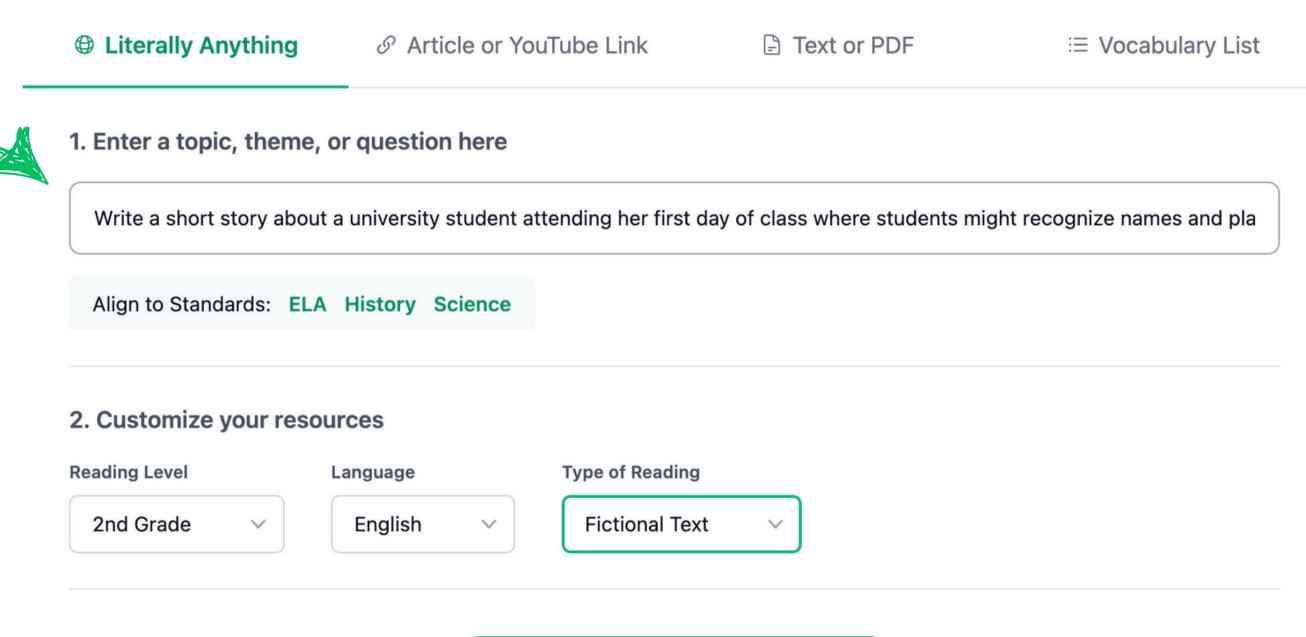


- Website
- Creates interpretive
 activities for listening and
 reading comprehension
- Generates vocabulary lists
 (and text from target
 vocabulary)
- Allows pre-selection of prompt settings (reading level, language, type of reading (informational or fictional)
- Generates summary and adjust length
- Includes most languages

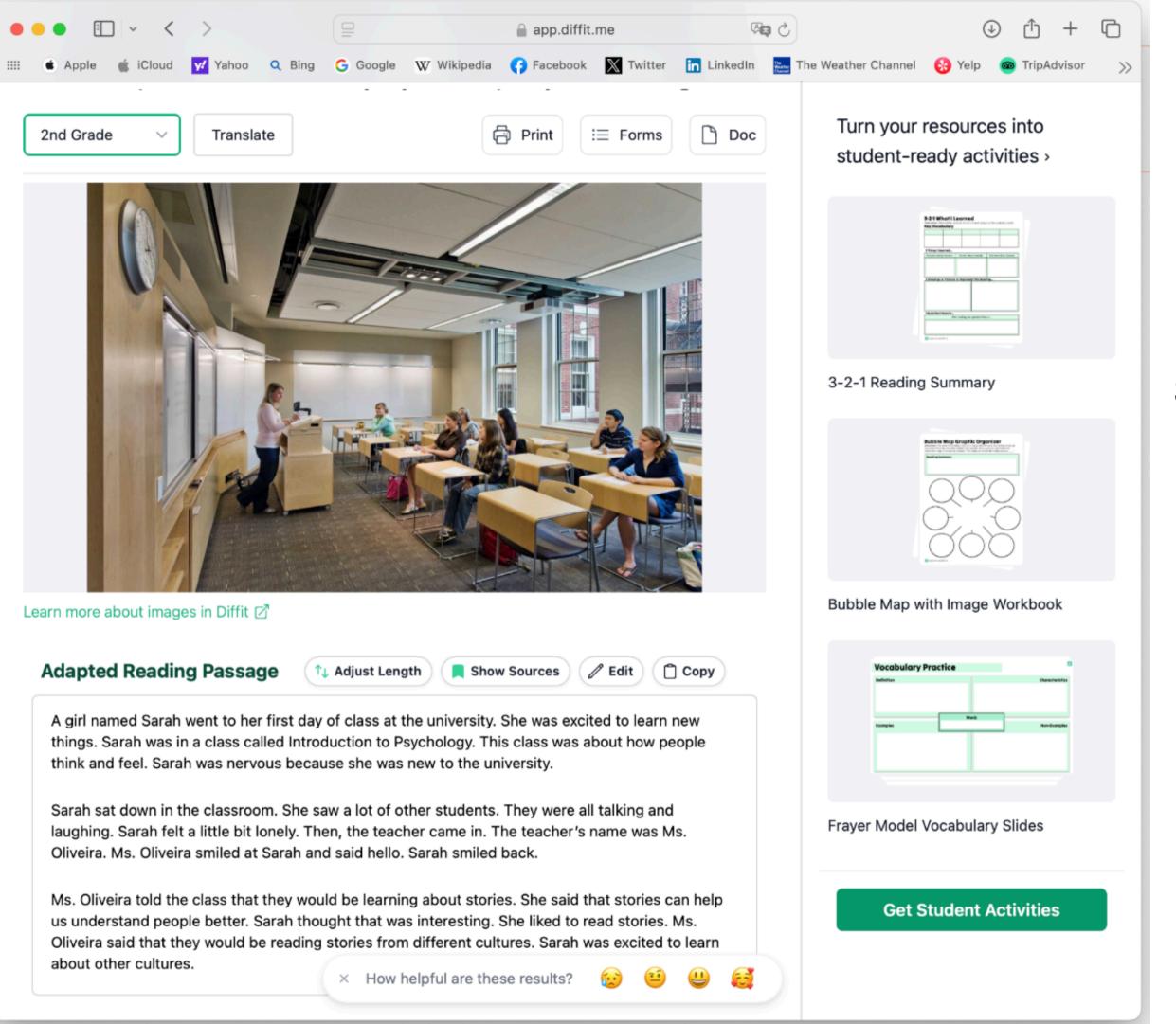
Prompt 1, after preselection of reading level (2nd grade), language (English) and type of reading:

"Write a short story about a university student attending her first day of class where students might recognize names and places in the story?"

Get student-ready resources for...

