AI Speaking Worlds:
Chatbots, Gamified Tasks and Inclusive Digital Learning in the EFL Classroom

DigiTalk-EFL × DIDA workshop

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FG: Fremdsprachenlehr- und -lernforschung
Didaktik der englischen Sprache

ORIENTATION

Workshop outcome and route

1 · Diagnose
What prevents speaking participation?

→

2 · Ground
Task, interaction, output, anxiety

→

3 · Include
DIDA inclusion lens: structure, choice, access

→

4 · Build
Vibe-code a chatbot or game

→

5 · Transfer
Plan transfer to your classroom

Design principle

AI tools are **inclusive** only when they are embedded in **meaningful, structured, teacher-controlled tasks** that preserve access to **human interaction**.

Design formula: Prepare with AI → rehearse with support → communicate with peers → reflect and adapt

ROUTE

Three connected AI Speaking Worlds

A common design logic links chatbots, gamified tasks and inclusive digital learning.

CHATBOT WORLD

Private rehearsal
Role exploration
Useful phrases
Short feedback before peer talk

GAME WORLD

Roles, clues and constraints
Progression
Shared speaking outcome

INCLUSIVE WORLD

DIDA lens
Structure, choice and access
Reduced overload
Scaffolding

Prepare with AI → rehearse with support → communicate with peers → reflect and adapt

Teacher agency first: digital affordances are used to widen access to meaningful EFL communication.

DIDA
Digital Differentiation for Attention Difficulties in EFL Learning and Teaching


Mentimeter

THEORY 1/3

Why Classroom Talk still matters

Task-based, interactionist and affective foundations for AI-supported EFL speaking tasks

✓ **Communicative outcome.** Learners use English to achieve a goal, not merely to “talk to a bot” (Ellis, 2003; Nunan, 2004).

✓ **Interaction.** Clarification, negotiation of meaning, follow-up questions and repair create learning opportunities (Long, 1996; Mackey, 2020).

✓ **Output and noticing.** Trying to express meaning helps learners notice gaps and refine linguistic resources (Swain, 1985; Schmidt, 1990).

✓ **Low-pressure rehearsal.** Recent studies report lower speaking anxiety and stronger willingness to communicate, but effects remain task- and design-dependent (Zhang et al., 2024; Wang et al., 2024; Huang & Kakham, 2026).

Design implication

The chatbot phase prepares language and interactional moves; classroom talk is where the communicative task is completed.

Design formula: Prepare with AI → rehearse with support → communicate with peers → reflect and adapt

THEORY 2/3

Inclusive AI-supported speaking: why low-pressure rehearsal can widen participation

A DIDA-informed rationale for nervous, anxious and neurodiverse learners

What the evidence suggests:

✓ Speaking anxiety matters - It can reduce participation, working-memory resources and willingness to communicate.

✓ Low-pressure AI rehearsal can be useful when it offers private preparation, repeatability and non-public first attempts.

✓ Recent chatbot evidence is promising but not automatic: affective gains depend on tool design, embodiment, feedback, task type and teacher mediation.

✓ The inclusive target is not avoidance of human talk. Digital rehearsal should bridge learners into peer interaction and reflection.

Horwitz et al., 1986; MacIntyre & Gardner, 1994; MacIntyre et al., 1998; Tai & Chen, 2023; Wang et al., 2024; Wang et al., 2025; Xiao et al., 2024

For nervous or anxious learners, private and repeatable rehearsal can provide a bridge into human interaction. It should not become an avoidance route.
DIDA: clarify → externalise → segment → preserve control → support reflection.

DIDA
Digital Differentiation for Attention Difficulties in EFL Learning and Teaching

Design formula: Prepare with AI → rehearse with support → communicate with peers → reflect and adapt

Inclusive AI-supported speaking: why low-pressure rehearsal can widen participation

A DIDA-informed rationale for nervous, anxious and neurodiverse learners

DIDA design translation

1 · Predictable entry
One immediate goal and a visible sequence of 3–5 steps.

2 · Low-pressure rehearsal
One question at a time; pause, retry and optional text-plus-voice support.

3 · Differentiated access
CEFR-adjusted phrase banks, planning time, role choice and limited correction density.

4 · Human transfer
AI preparation leads into pair or group interaction; provide a non-digital route.

DIDA
Digital Differentiation for Attention Difficulties in EFL Learning and Teaching

Design formula: Prepare with AI → rehearse with support → communicate with peers → reflect and adapt

Vibe coding basics: technique for Chatbot World and Game World

What is vibe coding?

Creating interactive tools by describing what you want in natural language and letting an AI assistant generate the code.

How can it help?

Vibe coding can help teachers quickly create customized and interactive tools for their students (e.g., chatbots and game-like missions).

The inclusive value depends on the prompt: clear goals, short cycles, accessible language, learner choice, safety boundaries and a non-digital alternative.

APPLICATION

Game World: vibe-code an interactive grammar game

1. Use an LLM (large language model)

   e.g. Claude, Gemini, or ChatGPT. Free versions are fine.

