

Chalkboards to Chatbots

Exploring Edtech Tools for English Teachers
and Sharing Some Emerging Best Practices

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Professional Development Day
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Introduction

This presentation explores the evolution of Edtech tools in education and their impact on teaching and learning.

- Significant shift in teaching English over the last 20 years
- Chronicle the emergence of some teaching tools
- Chalkboards to AI chatbots
- Expanding choices
- Challenges: Continual updates, uncertainties
- More autotelic students

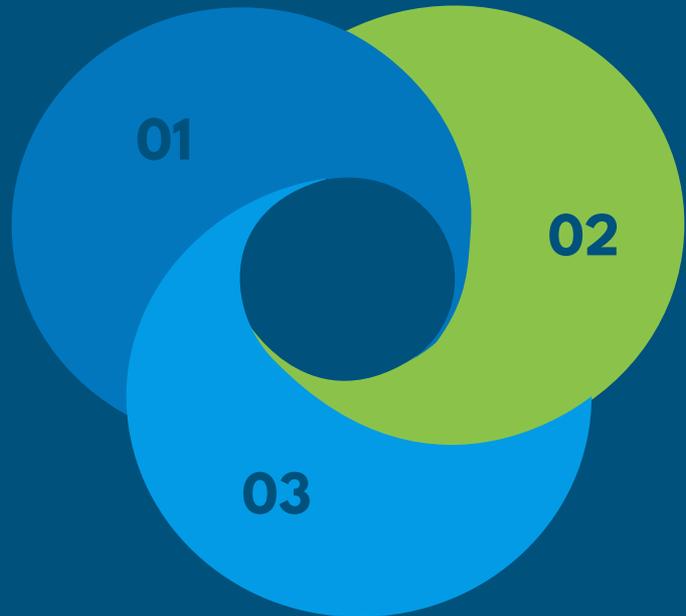


Evolution of Tools and Techniques

- YouTube, Wikipedia, Ted Talks, LMS, Turnitin, Blogs, Smartphones
- Flip, Duolingo, Grammarly, Google Documents, Zoom
- Flipped Classrooms

Benefits of Edtech Tools

Flexible, individualized,
and experiential
approach to education



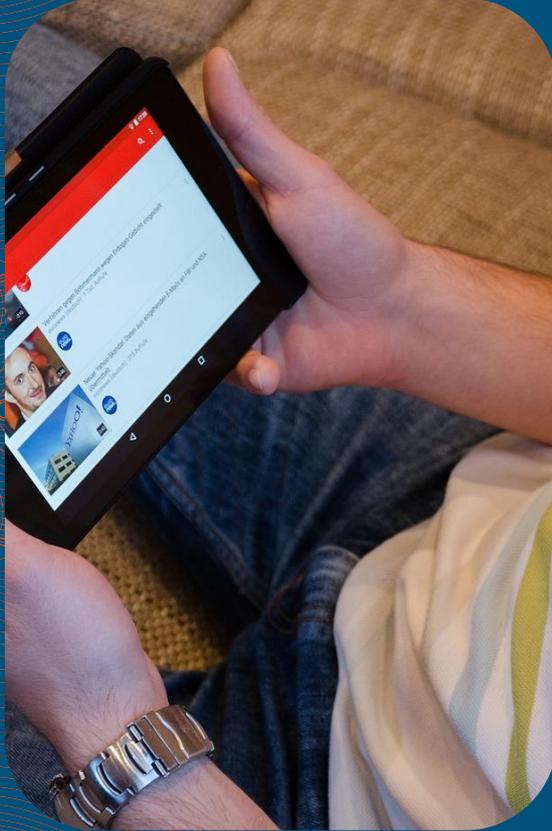
Accelerate learning,
strengthen memory,
deepen understanding

Foster curiosity, develop
critical thinking



Online Sources

- Hard copy vs soft copy
- Wikipedia vs Encyclopedia Britannica
- Reliability issues
- Google Scholar - 2004
- Students adopt, edit and improve Wikipedia articles



YouTube in Education

- Homework with multiple perspectives
- Pronunciation practice
- Research material
- Greater student autonomy