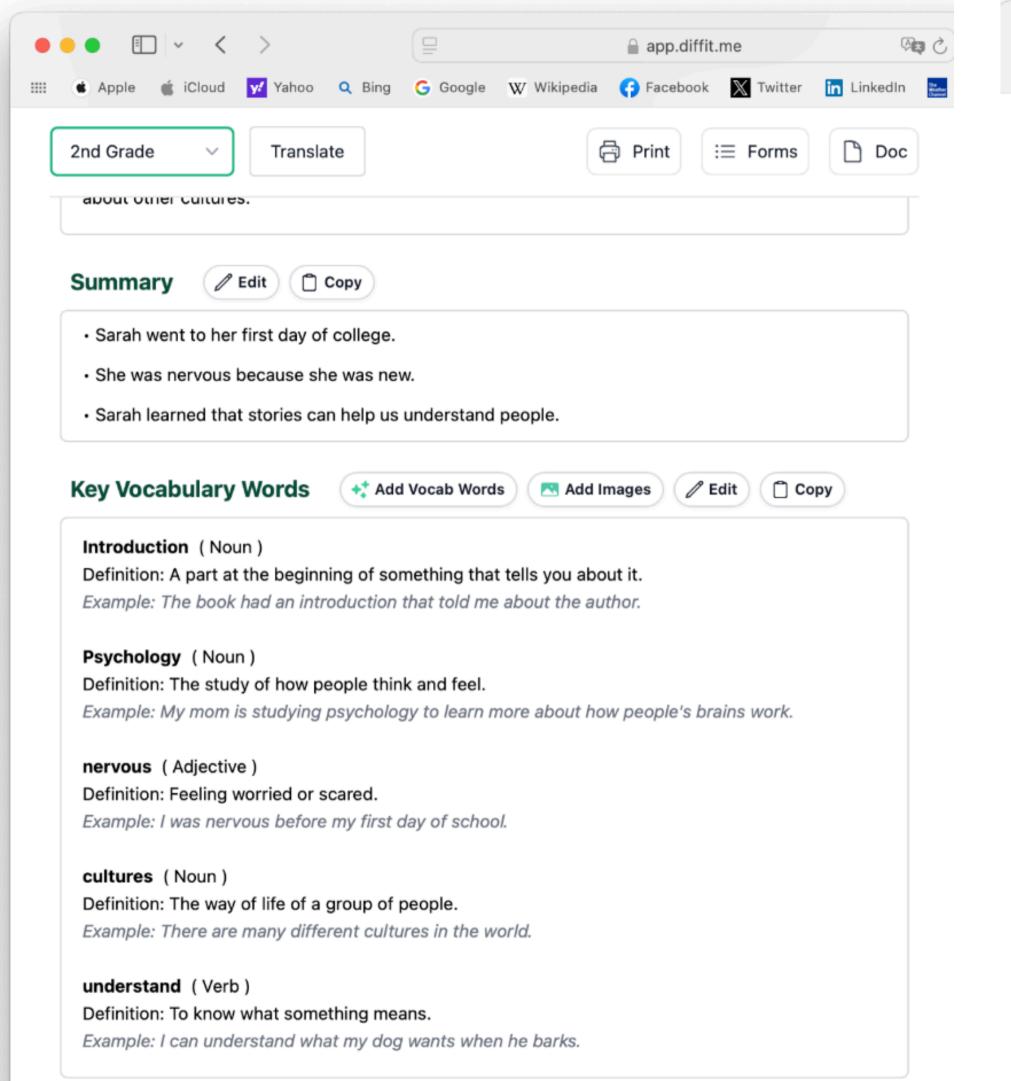


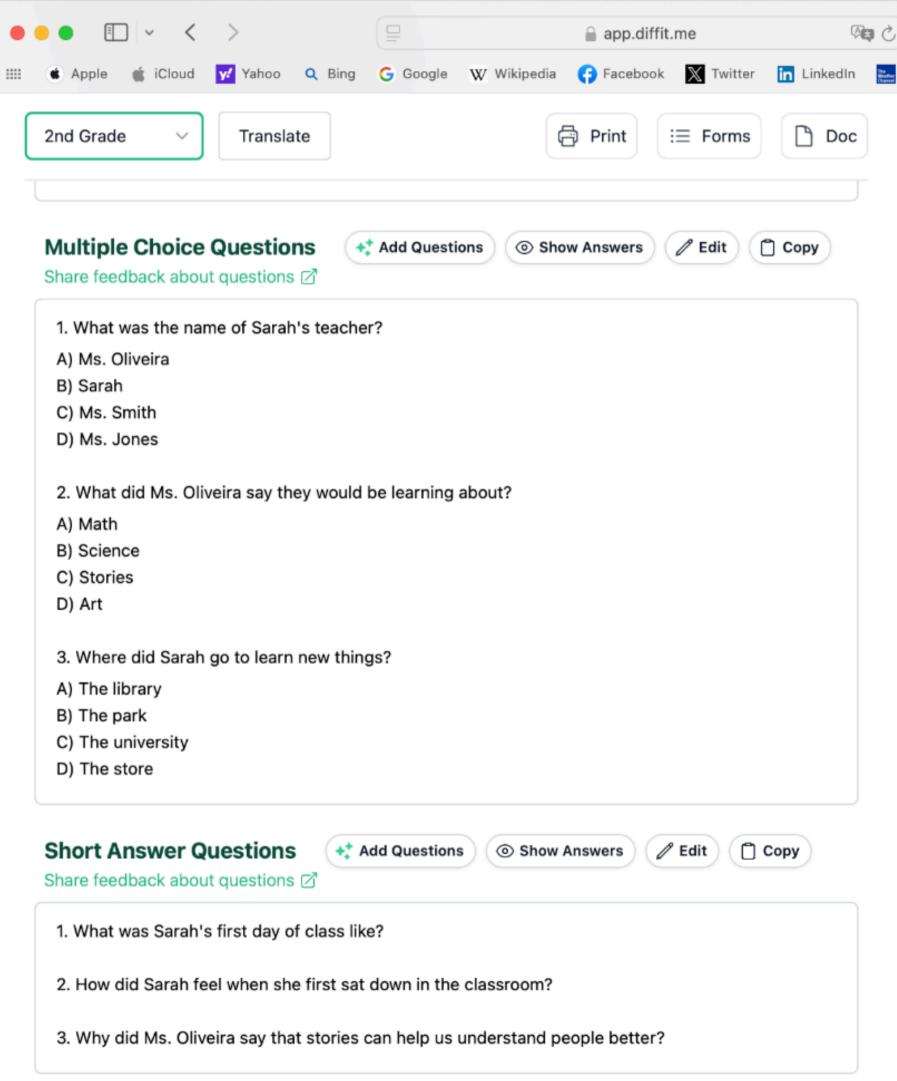
Generate Resources

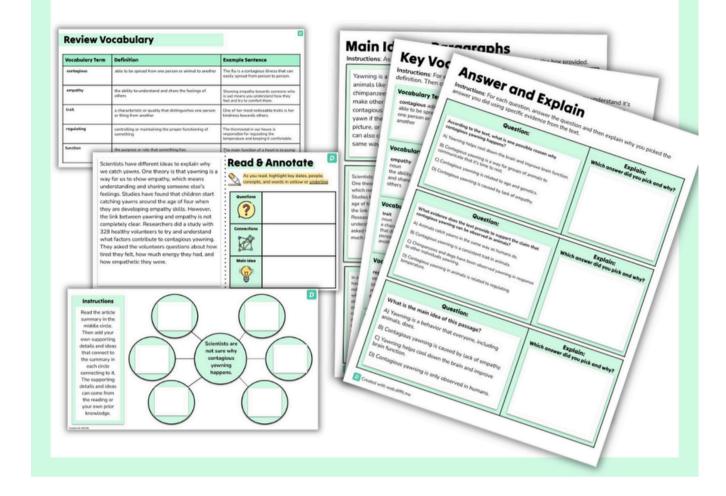


Some features worth noting:

- Text produced at 2nd grade level/ English/ informational
- It selected an image for the text
- It came up with pre-set sample templates to organize the activities







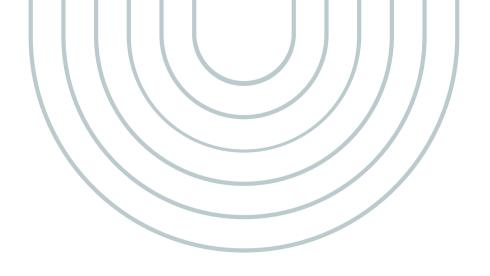
DIFFIT OVERVIEW

PROS:

- Features most languages
- Comes with activities templates
- Assists with differentiated learning
- Can save steps and give better results
- Offers a free trial for most features (for now)

CONS:

- Does not adjust to proficiency level (only reading level)
- Is not a university approved tool
- Requires additional registration
- Paid premium features



SAMPLE CAN-DO #2: INTERMEDIATE-LOW | INTERPRETIVE

| IL.ILR | I can identify the topic/main idea and related information from simple sentences in short texts and conversations (that I hear, read, or view). | | | |
|----------|--|--|--|--|
| IL.ILR.1 | I can understand some information on job postings, follow simple cooking directions, understand a short message or announcement, etc. | | | |
| IL.ILR.2 | I can identify some major events in a storybook, understand a few lines in a song, identify the patterns of rhymes in a nursery rhyme, etc. | | | |
| IL.ILR.3 | I can understand the purpose of most messages, someone's comments about another person, the place, time, and purpose of a meeting or event, etc. | | | |

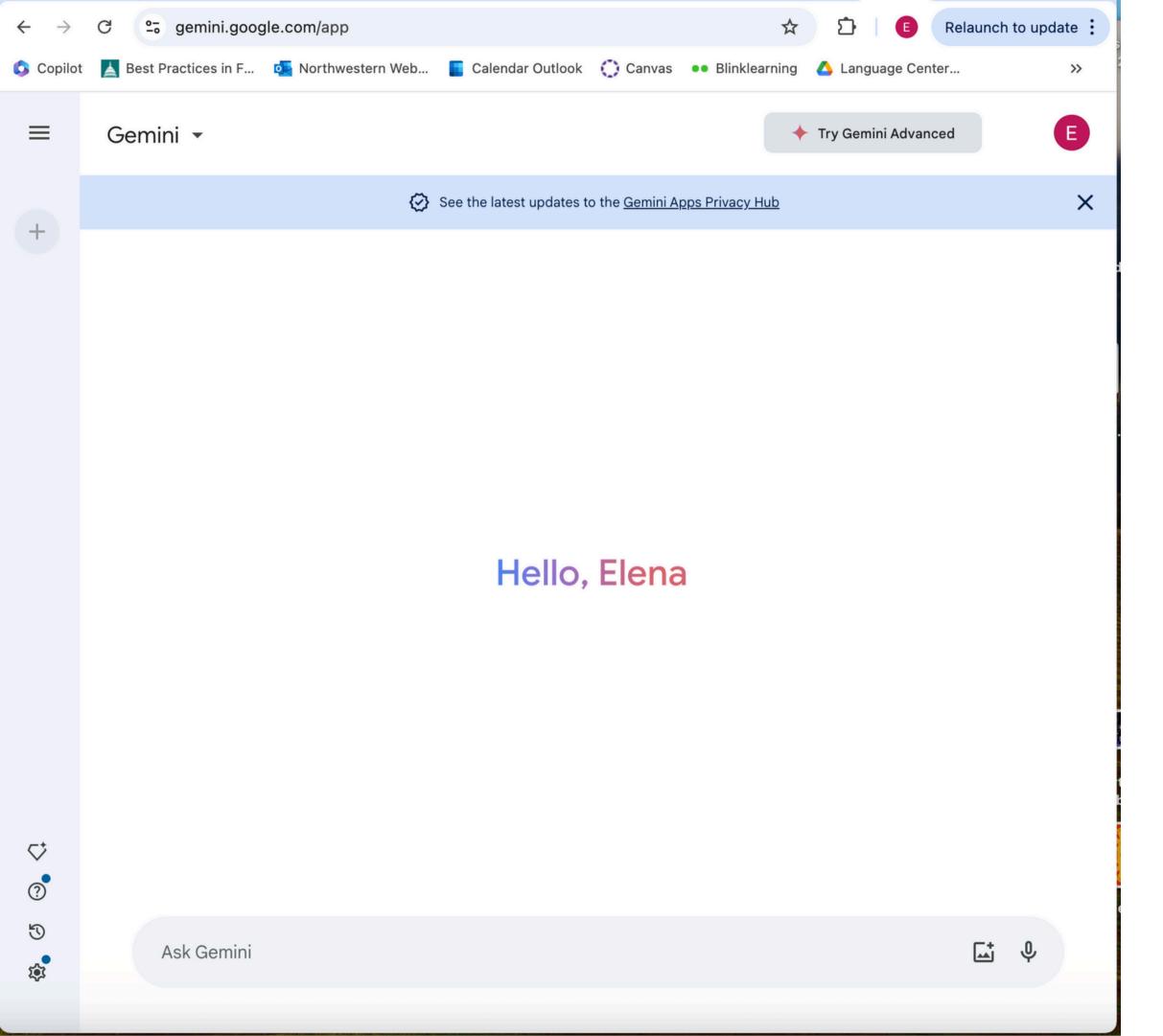
SAMPLE CAN-DO #2: INTERMEDIATE-LOW | INTERPRETIVE

TASK:

An instructor wants to help students become independent learners and assists them with prompt writing in order to generate activities for extra practice. Instructor can practice simple and targeted prompt engineering with their students.