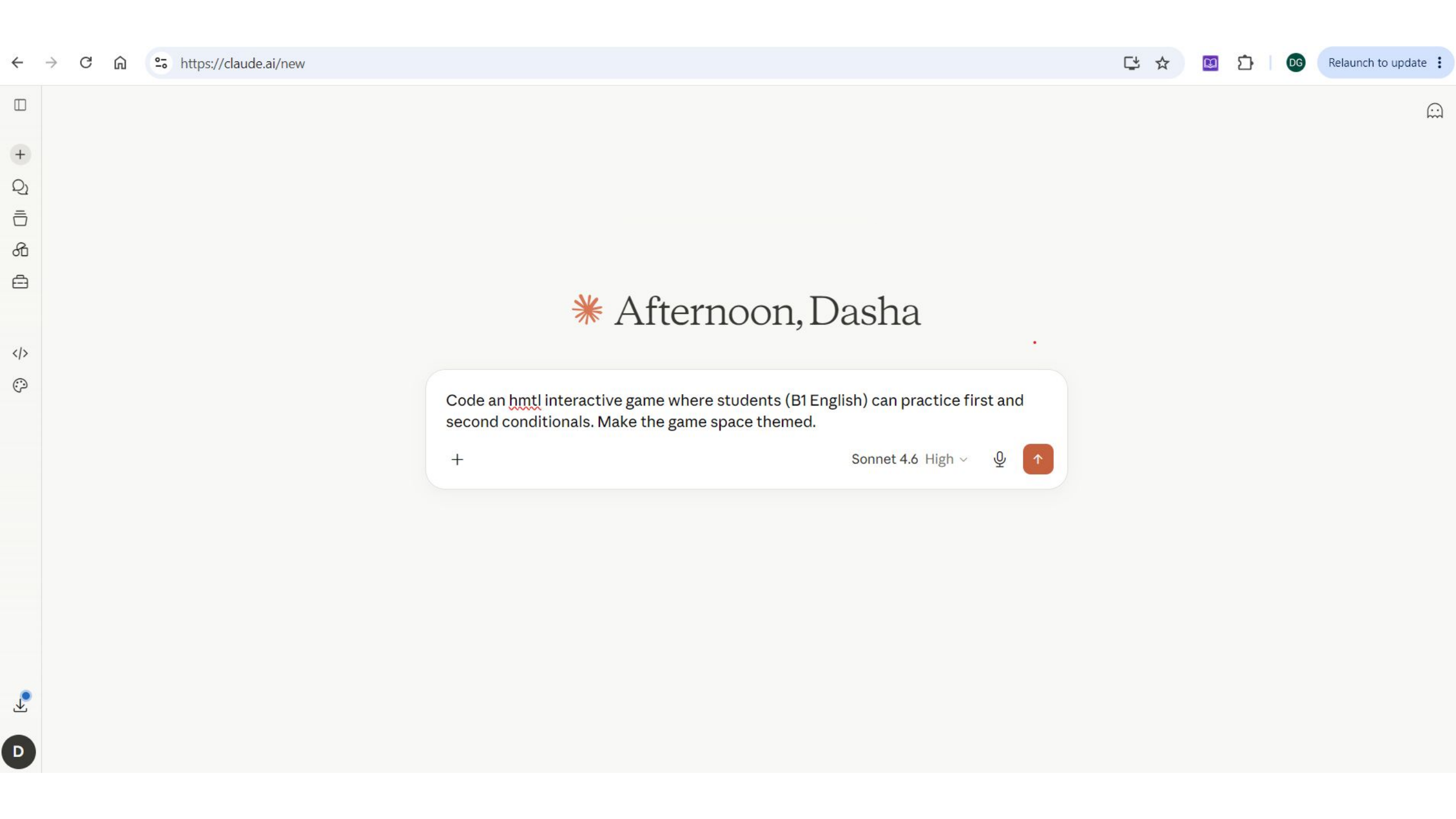
2. Start your prompt with: "**code an html…**"

   e.g.: *Code an html mission game where students (B1 English) can practice first and second conditionals. Make the game space themed.*

3. Check the preview generated by the LLM. Prompt the LLM to make any changes you see fit.

   e.g. "*simplify the instructions*" or "*provide German translations for each example*"

4. Publish a link to your new tool.


https://claude.ai/new
Relaunch to update
Afternoon, Dasha
Code an hmtl interactive game where students (B1 English) can practice first and second conditionals. Make the game space themed.
Sonnet 4.6 High
D

Claude conversation window

Game preview

Space-themed conditional practice game

Validated code structure and prepared deliverable

Mission: Conditional Voyage — a 12-question game that flies students from Earth to the exoplanet Kepler-B1, with a rocket that visibly advances along a flight path as they answer.

It covers both conditionals in three rounds:

1. **Trajectory Scanner** – classify a sentence as real/possible (1st) or imagined (2nd)
2. **Engine Calibration** – pick the correct verb form to fill the blank
3. **Comms Link** – choose the correct result clause to match the if-clause

Every answer gets instant feedback explaining *why*, and wrong answers are collected into a "mission log" review at the end, alongside a rank (Space Cadet → Galactic Master) based on score.

Just open the file in a browser to play — no setup needed. If you want any changes (more questions, a different difficulty mix, third conditional added, printable worksheet version, etc.), just let me know.

Conditional voyage
Code · HTML

Download

Write a message...