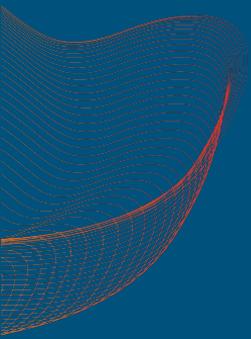
TED Talks and Global Perspectives

Increase student interest, improve oral skills

TED ED – Zombie Nouns

More student choices

Excellent National Geographic series for all levels



▶ Learning Management Systems (LMS)

- Post syllabus
- Send emails
- Week by week schedule
- Emergency lessons
- Evolution of LMS:
 - Class blog
 - Additional material
 - Show student work



▶ Turnitin

- Plagiarism check - Instant feedback
 - Less personal
 - Shared problem
- Evolution of Turnitin:
 - Added ETS
 - More personal comments
- Used by thousands of universities
- AI detection tool debate



▶ Flipped Classrooms

Content delivered at home via recordings

Review homework in classroom

Demonstrate understanding

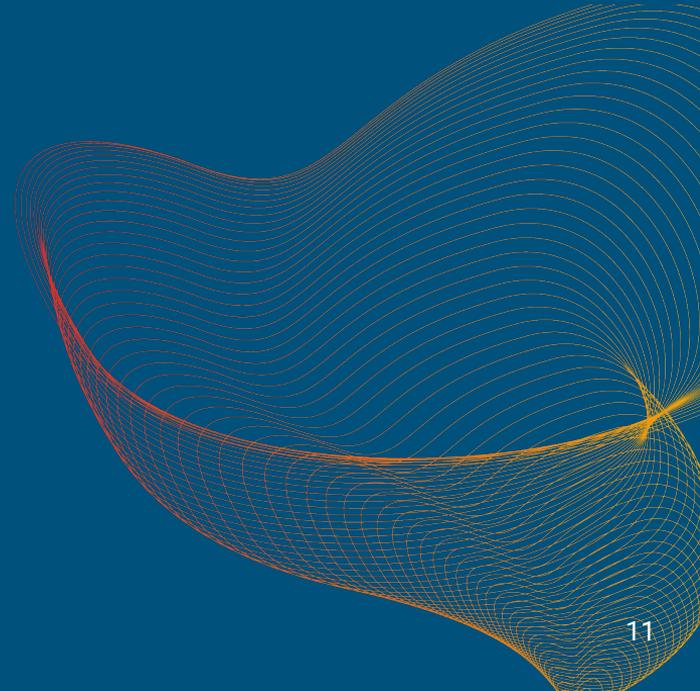
Create authentic communication experiences





The Six Principles of Teaching English (TESOL)

1. Know your learners
2. Create a supportive learning environment
3. Set meaningful goals
4. Adapt and differentiate instruction
5. Engage in scaffolded instruction
6. Promote language and content integration



▶ Choosing Edtech Tools

What is the goal?

Does the tool create new choices or improve existing ones?

What's the learning curve?

What are the costs and benefits?





ISTE Principles

- Empowered Learner
- Digital Citizen
- Knowledge Constructor
- Innovative Designer
- Computational Thinker
- Creative Communicator
- Global Collaborator



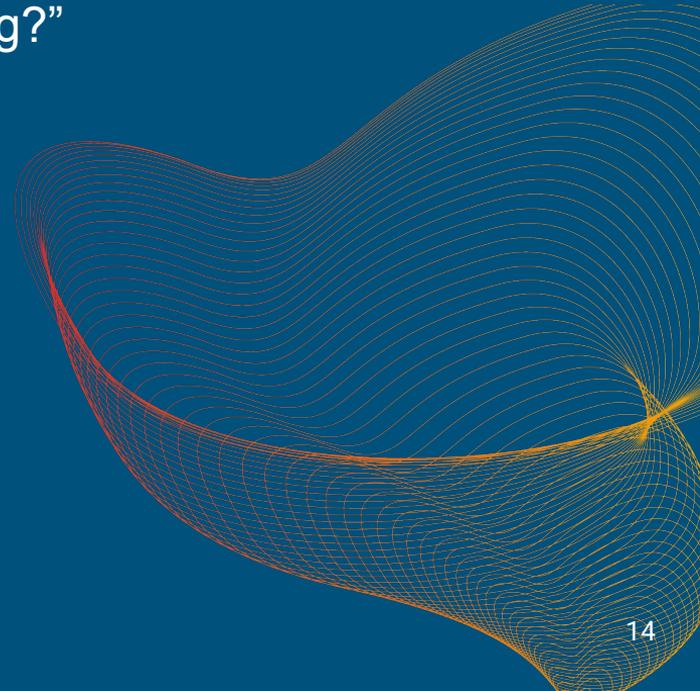


Can a Machine Learn to Write for the New Yorker?