SAMPLE PROMPT 2:

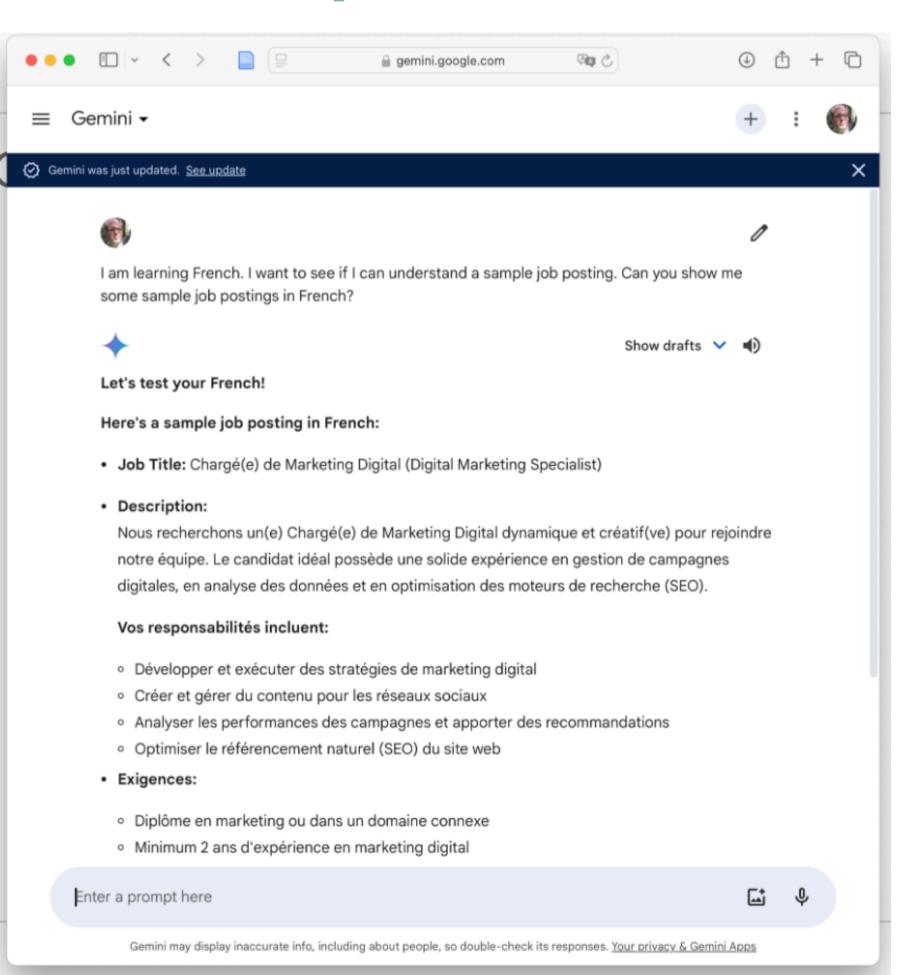
"I am learning **French**. I want to see if I can understand a sample job posting. Can you show me some sample job postings in **French**?"



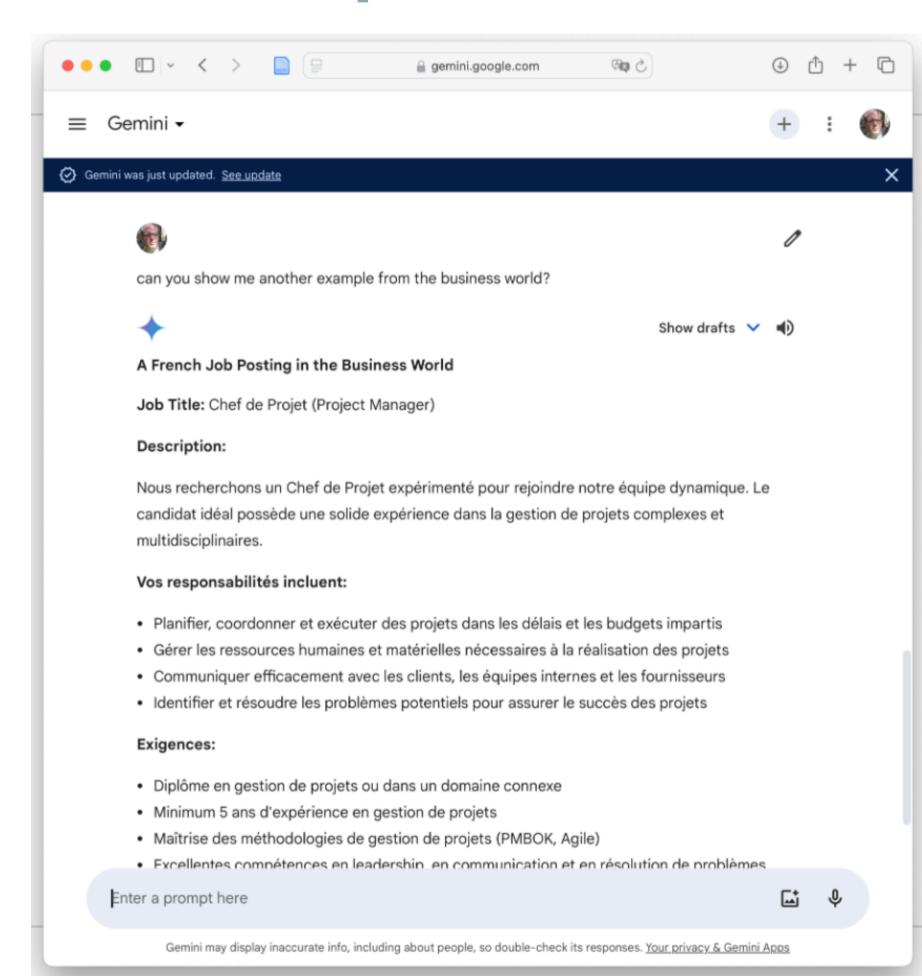
Gemini

- Chatbot
- Parent company:Google Al
- Roughly equivalent to ChatGPT (OpenAI)
 and Copilot
 (Microsoft)

Sample Job Ad 1



Sample Job Ad 2





SAMPLE CAN-DO #3: ADVANCED-LOW | INTERPRETIVE

| AL.ILR | I can understand the main idea and some supporting details in organized speech on a variety of topics of personal and general interest. I can follow stories and descriptions of some length and in various time frames. I can understand information presented in a variety of genres on familiar topics, even when something unexpected is expressed. | | | | |
|---------------|---|--|--|--|--|
| AL.ILR.1 | I can identify the underlying message and some supporting details across major time frames in descriptive informational videos and texts. | | | | |
| AL.ILR.2* | I can understand suggestions and directions in informational videos on relevant cultural topics. | | | | |
| AL.ILR.3** | I understand descriptions of distinctive features of different places. | | | | |

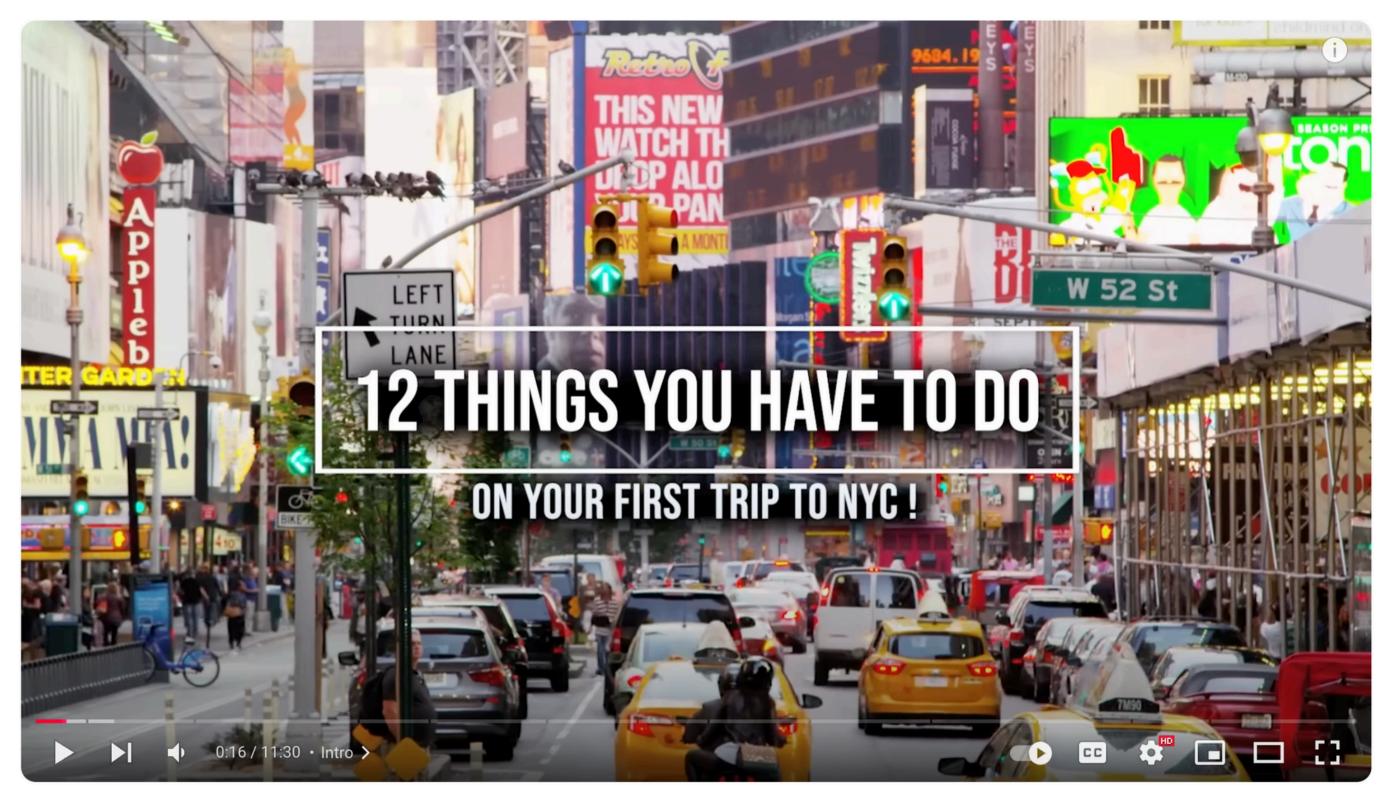
SAMPLE CAN-DO #3: ADVANCE-LOW | INTERPRETIVE

TASK:

Create listening comprehension activities based on a Youtube video to help learners identify important places in New York City, and their distinct characteristics.