Sonnet 4.6 High

Claude is AI and can make mistakes. Please double-check responses.

Conditional voyage · HTML

Copy

MISSION CONTROL · CONDITIONAL VOYAGE

STARS 0/12

PRE-FLIGHT BRIEFING // CREW LEVEL: B1

MISSION: CONDITIONAL VOYAGE

Your shuttle is fuelled and waiting on the launch pad at Earth. To reach the distant exoplanet **Kepler-B1**, you'll need to pass 12 radio checks using two kinds of English conditional sentences. Get them right and the engines fire. Get them wrong and Mission Control will explain what went wrong before you try the next one.

1ST CONDITIONAL

Real future

`If + present simple, ... will + infinitive`

"If we launch on schedule, we will reach orbit by dawn."

2ND CONDITIONAL

Imagined present/future

`If + past simple, ... would + infinitive`

"If we discovered a new galaxy, we would name it together."

BEGIN LAUNCH SEQUENCE →

MISSION CONTROL · CONDITIONAL VOYAGE

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BEGIN LAUNCH SEQUENCE →

MISSION CONTROL · CONDITIONAL VOYAGE

STARS 0/12

RESTART MISSION

SYSTEM CHECK · TRAJECTORY SCANNER (1/12)

Read the transmission. Is it a REAL possibility or an IMAGINED situation?

If the rocket runs out of fuel, we will crash into the asteroid belt.

REAL / POSSIBLE (1st)

IMAGINED / HYPOTHETICAL (2nd)

Space-themed conditional practice game

Validated code structure and prepared deliverable >

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Conditional voyage
Code · HTML
Download

simplify the instructions. also, i want students to actually put in the verbs themselves, rather than only choosing between 1st and 2nd conditionals.

+ Sonnet 4.6 High

Clau

prompt Claude to make changes to the game

Conditional voyage · HTML
Copy

MISSION CONTROL · CONDITIONAL VOYAGE
STARS 0/12
RESTART MISSION

EARTH NAV ARRAY COMMS RELAY KEPLER-B1

SYSTEM CHECK · TRAJECTORY SCANNER (1/12)
Read the transmission. Is it a REAL possibility or an IMAGINED situation?

If the rocket runs out of fuel, we will crash into the asteroid belt.

REAL / POSSIBLE (1st)
IMAGINED / HYPOTHETICAL (2nd)

When you are happy with the tool, go to *Copy* □ *Publish artifact*. Claude will generate a shareable link.

Space-themed conditional practice game

JS checks out. Now let's copy the updated file to outputs and present it again:

Ran a command, read a file >

Done. Two changes:

- **Instructions simplified** — the briefing text and the per-question instruction are both shorter and plainer now, just: *"Type the correct verb form to complete the sentence."*
- **Typing instead of clicking** — every question now shows a sentence with a blank and the base verb in brackets (e.g. *"If the rocket _____ (run) out of fuel..."*), and students type the answer into a field and hit **Check** (or press Enter). It accepts reasonable variations (e.g. "were" or "was" for "If I were an astronaut"), is case-insensitive, and ignores extra spaces/punctuation.

Everything else still works the same — the rocket still advances toward Kepler-B1 with each answer, feedback explains the grammar either way, and the results screen lists any missed items for review.

Conditional voyage
Code · HTML
Download

Write a message...