“Where will predictive text take us?”

“Would humans stop writing, or at least publishing?”

By John Seabrook; Published October 14, 2019



▶ Thrown Online: COVID and Zoom

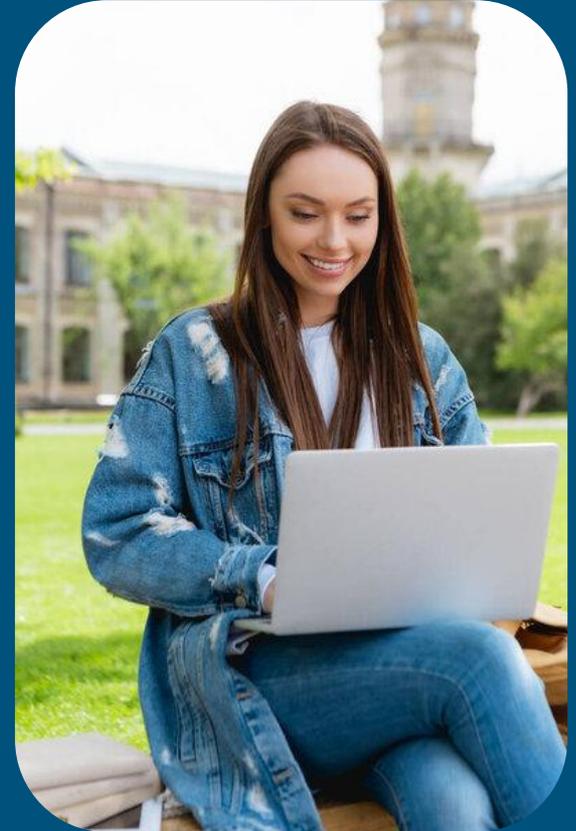
Camera etiquette

Greater dependency on LMS

Social emotional learning

Multiple time zones

Breakout rooms



“Do what you can, with what you have, where you are.”
- Theodore Roosevelt (1858-1919), 26th U.S. President

▶ Lessons Learned

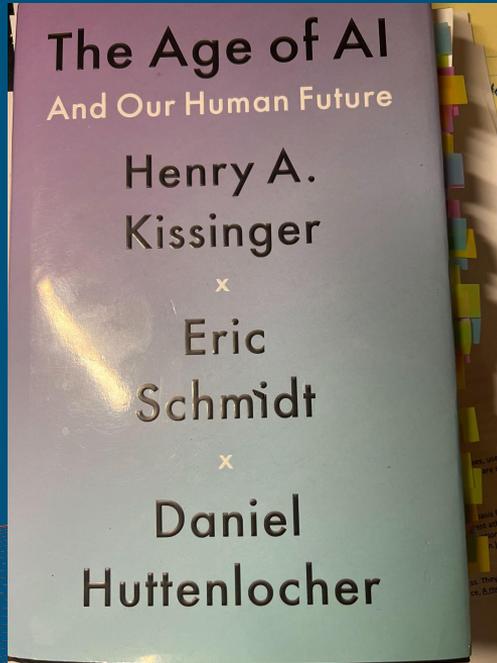
Social Emotional learning

- Google Docs
- Flip/FlipGrid
- Tech sometimes fails
- Virtual student-professor conferences





The Age of AI and Our Human Future



Read *The Age of AI and Our Human Future* (2021)

- “*The Age of AI* is upon us. Three leading thinkers have come together to consider what it means – and they have concluded it that it is changing nearly everything about how humans navigate the world.”

“But it (AI) is being applied to more elements of our lives, it is altering the role that our minds have traditionally played in shaping, ordering, and assessing our choices and actions.”

P.53



ChatGPT

Chat GPT - Generative pre-trained transformer

Can generate texts in different languages, styles, formats, and levels of detail

Over 1 million users in five days

▶ Using AI Tools

- Ignore apocalyptic nightmares
- Don't buy the hype
- We already use many AI tools:
 - Siri
 - Alexa
 - Grammarly
 - Duolingo
 - Gmail
 - Word

Evolution as much as revolution





Shall We Explore?

Can you provide a list of sentence starters for advanced English language learners?