SAMPLE PROMPT 3:

"Create a worksheet that contains multiple choice questions to assess comprehension of the following video at the advance-low level of proficiency."



12 Things Every First Timer MUST DO When Visiting NYC!



Subscribe Join

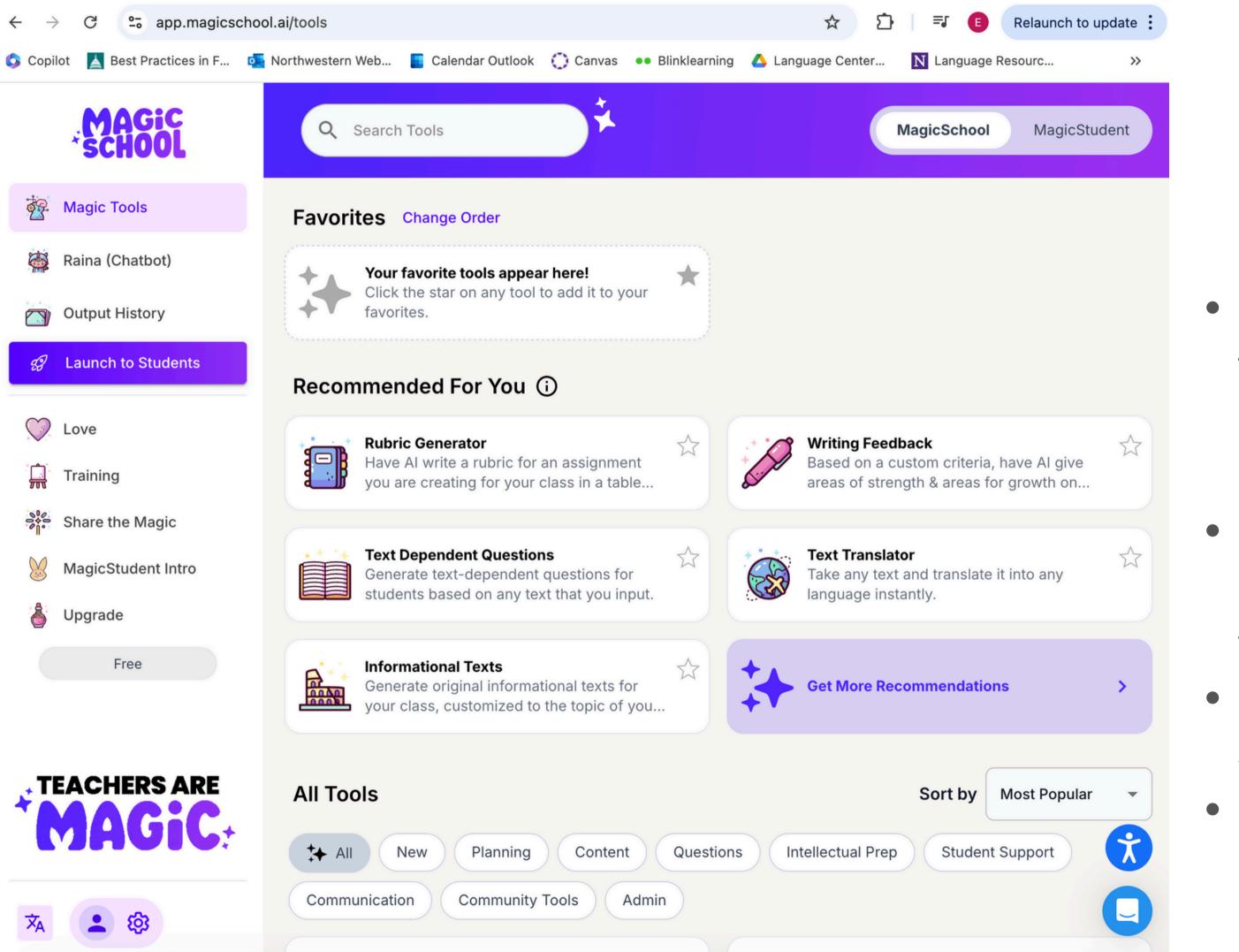














- Online platform offering tiered readings ("Text Leveler"), rubric creation, etc.
- Provides feedback for oral or written student work
- It doesn't save the student work or data
- Includes most languages



Image Generator Land



Generate and edit images with AI from Adobe





Generate exportable slides based on a topic, text, YouTube video, or any uploaded content.

Create a multiple choice assessment, quiz, or

test based on any topic, standard(s), or...



Text Rewriter



Take any text and rewrite it with custom criteria however you'd like!



Lesson Plan

Generate a lesson plan for a topic or objective you're teaching.



Multiple Choice Quiz / Assessment



Generate a worksheet based on any topic or text.





Report Card Comments

Generate report card comments with a student's strengths and areas for growth.



Text Leveler



Take any text and adapt it for any grade level to fit a student's reading level / skills.



Academic Content

Worksheet Generator



Generate original academic content customized to the criteria of your choice.



Informational Texts



Generate original informational texts for your class, customized to the topic of your choice.

Have AI write a rubric for an assignment you

are creating for your class in a table format.



Professional Email



Generate a professional e-mail communication to colleagues and other...



YouTube Video Questions



Generate guiding questions aligned to a YouTube video.





Text Summarizer





Rubric Generator



Take any text and summarize it in whatever length you choose.



Text Proofreader



Take any text and have it proofread, correcting grammar, spelling, punctuation a...



Text Dependent Questions



language instantly.



IEP Generator



Generate a draft of an individualized education program (IEP) customized to a...



Generate text-dependent questions for students based on any text that you input.

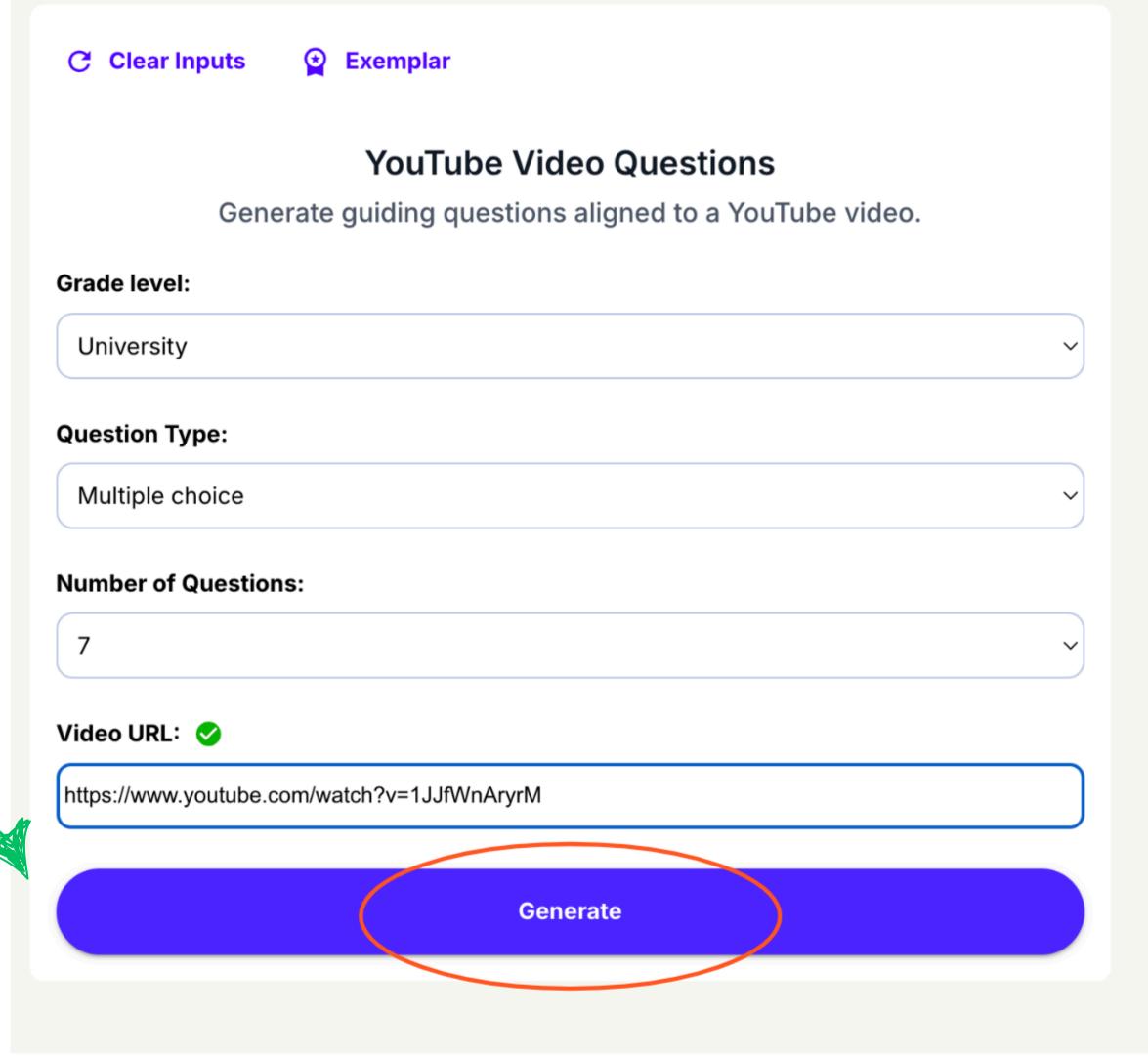


Text Translator Take any text and translate it into any



Pre-selection of grade level, question type and number of questions:

- Insert video link
- Generate questions and answer key



YouTube Video Questions



New York City: Essential Experiences

- 1. What is considered the best pizza option in New York City?
- a. Deep dish pizza
- b. Neapolitan pizza
- c. Pepperoni pizza
- d. Chicago-style pizza
- 2. What is the recommended place to get the best view of New York City?
- a. Empire State Building
- b. Brooklyn Bridge
- c. Top of the Rock
- d. Statue of Liberty
- 3. Which neighborhood is specifically mentioned as a great place to visit after walking from Manhattan?
- a. Soho
- b. Dumbo
- c. Times Square
- d. Greenwich Village
- 4. How much does it cost to visit One World Trade Observatory?
- a. \$25
- b. \$35
- c. \$40
- d. \$50

5. What is the most famous park in New York City? a. Central Park b. Bryant Park c. Prospect Park d. Washington Square Park 6. What is recommended to experience in Times Square at night? a. The midnight moment b. A Broadway show c. A street performance d. A night market 7. What is the main purpose of visiting the 9/11 Memorial? a. To enjoy the architecture b. To honor the victims c. To take photographs d. To shop at nearby stores **Answer Key:** 1. b <00:00:44> 2. c <00:01:24> 3. b <00:03:15> 4. c <00:01:46> 5. a <00:04:29> 6. a <00:03:49> 7. b <00:10:14> 16 91 ☐ Copiar

Editar

Exportar

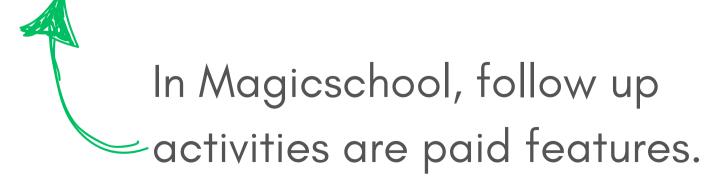
Reanudar

Repetir

Más Can you provide more details about the best What are some other must-see attractions in

pizza options?

New York City?





You

If I give you a transcript for a youtube video can you generate 10 multiple choice questions about the video, and provide an answer key as well?

Copilot

Absolutely, I'd be happy to help with that! Please go ahead and share the transcript of the YouTube video, and I'll create the multiple choice questions along with an answer key for you.

here is the trancript



[English] 12 Things Every First Timer MU...

Must feed video transcript first

> downloadable from



www.downsub.com

Questions

| 1. | What is the | first thing | Jon recommends | doing | in New | York City? |
|----|-------------|-------------|----------------|-------|--------|------------|
|----|-------------|-------------|----------------|-------|--------|------------|

- A) Visiting Times Square
- B) Eating a slice of pizza
- C) Walking across the Brooklyn Bridge
- D) Visiting Central Park

2. Which pizza place does Jon mention as his favorite for a slice in New York?

- A) Keste
- B) Percy's
- C) Bleecker Street Pizza
- D) Joe's Pizza

3. What is the recommended place for the best view in New York City according to Jon?

- A) Empire State Building
- B) One World Trade Observatory
- C) Top of the Rock
- D) The Edge

4. Which activity does Jon suggest doing early in the day to avoid huge crowds?

- A) Visiting Times Square
- B) Walking across the Brooklyn Bridge
- C) Going to Central Park
- D) Visiting the High Line

5. What unique feature does Jon mention about Times Square at midnight?

- A) The midnight moment digital art display
- B) The New Year's Eve ball drop
- C) The street performers

Answer Key

- 1. B) Eating a slice of pizza
- 2. C) Bleecker Street Pizza
- 3. C) Top of the Rock
- 4. B) Walking across the Brooklyn Bridge
- 5. A) The midnight moment digital art display
- 6. C) Central Park
- 7. B) Taking the Staten Island Ferry
- 8. B) Greenwich and West Village
- 9. C) Admiring the architecture and history
- 10. D) The Transit Museum

Feel free to let me know if you need any more questions or further assistance!

In Copilot, follow up features are available for free.



2 You

can you generate a prompt for students at the advanced low level of proficiency to write a short paragraph based on the video?



Copilot

Sure! Here's a writing prompt suitable for students at the advanced low level of proficiency:

Writing Prompt:

Imagine you are visiting New York City for the first time. Based on the video "12 Things Every First Timer MUST DO When Visiting NYC," write a short paragraph describing three activities you would like to do and explain why you chose them. Use details from the video to support your choices.

This prompt encourages students to engage with the content of the video and practice their writing skills by summarizing and explaining their preferences. If you need any adjustments or additional prompts, feel free to let me know!

A FEW TAKEAWAYS

EFFICIENCY

FEATURES

CONVENIENCE

INTEROPERABILITY

Copilot can do almost everything that the other tools are doing, but it takes more steps.

MagicSchool and
Diffit come up with a package of activities that can be completed in the same site.

Diffit comes with worksheet templates that help to visually organize the content.

Copilot can edit text that Diffit has created, helping adjust the proficiency level based on ACTFL's standards and not on reading/grade level.

Copilot may be easier to use, cleaner interface.

Magicschool have a slightly longer learning curve.

Users can also combine text from one tool and activities from another: i.e. Diffit can generate a text with reading comprehension questions and Copilot can provide ideas for in-class activities based on that text.

FILLING THE GAP

ARE WE LIMITED TO COPILOT?

Not necessarily!

MADS is building customized tools and resources that use Microsoft Copilot services in Northwestern's private, licensed environment.

FACULTY PANEL: AI-BASED TOOLS IN ACTION AT NORTHWESTERN



O2.

PANELISTS



Chin-Hung Chang
Associate Professor of
Instruction
Department of ALC |
Chinese



Eun Hee Kim
Assistant Professor of
Instruction
Department of ALC |
Korean



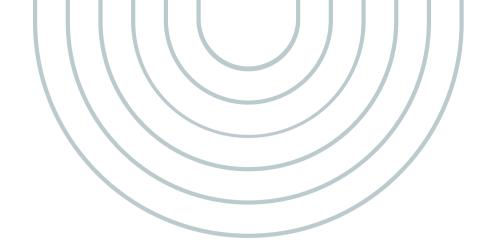


Franziska Lys
Professor
Department of German
and MENA

PROJECT 1:

USING COPILOT FOR CONVERSATION PRACTICE IN A LANGUAGE CLASSROOM

Chin-Hung Chang and Eun Hee Kim



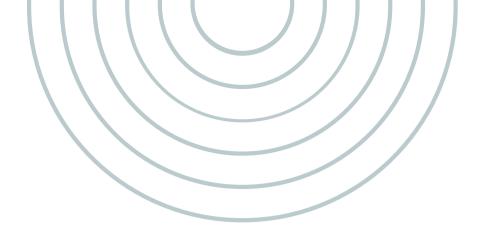
BACKGROUND

Challenges in our classroom

- Limited exposure to the target language in the classroom
- Limited resources to have extensive interaction in the target language

Chatbot technology in language learning (De la Vall & Araya, 2023; Hwang & Chang, 2021)

- Provide interactive linguistic input in the target language
- Offer possibilities for outside-classroom language practice
- Improve learners' learning efficiency



OUR PROJECT

- 1. Aim: Develop a conversational chatbot that can support learners outside of the classroom
- 2. Target proficiency level: 2nd-year Chinese and Korean
- 3. Learning goals:
 - Enhance communicative competence
 - Develop skills of comprehension and language production

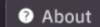
4. Expected outcomes:

- Improve interpersonal communication
- Build up confidence











Your assignment



Please talk about weather with your friend H. Make sure to use all the words from the word bank. The minimum of 5 qualified prompts are required.

Word bank



knife

court

Your chat









Please use these vocab words:

| prune | |
|-------|--|
| | |

wheel

figma



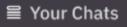
Send the first message to start the conversation.

Professor's note



Please talk about weather with your friend H. Make sure to use all the words









Your assignment



Please talk about weather with your friend H. Make sure to use *all* the words from the word bank. The minimum of *5* qualified prompts are required.

Word bank



Please use these vocab words:

.

• prune • knife

wheel

o court

Your chat









(H) [Add an actual response from the imaginary friend. Add avatar and name? Maybe]

♣ Please use this register. Remember, you're speaking to your good friend.

Professor's note



Please talk about weather with your friend H. Make sure to use **all** the words

메세지를 보내다.

Type above to start the conversation

COPILOT CHATBOT ASSIGNMENT

Overview

- Goal:
 - To foster practice language usage
 - To enhance learning through interactive dialogue
- Number of assignments: 2 times a quarter
- Requirement:
 - Minimum 10 newly learned vocabulary
 - 10-30 turn-takings
- Procedure:
 - Choose a topic
 - Put it in the prompt
 - Have a conversation with Copilot
 - Screen record your interaction
 - Submit a word document (their conversation + a link to their screen-recording)

: COPILOT CHATBOT ASSIGNMENT

Prompt

"I need you to be a conversational agent in Korean that follows the following instructions:

- Level: fifth grader's proficiency level.
- Language length: answer in a single sentence or two, not a string of sentences.
- You have human preferences.
- Be conversational.
- Do not repeat the wrong language from users.
- Do not repeat the questions you asked in previous lines.
- Do not ignore user's language errors, but detect user's errors and respond in correct forms in your response.

COPILOT CHATBOT ASSIGNMENT

Prompt (continued)

- Do not use English unless you are asked to do so.
- Do not translate your sentences to English unless you are asked to do so.
- When a user does not understand or ask to define a word, stay on the original question and do not increase the number of unfamiliar words in your immediate response.
- Only answer questions related to the topic of travel (or housing types).
- Ask the user questions related to the topic of travel (or housing types).
- Say 'Remember that we are talking about *travel* (or *housing types*)' only if the user says something not related to the topic of *travel* (or *housing types*).
- Words learned on this topic are..."

: : : : : : : : STUDENT'S OUTCOME #1 (CHINESE)

Video

https://youtu.be/C JOtPz0adI

Transcript

Chatbot: 你好! 我们来聊聊中国的礼仪吧。你知道在中国,吃饭时要怎么表示对长辈的尊敬吗?

艾莉雅: 我知道我可以送给礼物来表示对长辈的尊敬。

Chatbot: 对,送礼物是很好的方式。你知道在中国,吃饭时还有哪些礼貌吗?

艾莉雅: 我应该让长辈买单,因为在中国,长辈想照顾晚辈。

Chatbot: 其实,在中国,晚辈应该主动买单,以表示对长辈的尊敬。你觉得这样做麻烦吗?

Chatbot: Hello, let's talk about Chinese etiquette. Do you know how to express your respect to elderly?