Sonnet 4.6 High

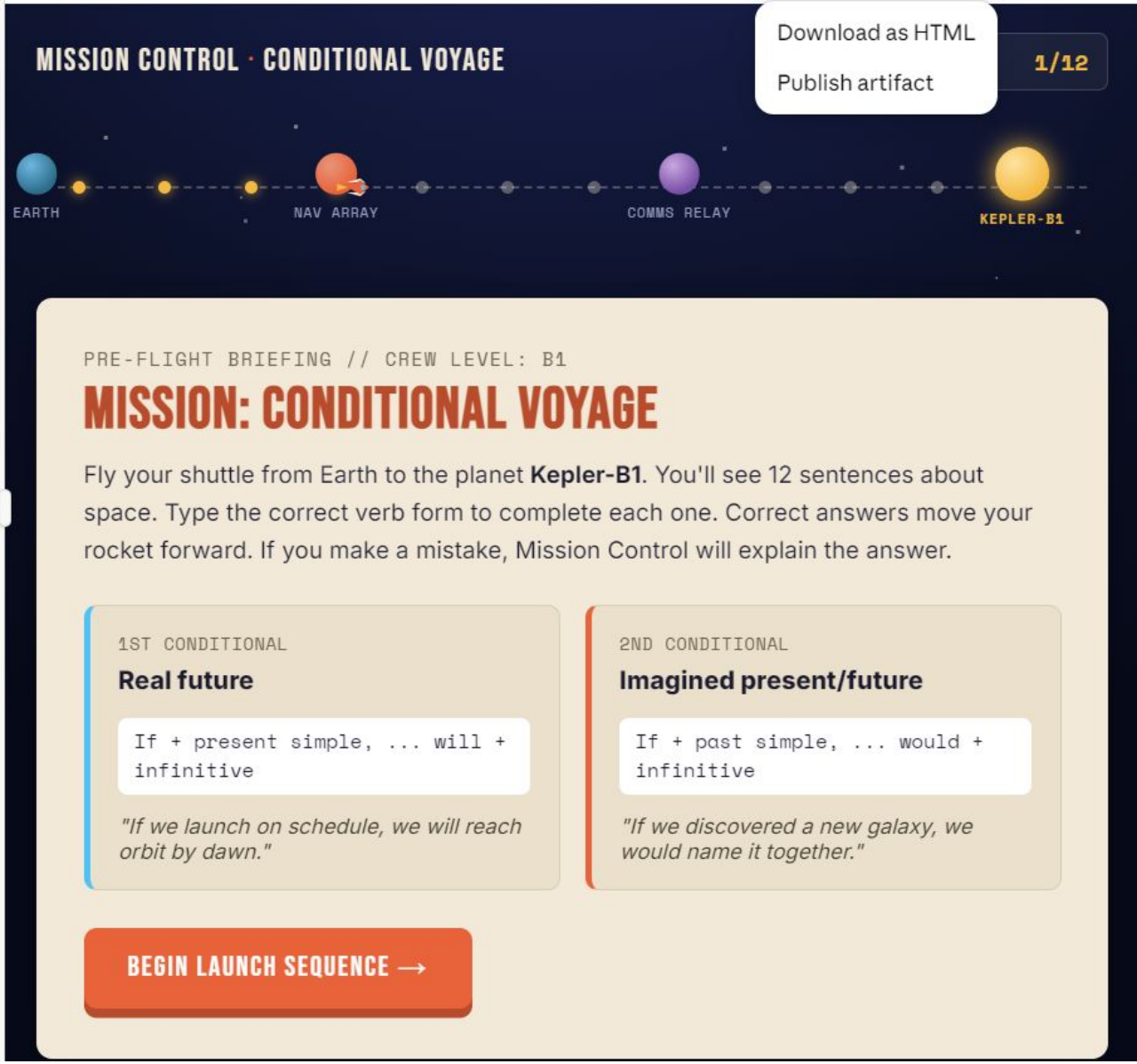
Claude is AI and can make mistakes. Please double-check responses.