Create a list of 25 classic proverbs to modify in an MLL lesson for international college students on hedging language. Include a blank line for student writing.

What are 20 verbs related to preparing food for intermediate English language learners?

Please create a primer and detailed study guide for the Oral Proficiency Exam?

List 15 steps to write a compelling product review for YouTube. Give examples. Provide reasons. Cite sources.

Design a 30 question preposition quiz using “in, on, at” for computer science students?

Design a worksheet reviewing word forms for 25 reporting verbs.

Can you create a bespoke grammar exercise with 25 multiple choice questions for a 28-year old pilot from Bogota, Columbia? Focus on verb tense. Begin by reviewing the difference between past and present perfect.



ChatGPT in Writing Class

Writing process:

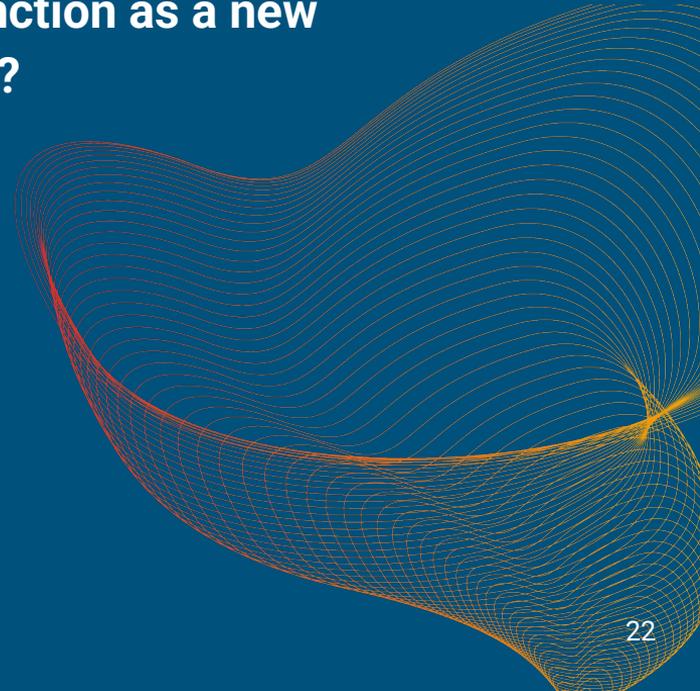
- Brainstorm
- Prewriting
- Test keywords
- Editing
- Spell check
- Paraphrasing
- Vocabulary expansion
- Alternative tones





Benefits of AI Tools in Writing Classes

- Sparks brainstorming
- Suggests keywords
- Generates possible sources
- Overcomes writer's block
- Offers rough outlines
- Corrects spelling
- Identifies grammar errors
- Encourages editing for tone
- Provides 24/7 feedback
- New can be nice
- Might function as a new audience?