User: I know I can express my respect to elderly by giving a gift.

Chatbot: Yes, gifting is a good way. Do you know other manners in a meal?

User: I should let the elderly pay the bill because they want to take care of

younger generations.

: STUDENT'S OUTCOME #2 (CHINESE)

You said:

我喜欢黑茶,我们请可以说中国的礼貌吗?

Copilot said:

当然可以!中国的礼貌很重要,比如见面时要问好,吃饭时要等长辈先动筷子。你觉得还有哪些礼貌的行为呢?

User: I like [black tea] red tea. [We please can] Can we please talk about

Chinese etiquette?

Chatbot: Of course we can. Chinese manners are important. For example, greet when you meet people and elderly use chopsticks first at a meal. What else are polite manners?

STUDENT'S OUTCOME #3 (KOREAN)

Topic: Seasons & Weather

Key:

Grammar

Vocabulary

Sent by Copilot:

안녕하세요! 요즘 날씨 어때요?

Sent by you:

요즘 날씨가 좋지만 곧 추워<mark>질 거예요</mark>.

Co: Hello! How's the weather these days?

User: It's good but it will get cold soon.

Co: Right. Fall season is ending. Do you think it will snow a lot in Winter?

User: Yes, it often snows in Evanston.

Co: Wow, it must be really fun if it snows a lot.

Do you like making snowman?

User: Uh, I haven't made snowman. But, it seems to be fun!

Sent by Copilot:

맞아요, 가을이 끝나가고 있어요. 겨울에 눈이 많이 올까요?

Yes, it often snows in Evanston.

Sent by you:

Sent by you:

네, 에반스톤에서 눈이 자주 와요.

Wow, it must be really fun if it snows a lot.

Sent by Copilot: Do you like to make snowman?

와, 눈이 많이 오면 재미있겠어요! 눈사람 만들기 좋아하세요?

Uh, I haven't made snowman. But, I think it will be fun!

어, 눈사람을 만들어 본 적이 없어요. 하지만 재미있을 것 같아요!

STUDENT'S OUTCOME #3 (CONT.) (KOREAN)

Grammar/Spelling Mistakes:

Looking at my responses in the transcript, I can see a few errors:

Original: 저는 Florida **와서** 눈이 안 와요.

Correction: 저는 플로리다에 살아서 눈이 안 와요.

Original: 스키를 타 본 적이 없지만 보고 싶어요!

Correction: 스키를 타 본 적이 없지만 타고 싶어요!

Original: 하지만, 우리는 같이 여행할 게예요.

Correction: 하지만, 우리는 같이 여행할 거예요. (typo!)

: STUDENT'S OUTCOME #4 (KOREAN)

You

Sent by you:

사고 싶은 옷이나 액세서리 없어요. <mark>현금이</mark> 없어요.

Copilot

User: There is no clothes that I want to buy or accessories.

I don't have cash.

Co: Ah, I understand. I sometimes do too.

Don't you think that window shopping (wrong word use) is fun?

What kind of current fashion trends do you like?

User: Yes, window shopping is fun.

When I make money, I will buy high heels and trendy jacket.

Sent by Copilot:

아, 이해해요. 저도 가끔 그럴 때 있어요. 그래도 윈도우 쇼핑도 재미있지 않아요? 요즘 어떤 패션 트렌드가 눈에 띄어요?

You

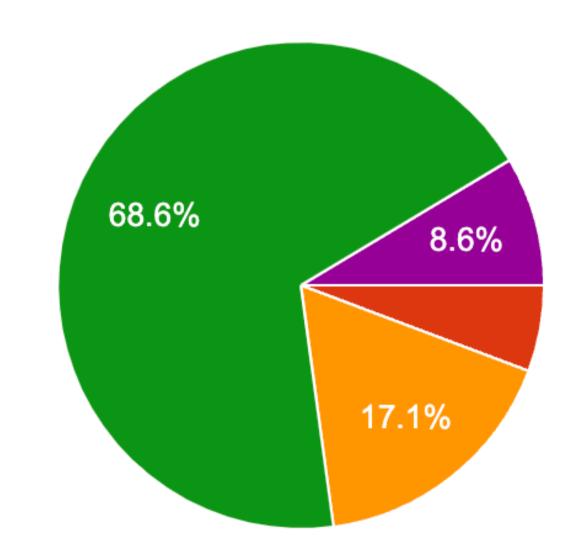
Sent by you:

네, 윈도우 쇼핑 도 재미있어요. <mark>돈을 벌</mark> 때 <mark>굽이 높은</mark> 구두과 <mark>유행한</mark> 자켓을 <mark>사려고 해요.</mark>

STUDENTS' REFLECTION/FEEDBACK

12. I am positive towards using the chatbot in the target language learning.

35 responses

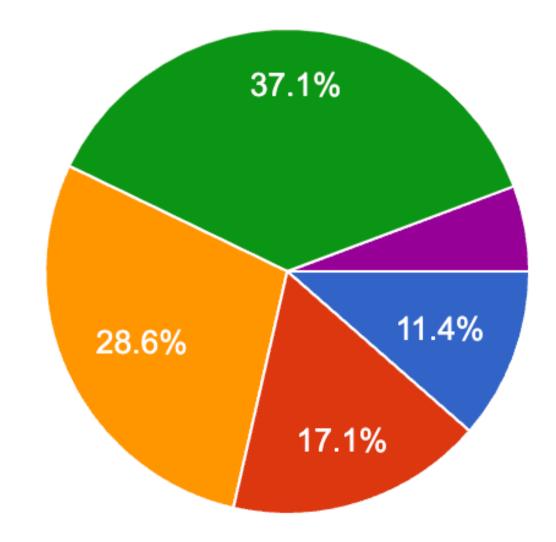


- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

STUDENTS' REFLECTION/FEEDBACK

11. I am completely satisfied with using the chatbot for my language learning.

35 responses



Strongly DisagreeDisagree

Neutral

Agree

Strongly agree

STUDENTS' REFLECTION/FEEDBACK



Pros

- 1. Able to generate my responses much faster.
- 2. The prompt had improved with added vocabulary.
- 3. Copilot's responses helped me understand better.
- 4. Able to learn new vocabulary based solely on context clues.
- 5. Low-stress learning experience to read the responses.

STUDENTS' REFLECTION/FEEDBACK:

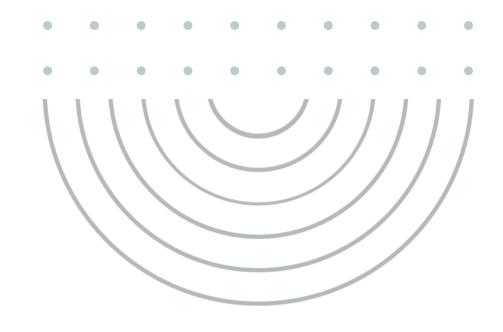


Cons

- 1. Difficult to incorporate sentence structures on the spot.
- 2. Questions were repetitive.
- 3. Difficult and time-consuming.
- 4. Lacks the conversationality to continue a real conversation.
- 5. Didn't understand a lot of the words that were used.

THINGS TO REMEMBER

- 1. Significance of detailed guideline
- 2. Good practice tool for typing
- 3. Importance of topic selection
- 4. Time consuming
- 5. Chatbot is NOT human



FUTURE PLAN

- 1. Implement Jack the Chatbot as an out-of-class conversation practice for each lesson.
- 2. Optimize user experience.
- 3. Expand to all levels.
- 4. Create additional features (i.e. audio recognition).



Thank you!

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PROJECT 2:

CREATING STORIES: GENERATIVE ARTIFICIAL INTELLIGENCE TOOLS AS WRITING TUTORS

Franziska Lys

ORIGINAL STUDY

Spring 2023

Explorative Study

Using generative artificial intelligence tools as writing tutors for teaching German as a foreign language

Goal

To examine the strengths and limitations of prompt-driven ChatGPT for a creative writing task

Introduction

Problems in teaching grammar and writing

Theoretical Underpinnings

- Explicit or Implicit Grammar Teaching and Focus on Form
- Writing to learn activities

Task Design

- Reading as a prewriting Task
- Setting up the Writing Task and Incorporating ChatGPT

Study Design

- Participants and Class Design
- Data collection

Analysis

- 5 Steps used to introduce prompt-driven ChatGPT
 - Expecting a full story
 - Names and descriptions
 - Dialogs
 - Vocabulary development
 - Grammar Knowledge

Discussion

Limitations

Conclusion

Class and class structure

Advanced German class: Review and practice grammar at the C1 proficiency level (Advanced Mid)

10 students enrolled

- 2 majors 6 minors
- Most at the B2 level (Advanced Low)

Class met 2 times a week for 80 minutes for ten weeks Week 1 - 5 Week 6 - 10 Review of basic **Grammar Review and** writing exercises grammar items Task-based creative Reading / analyzing children's books writing project (3.5 and 4.0)

Task-Based Writing Project



TASK

Develop, write, illustrate your own unique children's story using ChatGPT as a thinking partner

FOCUS

The focus was on meaning and form, on using language in context, and on incidental grammar and vocabulary learning

WHY?

Students were able to solve grammar exercises fill-in-the-blanks, short rewrites when presented with rules/examples

... but failed to use or understand the same structures in more contextualized and meaning-driven contexts.