Conditional voyage · HTML

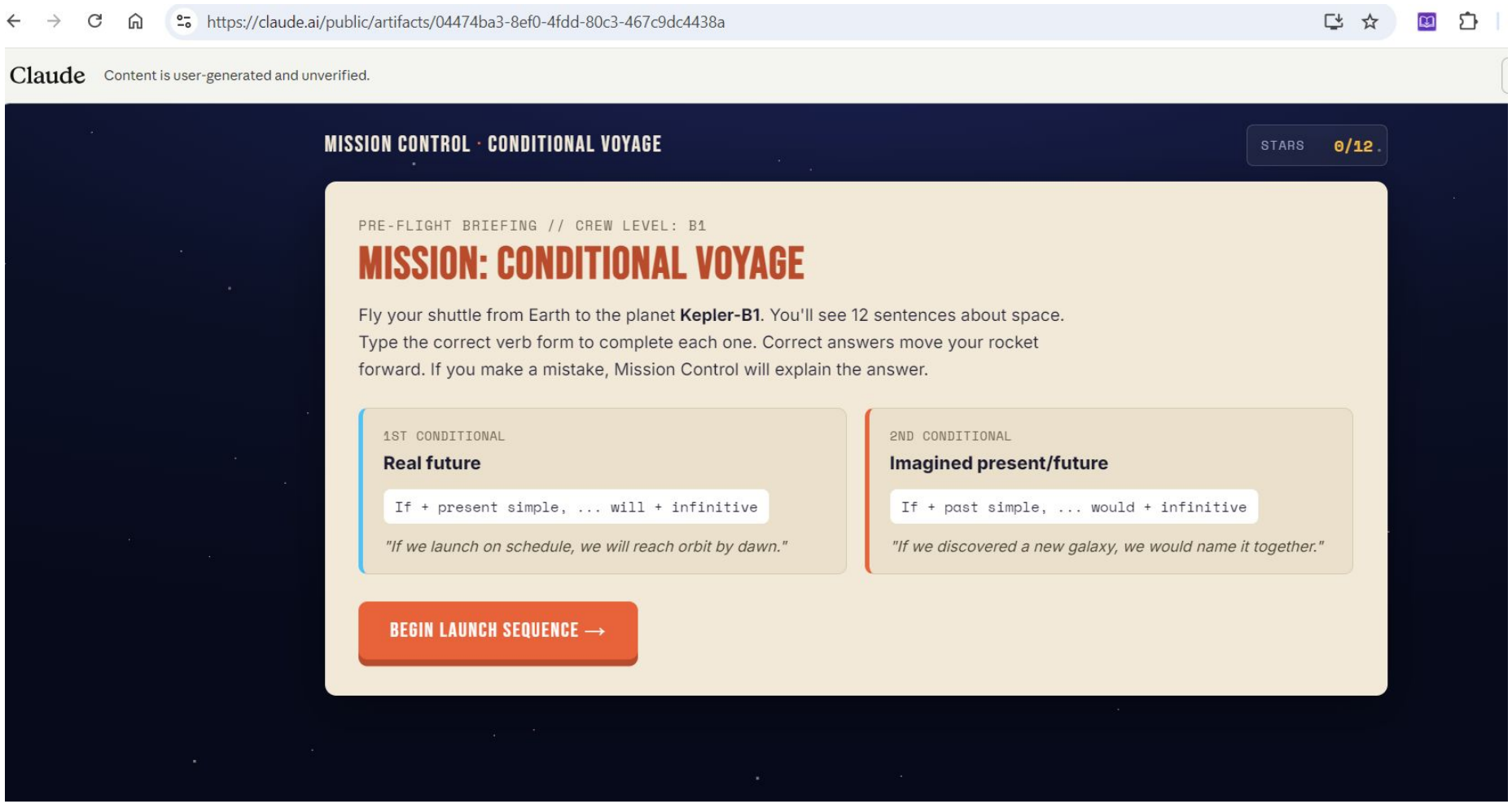
Copy

Download as HTML

Publish artifact



Result: Interactive grammar game, made in less than 5 minutes



GAME WORLD

From grammar game to speaking mission

Gamification becomes didactically meaningful when game elements lead to a communicative outcome.

BEFORE

Interactive grammar game

- item-by-item practice
- language accuracy focus
- useful, but speaking remains optional

→

AFTER

Space rescue mission

- Goal: agree on the safest route
- Roles: pilot, engineer, mission control
- Gap: each learner has different clues
- Language: If we choose…, we will… / I suggest… because…
- Outcome: group decision + short justification

Design rule: The non-negotiable element is an information gap, role gap or decision gap that makes peer talk necessary.

Research anchors: task-based learning and gameful design (Ellis, 2003; Nunan, 2004; Deterding et al., 2011; Sailer & Homner, 2020).

APPLICATION

Chatbot World: vibe-code a chatbot to scaffold classroom speaking

1 · Task setup

Teacher defines the speaking goal, roles, gap, problem, or decision.

2 · Low-pressure AI preparation

Learners use the chatbot to explore roles, ideas and useful phrases

3 · Peer interaction

Learners use their preparation in a partner or group task

4 · Debrief + feedback

Learners reflect on what worked, what language helped, and what they would improve next time.

AI should not replace classroom speaking.
It can reduce avoidable pressure by offering clearer roles, useful language, predictable steps and rehearsal before human interaction.

APPLICATION

Before designing the chatbot, decide...

What classroom interaction should the chatbot lead into?

E.g.: an information gap, opinion gap, role-play, problem-solving task, group decision, interview, debate.

What should the chatbot generate or prepare?

Information cards, roles, opinions, constraints, clues, arguments, questions

What barriers should the chatbot reduce before the speaking task?

It can clarify the role, externalize steps, provide optional phrase support and allow rehearsal before speaking.

VIBE CODING DEMO

Prompt structure: connect the three worlds

Create an html chatbot for [level] EFL learners. The chatbot should help students prepare for a classroom speaking task about [topic].

The chatbot can support students by:
- helping them rehearse the interaction
- generating roles, information, opinions or constraints
- providing brief CEFR-aligned phrase support
- asking one short question at a time
- allowing pause, retry and optional planning
- giving selective feedback before the peer task

After using the chatbot, students should be ready to [compare information / solve a problem / reach a decision / discuss different views] with classmates.

Avoid personal or sensitive topics. Do not over-correct or write the full dialogue for the learner. Provide a simple alternative route if voice interaction is not accessible.

Set the context
Who are the students? What level are they? What topic are they working on?

Define the chatbot's role
E.g. conversation partner, role-card generator, interviewer or source of missing information.