Improving Questioning and Prompts

Include examples,
reasons, quotes, and
sources



Ask better questions to
enhance learning

Create specific prompts
for better responses

Roleplay characters/
situations create
bespoke lessons

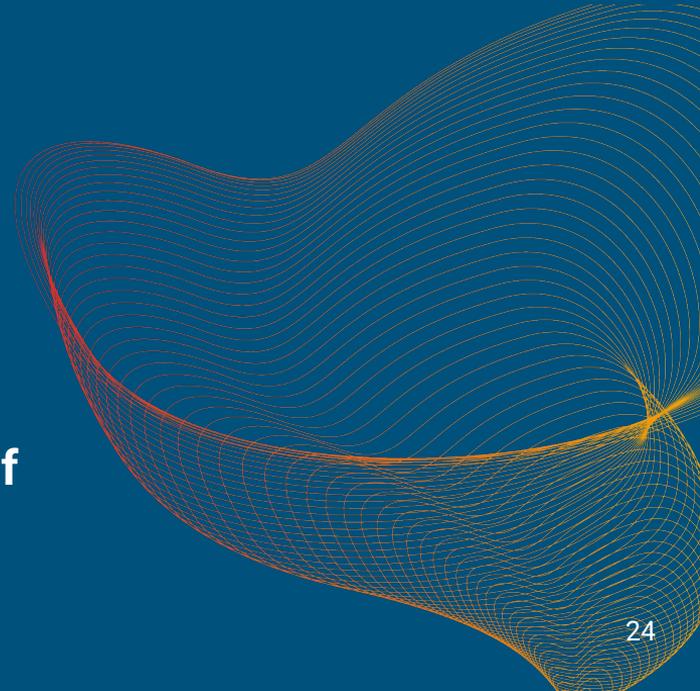
Use APA/MLA citation
style



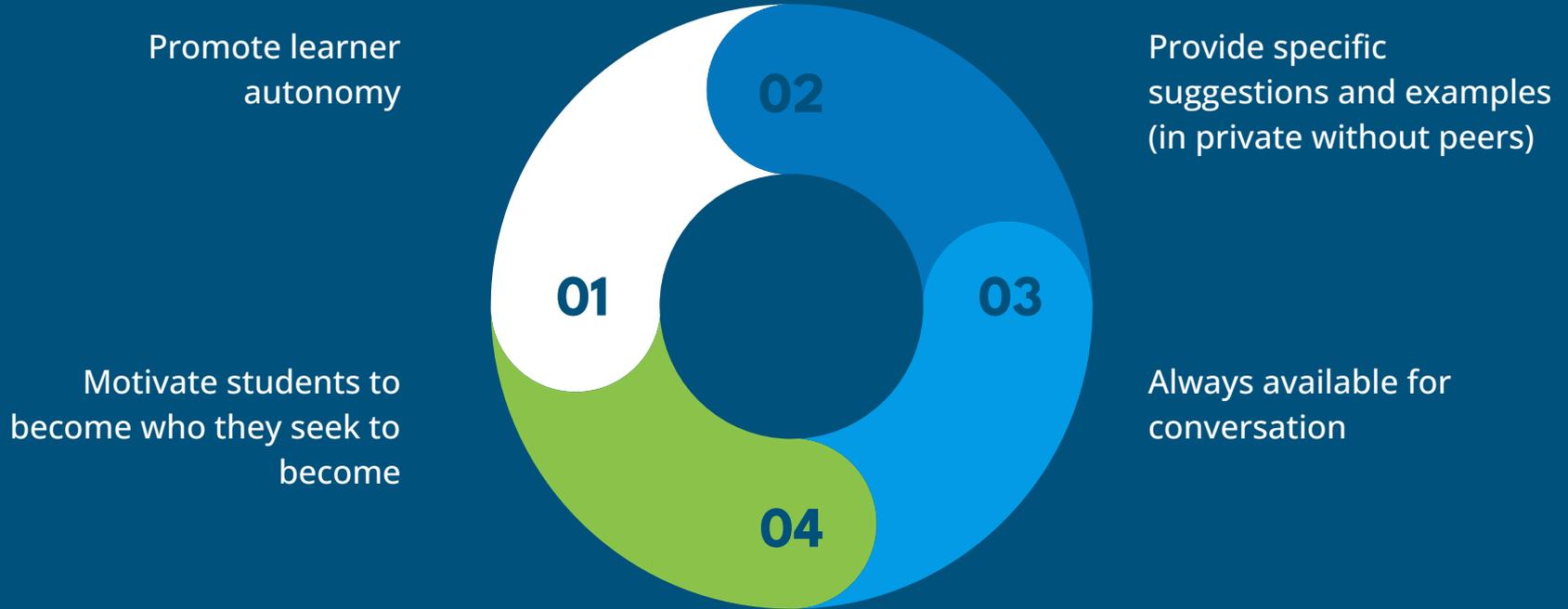
Benefits of AI Tools for Speaking Skills

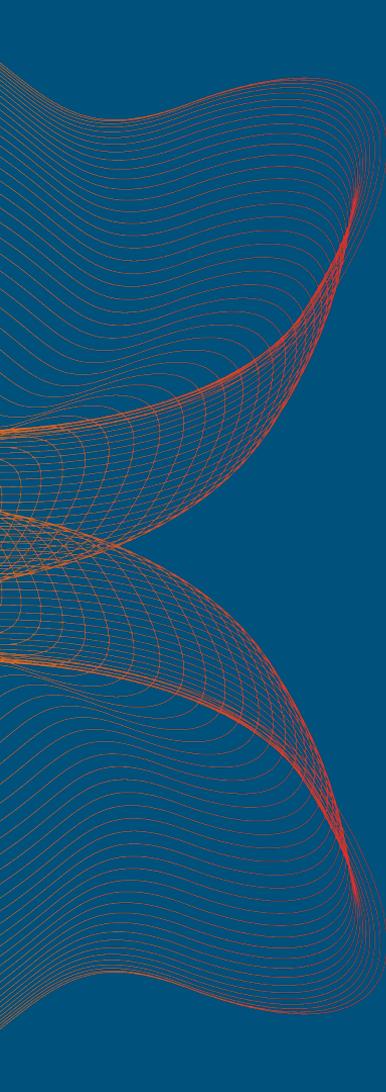
- Practice conversations
- Receive pronunciation feedback
- Free of social pressure
- Patient conversation partner
- Practice job interviews
- Rehearse future real life scenarios
- Self-paced lessons
- Tireless conversation partners
- Might function as a new audience?