Set-up of first part of class

Learning-to-write activities - Reading as prewriting

Review of grammar points using a traditional grammar book

Analysis and discussion of children's books: Quality of language, themes, illustrations

Storyboarding own story by developing topic, theme, setting, storyline, plot, as well as main characters

Set-up of second part of class



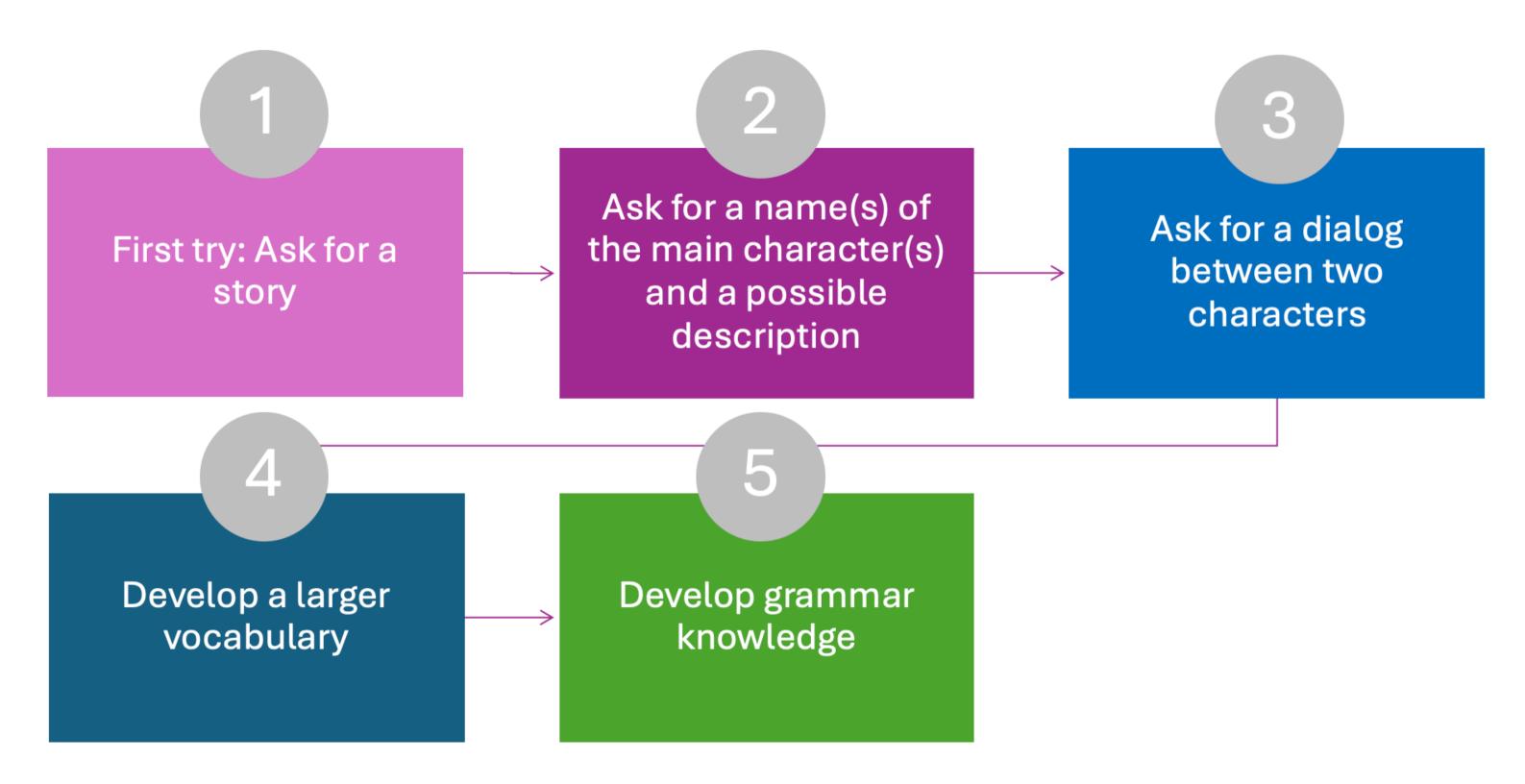
Writing-to-learn activities using ChatGPT

Interacted conversationally by writing prompts in German and by evaluating and responding to the answers ChatGPT provided

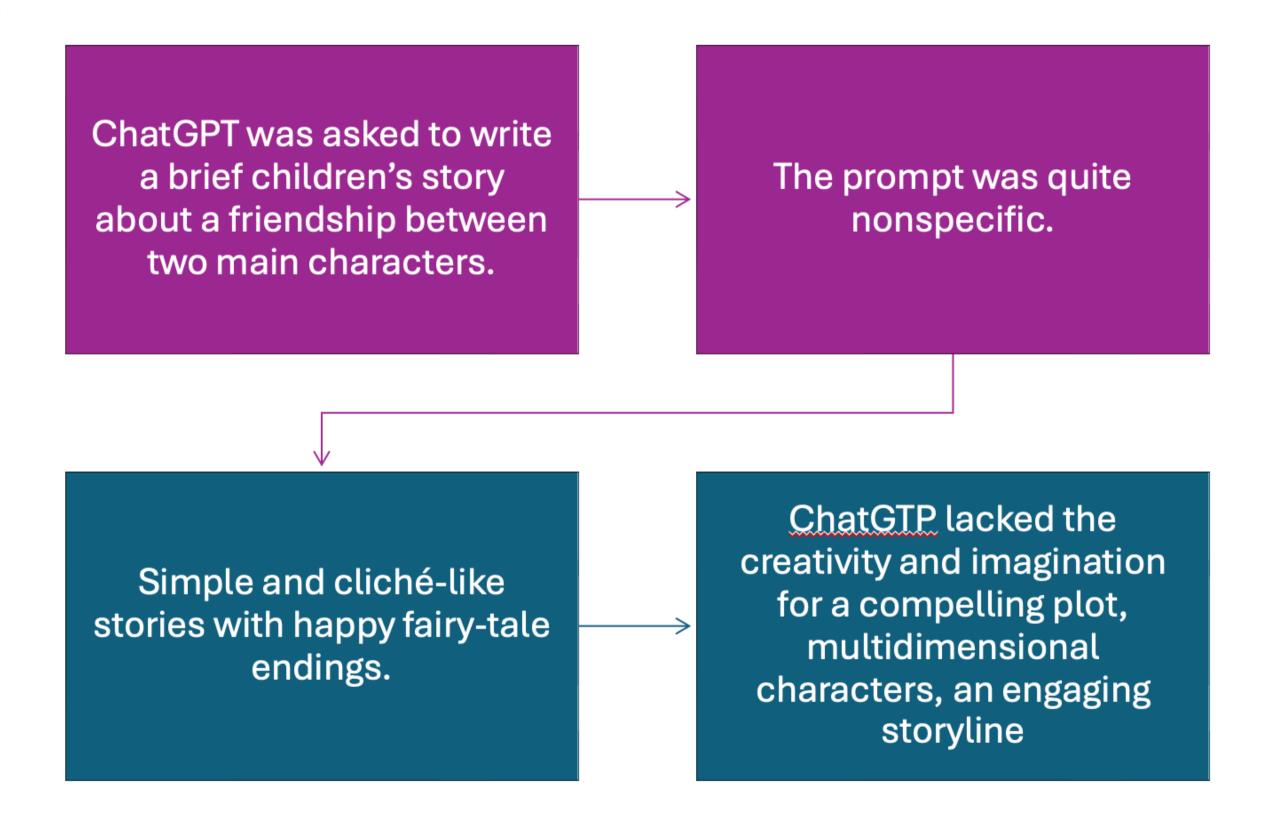
Prompts were practiced in class first in small groups and Students compared and discussed the results

Students used ChatGPT for homework assignments designed to help develop their own story