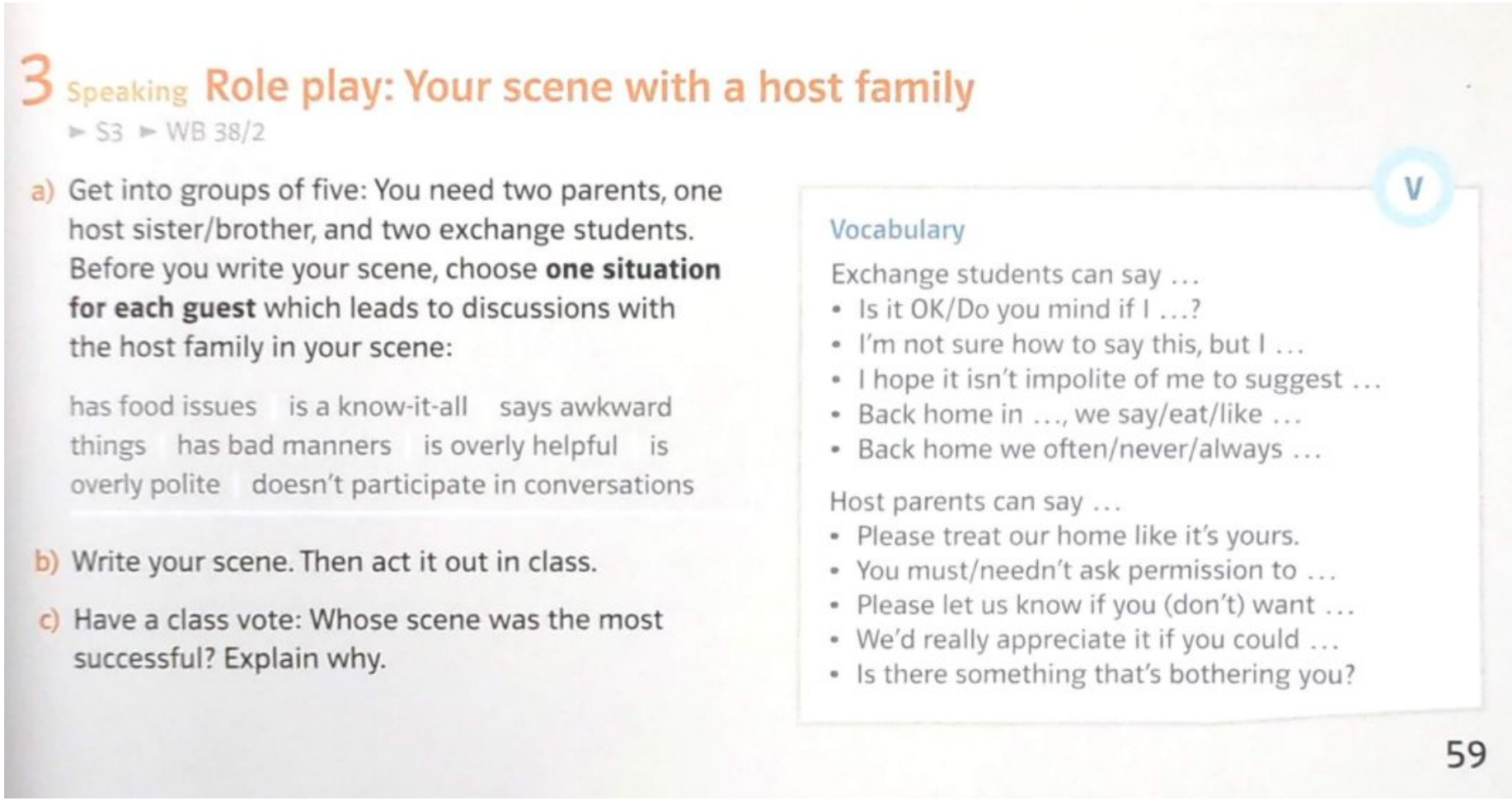
Specify inclusive support
Visible steps, planning time, phrase bank, pause/retry, choice or alternative.

Explain the classroom task
What will students do after using the chatbot?

Set boundaries
What should the chatbot avoid?

Textbook activity link

The chatbot prompt on the next slide was inspired by this activity from *Green Line 3 (Klett)*



3 Speaking Role play: Your scene with a host family

► S3 ► WB 38/2

a) Get into groups of five: You need two parents, one host sister/brother, and two exchange students. Before you write your scene, choose **one situation for each guest** which leads to discussions with the host family in your scene:

has food issues | is a know-it-all | says awkward things | has bad manners | is overly helpful | is overly polite | doesn't participate in conversations

b) Write your scene. Then act it out in class.

c) Have a class vote: Whose scene was the most successful? Explain why.

V

Vocabulary

Exchange students can say …
- Is it OK/Do you mind if I …?
- I'm not sure how to say this, but I …
- I hope it isn't impolite of me to suggest …
- Back home in …, we say/eat/like …
- Back home we often/never/always …

Host parents can say …
- Please treat our home like it's yours.
- You must/needn't ask permission to …
- Please let us know if you (don't) want …
- We'd really appreciate it if you could …
- Is there something that's bothering you?

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VIBE CODING DEMO

Example prompt

Create an html chatbot for 7th-grade EFL learners preparing a host family role-play.