“Speakable is going to be a big help to many of our students!” - Larry Ferlazzo



The Superpower of AI Tools





Going Beyond ChatGPT

- **Bing Search engine**
 - Short answers
 - Real links
 - Sets of 30 questions
 - Suggest 3 questions
- **AI Writer**
 - Longer answers
 - Offers multiple tones
 - Easy to use interface
- **Jasper AI**
 - Workplace-focused
 - Longer answers
 - Multiple tones
- **Grammarly Online editor**
 - Explanations
 - Plagiarism checker

Academic Writing Concerns

Editing is more useful for sentences and paragraphs



Write with, not by AI

Write for classmates, not for AI

Trust, but verify (Citations uneven)

Larry Sanger's illuminating exchange



Verify, verify, verify!

Widespread errors

- Outdated information
- Similar names
- Generates plausible sounding, yet factually wrong information
- Robbie Robertson

Ask students to evaluate a response in class?

Trust, but verify - Russian proverb

Bertrand Russell, Aldous Huxley, and G.B. Shaw all credited with the same quote.

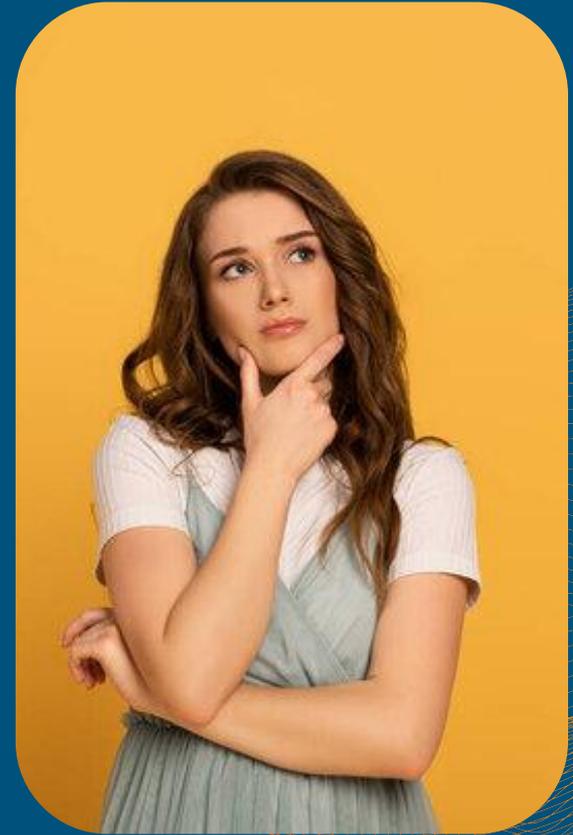
Larry Sanger exchange

Seven false citations in one chatbot conversation! How is this possible?!



More Concerns

- Will plagiarism be normalized?
- Might AI undermine motivation to write?
- Could false information spread faster?
- Will we develop excessive trust in AI tools?
- Or will students become very cynical?
- Will students outsource thinking to AI tools?
- Will AI translation tools lead more students to abandon language learning?





Current Lesson Preferences

- AI tools for brainstorming
- Self-contained classroom exercises
- Short, supplemental tasks
- Expand prior knowledge
- Help identify biases
- Explore possibilities
- Edit and re-edit

AI Tools in Multi-Skill Classes





Evolving AI Policies in Universities

Stanford University

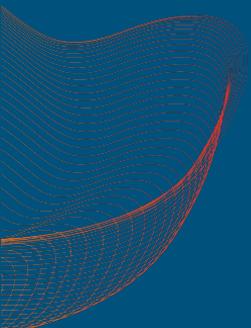
- Focus on safe, ethical, and equitable use of AI