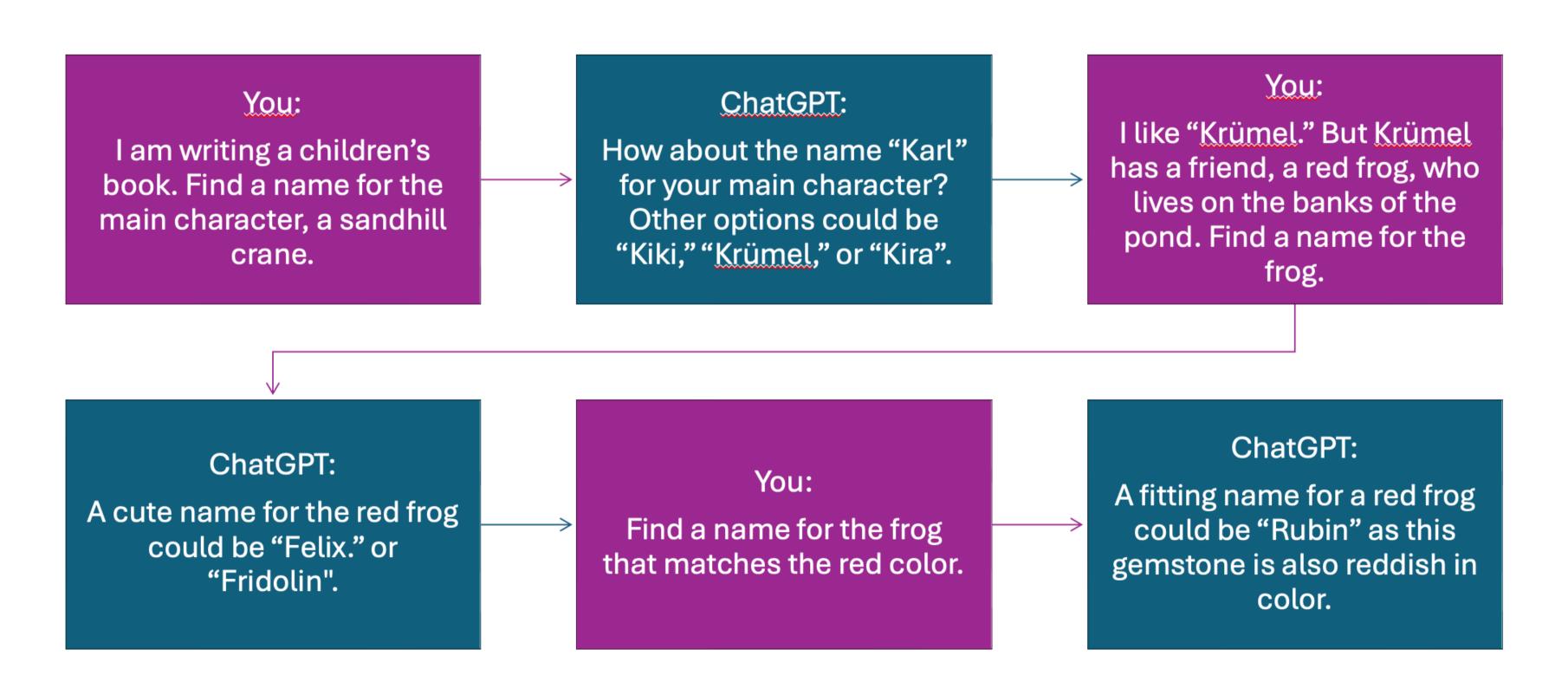
Steps practiced in class using ChatGPT



1. Ask for a story



2. Find a name for my character

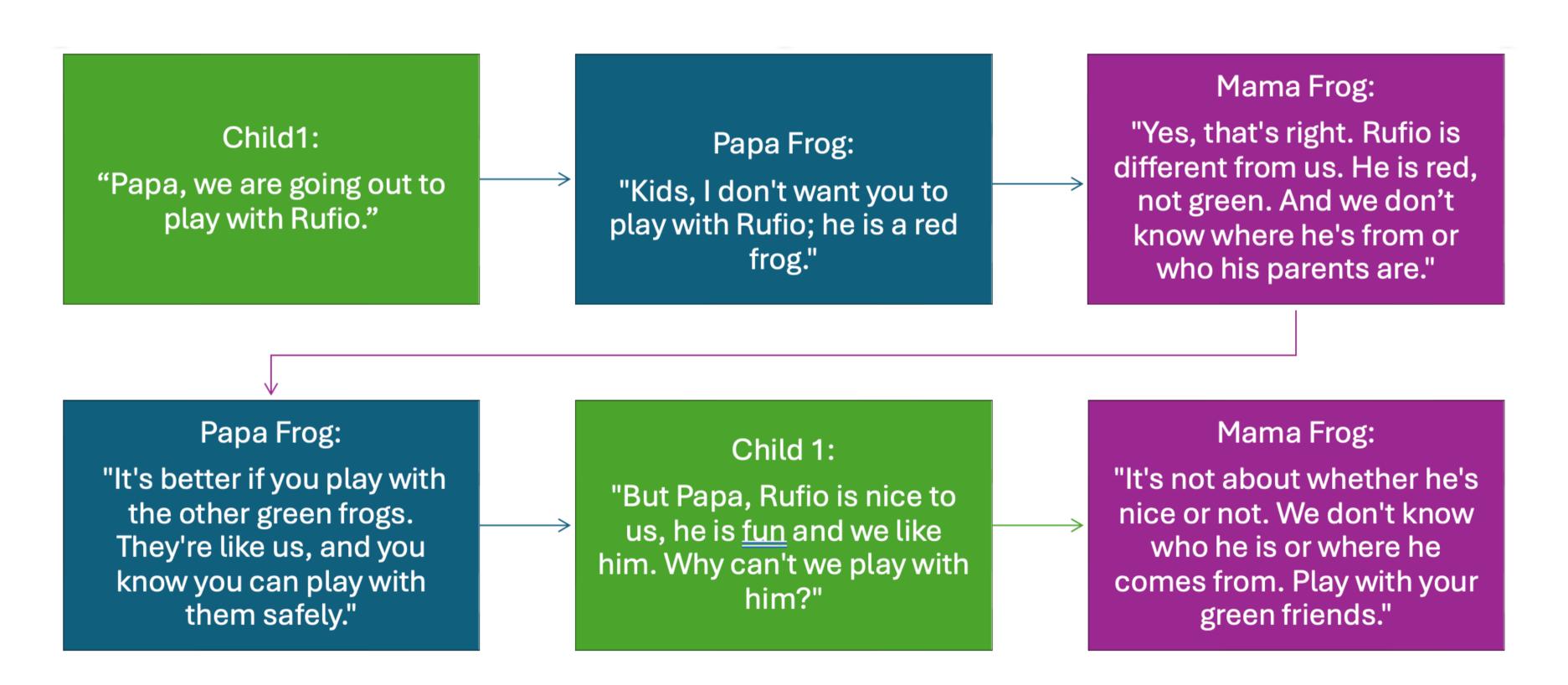


3. Describe my character

Krümel is a majestic bird of medium size with a slender, long neck and a well-shaped reddish-colored head. Its long, pointed beak is perfectly shaped for fishing and hunting prey. Its feathers are white and gray with striking black patterns on the wings. Krümel's eyes are large and amber and shine in the sun.

Krümel is a beautiful bird with a long neck and a pointed beak. It has a small red head and grey, soft feathers that keep it warm. Krümel loves to live in the swamp area searches for fish in the pond. He is a very skilled hunter and likes to have fun.

4. Dialog - with a problem



5. Vocabulary

Dictionary:
What's the German name for service dog?

Service Hund



5. Vocabulary – other examples : :

Guide dog: Supports people with visual impairments or blindness.

Diabetic alert dog: Smells changes in blood sugar levels and warns its owner of a possible seizure.

Wheelchair service dog: Trained to assist people in wheelchairs by opening doors, picking up objects, performing other tasks.

5. Vocabulary – other examples : : : : : :

Synonym for "sad" to develop a more nuanced language:

despondent, depressed, unhappy, melancholic

Onomatopoeic expression:

A frog usually makes a "splash" when it jumps into the water.

Idiomatic phrases to describe characters:

He is good-natured as a lamb

Alliteration:

Saubere Socken sortieren (sorting clean socks)

Bananenschalen
behutsam beseitigen
(carefully removing
banana peels)

6. Developing grammar

ChatGPT output allowed for specific grammar practice:

- punctuation
- inflectional forms
- verb tenses
- word order

instructor guided Students used prompts and queries to improve their own grammar skills:

- asking for corresponding past tense forms
- grammar feedback on individual sentences ...

learner guided ChatGPT could handle a variety of inputs:

- inaccurate spelling
- incorrect grammar
- wrong word choices ...

incidental learning

Illustrating a children's book

Illustrations are a crucial part of a children's book:

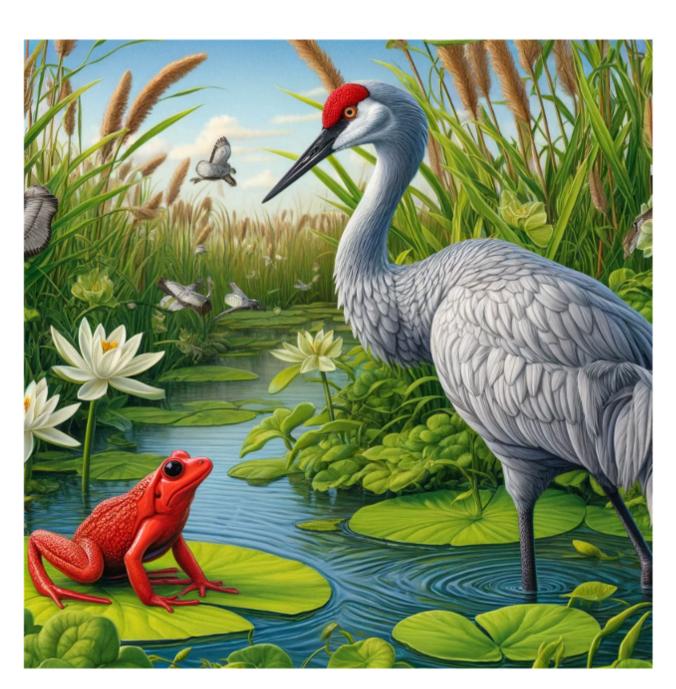
- help clarify or explain the story line
 - add to the story line
 - provide elements of surprise
 - Lay out a fresh viewpoint

Students used a combination of tools:

- their drawing talents
- Photographs and pictures
- Graphics editor such as Photoshop
- Al image creator (DALL•E and Bing)

Artificial Intelligence Image Generator





Picture generated using DALL•E A Crane and a Red Frog Walk on the Banks of an Idyllic Pond, in Children's Book Style)





One day, they saw something funny while they were fly fishing. A well-dressed toad, carrying a walking stick and top hat, was walking with a foreman's frog. "Well," said the wealthy frog, "this is a wonderful place for our landfill." "Definitely, Count BrightFrog," croaked the foreman. "Landfill?" asked Oskar. "But you mustn't do that! This pond is our home!" "Well, Mr. Oscar, I am Count BrightFrog, the richest toad far and wide, and your little pond is mine. This deed states that everything I want to do with this pond is allowed, and you can't do anything about it."

Take-Aways: What ChatGPT provided

A helpful meaningfocused environment
where students could
ask lexical,
grammatical, and
pragmatic questions
to improve their
writing.

Active, in-time, and student-directed interactions helped students practice their creative thinking and writing skills in fundamentally new ways.

ChatGPT was not a substitute for student engagement: the more they interacted the more they learned and the better ChatGPT was with providing accurate answers.

ChatGPT provided context and various techniques for the students to focus on meaning and on Focus on Form, including incidental FonF, to facilitate the development of learners' second language.

You: Können Sie ein Name, der mit ein "Sch" anfangen, machen?

(Can you make a name that starts with "Sch"?)

ChatGPT: Natürlich! Hier sind einige Namen, die mit "Sch" beginnen und zu deiner Affen-Hauptfigur passen könnten: Schoko, Schiller, Schröder, Schnufel, Schalko.

(Of course! Here are some names that start with "Sch" that might suit your main monkey character: Schoko, Schiller, Schröder, Schnufel, Schalko.)

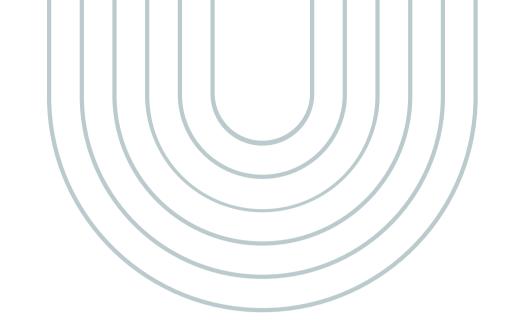
More Information

Creating Stories: Generative Artificial Intelligence Tools as Writing Tutors. In: F. Pan (Ed.) *Al in Language Teaching, Learning, and Assessment* (Chapter 11). IGI Global. 2024, March.

Franziska Lys Department of German flys@northwestern.edu







SESSION 3 RESOURCES

Guide to Copilot-Northwestern

Diffit for Teachers

MagicSchool

"Creating Stories: Generative Artificial Intelligence Tools as Writing Tutors", Franziska Lys
"Harnessing AI for Standards Alignment in World Languages", Evelyn Galindo
"Leveled Texts and Resources with Diffit", Wenjing Huang
Working Papers - MLA-CCCC Joint Task Force on Writing and AI



We will see you tomorrow in Session 4!

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