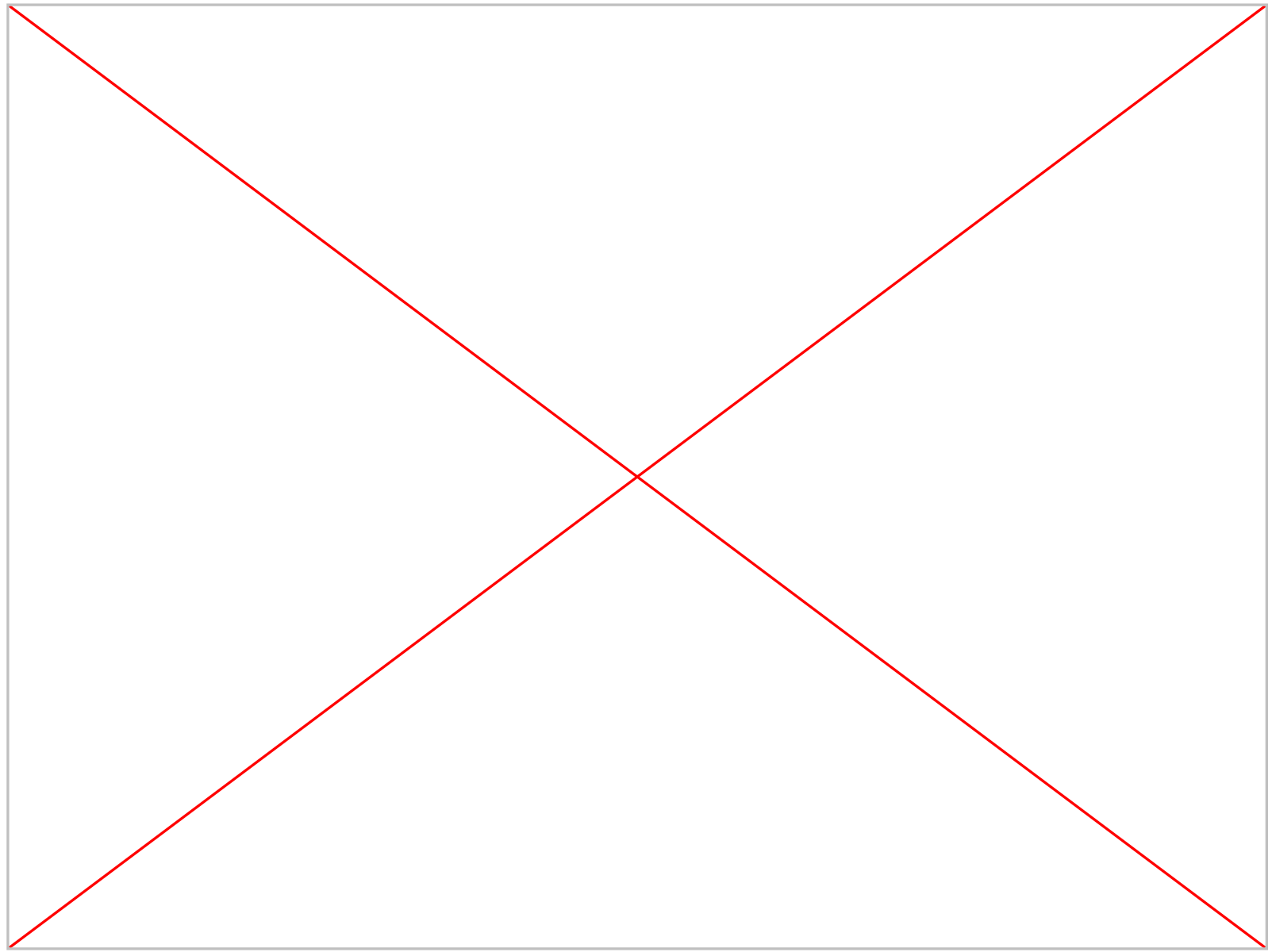
The students will later act out the scene with classmates. The chatbot should only help them prepare.

Do not give long explanations. Ask one short question at a time and wait for the student's answer.

First, ask the student which role they want: exchange student, host parent, or host sibling.

Then:
- suggest one simple problem or misunderstanding they could include in the scene
- remind them that they can change it or invent their own idea
- help them prepare 3-4 things their character might say
- give useful B1-level sentence starters for polite requests, suggestions, clarification, and disagreement

Use short, student-friendly language. Do not write the full scene for them. Avoid personal or sensitive topics.



DEBRIEF

What made the chatbot useful, and what would you restrict?

Usefulness

What made the chatbot pedagogically useful?

- clear role and observable goal
- level control
- one question at a time
- supportive phrases and planning
- pause/retry before peer speaking

Restrictions

What would you restrict before using it with learners?

- personal data or sensitive topics
- stereotypes, bias or factual authority
- constant or punitive correction
- diagnosis labels or forced disclosure
- no pause, retry or alternative route
- unsupervised use

Teacher role
Define the goal, remove barriers, test the prompt, supervise use and reconnect practice to human interaction.

Design formula: Prepare with AI → rehearse with support → communicate with peers → reflect and adapt

Prompt and inclusion checklist

Mission · problem, gap, role, clue, constraint or decision

Role · specific social or classroom role

Level · CEFR-aligned language and support

Goal · observable speaking outcome

Interaction · one question at a time; bot does not dominate

Scaffolding · visible steps, planning time, phrase support, choice and clarification

Feedback · selective, brief, action-oriented and not constant

Safety · no personal data, diagnosis labels, sensitive topics or factual authority

Transfer · leads to human speaking and includes a non-digital or lower-pressure route

Design formula: Prepare with AI → rehearse with support → communicate with peers → reflect and adapt

CLOSING

Transfer: choose your own AI Speaking World

My next task

Which chatbot, game-like mission or blended speaking task could I realistically try?

My inclusion plan

Which barrier will I reduce, and what structure, choice or alternative will I offer?

My safeguard

What remains teacher-controlled, and how will I protect data and learner dignity?

Design formula: Prepare with AI → rehearse with support → communicate with peers → reflect and adapt

CLOSING

Three takeaways

1

AI chatbots and gamified tasks can expand low-pressure, repeatable speaking practice, especially for hesitant or anxious learners.

2

Inclusion depends on design: one clear goal, short cycles, learner control, differentiated access and limited correction.

3

AI preparation should culminate in meaningful human interaction and reflection; teacher agency and safeguarding remain central.

Main takeaway: design for participation, not merely for tool use.