University of Southern California

- Emphasizes transparency, fairness, and inclusivity

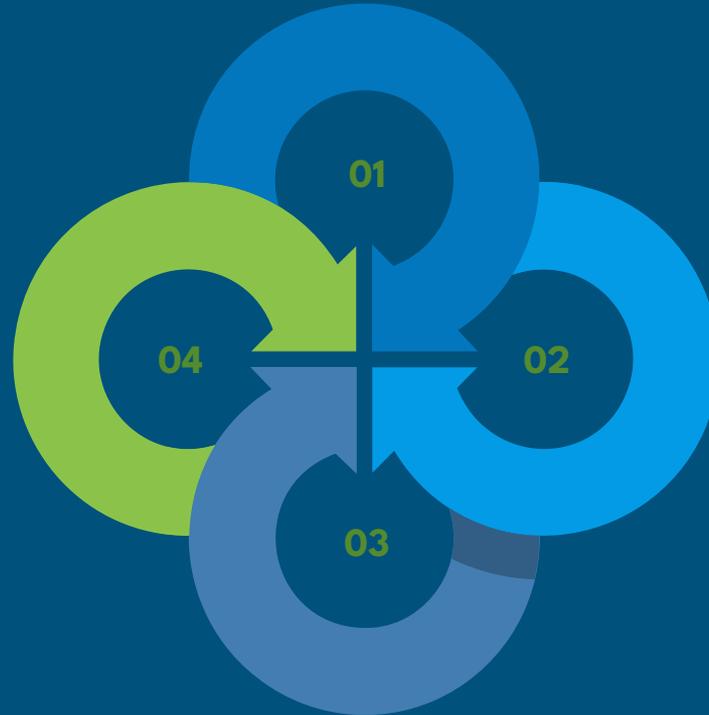
Harvard University

- Fostering understanding, responsible deployment, and ethical use of AI



CS50 Bot at Harvard

Immediate feedback
and interaction



AI chatbot used to
teach computer
science class

Enhances learning
experience for
students

Personalized help
with coding
challenges

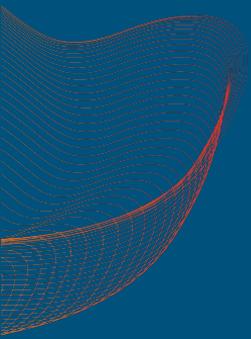


USC Options for Faculty

Sample Option A—not permitted

Since creating, analytical, and critical thinking skills are part of the learning outcomes of this course, all assignments should be prepared by the student working individually or in groups. Students may not have another person or entity complete any substantive portion of the assignment. Developing strong competencies in these areas will prepare you for a competitive workplace. Therefore, using AI-generated tools is prohibited in this course, will be identified as plagiarism, and will be reported to the Office of Academic Integrity.

USC Center for Teaching Excellence, July 2023





USC Options for Faculty

Option B—permitted on specific assignments

In this course, I encourage you to use artificial intelligence (AI)-powered programs to help you with assignments that indicate the permitted use of AI. You should also be aware that AI text generation tools may present incorrect information, biased responses, and incomplete analyses; thus they are not yet prepared to produce text that meets the standards of this course.

To adhere to our university values, you must cite any AI-generated material (e.g., text, images, etc.) included or referenced in your work and provide the prompts used to generate the content. Using an AI tool to generate content without proper attribution will be treated as plagiarism and reported to the Office of Academic Integrity. Please review the instructions in each assignment for more details on how and when to use AI Generators for your submissions.

USC Center for Teaching Excellence, July 2023



USC Sample Syllabus Options on AI Policy

Option C—encouraged use

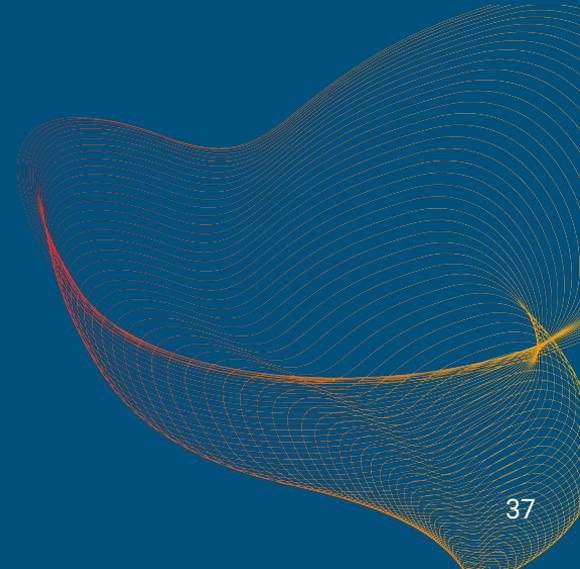
I expect you to use AI (e.g., ChatGPT and image generation tools) in this class. Learning to use AI is an emerging skill, and I welcome the opportunity to meet with you to provide guidance with these tools during office hours or after class. Keep in mind the following:

- AI tools are permitted to help you brainstorm topics or revise work you have already written.
- If you provide minimum-effort prompts, you will get low-quality results. You will need to refine your prompts to get good outcomes. This will take work.
- Proceed with caution when using AI tools and do not assume the information provided is accurate or trustworthy. If it gives you a number or fact, assume it is incorrect unless you either know the correct answer or can verify its accuracy with another source. You will be responsible for any errors or omissions provided by the tool. It works best for topics you understand.
- AI is a tool, but one that you need to acknowledge using. Please include a paragraph at the end of any assignment that uses AI explaining how (and why) you used AI and indicate/specify the prompts you used to obtain the results. Failure to do so is a violation of academic integrity policies.
- Be thoughtful about when AI is useful. Consider its appropriateness for each assignment or circumstance. The use of AI tools requires attribution.



AI Chatbots and TESOL Principles

- Encourages student to explore/share stories
- Integrates language and content
- Offers opportunities for input and output practice
- Enhances language awareness and critical thinking
- Engages and motivates students
- Promotes learner autonomy





Five Points

1. Edtech tools come in all shapes, sizes, and flavors
2. We have already lived many technological evolutions
3. AI tools can accelerate learning
4. AI tools will continue to rapidly evolve
5. Chatbots and AI tools are as evolutionary as revolutionary





Conclusion

- AI tools can enhance learning experience
- Provide personalized learning opportunities
- Rapid feedback
- Recommend related content
- Spark learners' curiosity
- Can encourage critical thinking

Teachers, however, provide essential context and guidance so students can develop understanding and communication skills with fellow human beings.





Thank you!
Please ask questions!!

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Thank you!

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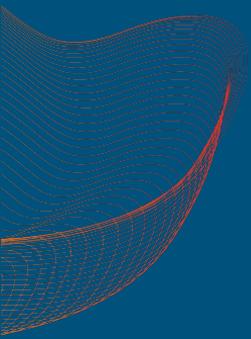
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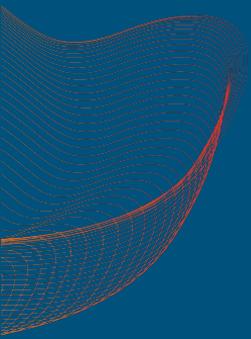
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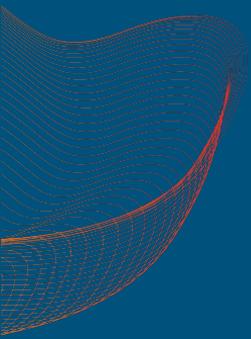
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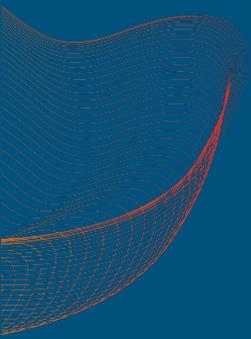


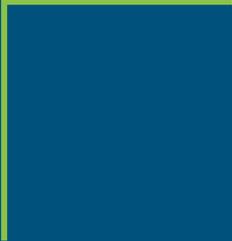
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Supplemental Slides





Do you remember?

- Before Google
- Before Wikipedia
- Before YouTube
- Before Learning Management Systems
- Before Turnitin
- Before Smartphones?

How did we teach English?





More YouTube Lessons

1. Curate a playlist of educational videos
2. Engage with authentic language content
3. Pronunciation practice
4. Listening comprehension exercises
5. Virtual field trips
6. Bespoke grammar lessons
7. Authentic listening materials
8. Product reviews
9. Writing prompts
10. Collaborative projects



Reviewing Principles of Teaching English with AI

1. Know your learners
2. Create a supportive learning environment
3. Set meaningful goals
4. Adapt and differentiate instruction
5. Engage in scaffolded instruction
6. Promote language and content integration