Design formula: Prepare with AI → rehearse with support → communicate with peers → reflect and adapt

ADDITIONAL RESOURCES

Practical AI and DIDA resources for the classroom

DIDA
Digital Differentiation for Attention Difficulties in EFL Learning and Teaching

University of Kassel projects

DigiTalk-EFL / QSL
AI-supported speaking simulations and inclusive practice formats
Project period: 01.07.2025–30.06.2026

DIDA
Digital Differentiation for Attention Difficulties in EFL Learning and Teaching
Focus: structure, learner control, manageable cognitive load, differentiated access and reflection

ADDITIONAL RESOURCES

Online-Befragung zur Veranstaltung Regionales Fachforum Medienbildung Kassel

HESSEN Befragungsportal FEEDBACK

Diese TAN berechtigt zur Teilnahme an der Online-Befragung zur Veranstaltung Regionales Fachforum Medienbildung Kassel. Bitte öffnen Sie folgende Webadresse oder nehmen Sie direkt an der Befragung mithilfe des QR-Codes teil.

feedback.befragungsportal-hessen.de

Gruppen-TAN:

VNCW47MN

Selected sources

Black, P., & Wiliam, D. (1998). Assessment and classroom learning. Assessment in Education: Principles, Policy & Practice, 5(1), 7–74
CAST. (2024). Universal Design for Learning Guidelines version 3.0.
Council of Europe. (2020). Common European Framework of Reference for Languages: Learning, teaching, assessment. Companion volume. Council of Europe Publishing. ·
Ellis, R. (2003). Task-based language learning and teaching. Oxford University Press.
Hattie, J., & Timperley, H. (2007). The power of feedback. Review of Educational Research, 77(1), 81–112
Hessisches Kultusministerium. (2020). Handreichung für die mündliche Kommunikationsprüfung in den modernen Fremdsprachen der gymnasialen Oberstufe (2nd ed.).
Hessisches Kultusministerium. (2024). Kerncurriculum gymnasiale Oberstufe: Englisch. Hessisches Ministerium für Kultus, Bildung und Chancen.
Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. The Modern Language Journal, 70(2), 125–132.
Levis, J. M. (2007). Computer technology in teaching and researching pronunciation. Annual Review of Applied Linguistics, 27, 184–202
Li, Z., Link, S., & Hegelheimer, V. (2015). Rethinking the role of automated writing evaluation feedback in ESL writing instruction. Journal of Second Language Writing, 27, 1–18.
Long, M. H. (1996). The role of the linguistic environment in SLA. In W. C. Ritchie & T. K. Bhatia (Eds.), Handbook of second language acquisition (pp. 413–468). Academic Press. · Mackey, A. (2020). Interaction, feedback and task research in second language learning. Cambridge University Press.
Nunan, D. (2004). Task-based language teaching. Cambridge University Press.
Schmidt, R. (1990). The role of consciousness in second language learning. Applied Linguistics, 11(2), 129–158.
Skehan, P. (1998). A cognitive approach to language learning. Oxford University Press.
Swain, M. (1985). Communicative competence. In S. Gass & C. Madden (Eds.), Input in second language acquisition (pp. 235–253). Newbury House.

Selected sources: AI-supported speaking and learner affect

Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. The Modern Language Journal, 70(2), 125–132.
MacIntyre, P. D., & Gardner, R. C. (1994). The subtle effects of language anxiety on cognitive processing in the second language. Language Learning, 44(2), 283–305.
MacIntyre, P. D., Clément, R., Dörnyei, Z., & Noels, K. A. (1998). Conceptualizing willingness to communicate in a L2. The Modern Language Journal, 82(4), 545–562.
Tai, T.-Y., & Chen, H. H.-J. (2023). The impact of Google Assistant on adolescent EFL learners' willingness to communicate. Interactive Learning Environments, 31(3), 1485–1502. https://doi.org/10.1080/10494820.2020.1841801
Wang, C., Zou, B., Du, Y., & Wang, Z. (2024). The impact of different conversational generative AI chatbots on EFL learners: WTC, speaking anxiety and self-perceived communicative competence. System, 127, 103533. https://doi.org/10.1016/j.system.2024.103533
Wang, F., Cheung, A. C. K., Neitzel, A. J., & Chai, C. S. (2025). Does chatting with chatbots improve language learning performance? A meta-analysis of chatbot-assisted language learning. Review of Educational Research, 95(4). https://doi.org/10.3102/00346543241255621
Xiao, Y., Zhang, T., & He, J. (2024). The promises and challenges of AI-based chatbots in language education through the lens of learner emotions. Heliyon, 10(18), e37238. https://doi.org/10.1016/j.heliyon.2024.e37238

SOURCES

Selected sources: AI speaking, inclusion and gamification

Inclusive design, cognitive load and DIDA

CAST. (2024). Universal Design for Learning Guidelines version 3.0.

Sweller, J., van Merriënboer, J. J. G., & Paas, F. (2019). Cognitive architecture and instructional design: 20 years later. Educational Psychology Review, 31, 261–292.

DIDA project description and DIDA Digital Tools for Attention Regulation in EFL toolkit. University of Kassel, 2026.

Gamification and task design

Ellis, R. (2003). Task-based language learning and teaching. Oxford University Press.

Nunan, D. (2004). Task-based language teaching. Cambridge University Press.

Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From game design elements to gamefulness: Defining gamification. MindTrek 2011.

Sailer, M., & Homner, L. (2020). The gamification of learning: A meta-analysis. Educational Psychology Review, 32, 77–112.