

Embracing the Disrupted Language Teaching and Learning Field:

Analyzing YouTube Content Creation Related to ChatGPT

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Research Team







Belle Li is a Dean's full scholarship doctoral student studying Learning Design & Technology at Purdue University



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Recent Publications

1. Li, B., Kou, X., & Bonk, C. J. (2023). Embracing the disrupted language teaching and learning field: Analyzing YouTube content creation related to ChatGPT. *Languages, 8*, 197. https://doi.org/10.3390/languages8030197

2. Li, B., Bonk, C. J., & Kou, X. (2023). Exploring the multilingual applications of ChatGPT: Uncovering language learning affordances in YouTuber videos. *International Journal of Computer-Assisted Language Learning and Teaching (IJCALLT), 13(1),* 1-22. http://doi.org/10.4018/IJCALLT.326135



Manuscripts Currently in Review

 Li, B., Wang, C., Bonk, C. J., & Kou, X. (Proposal accepted). Exploring inventions in self-directed language learning with generative AI: implementations and perspectives of YouTube content creators. *TechTrends*.

Li, B., Bonk, C. J., Wang, C., & Kou, X. (Under review).
 Reconceptualizing the self-directed language learning in the era of generative AI: an exploratory analysis. IEEE.



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Research Focus

Embracing the disrupted language teaching and learning field: Analyzing YouTube content creation related to ChatGPT.

Exploring the multilingual applications of ChatGPT:
Uncovering language learning affordances in YouTuber videos.

Exploring inventions in self-directed language learning with generative AI: Implementations and perspectives of YouTube content creators.

Reconceptualizing the self-directed language learning in the era of generative AI: An exploratory analysis.

benefits, drawbacks, and concerns

educational affordance best practice

SDL learning & instruction

SDL design & model







Huung, W., Hew, K. F., & Fryer, L. K. (2022). Chatbots for language learning—Are they really useful? A systematic review of chatbot-supported language learning. Journal of Computer Assisted Learning, 38(1), 237—237. https://doi.org/10.1111/jokl.12801

AI in Language Education

Huang, Hew, and Fryer (2022)

— A review of 25 articles on the topic of chatbot-supported language learning.

— Three technical affordances of chatbots: timeliness, ease of use, and personalization.

- personalization.
- Five pedagogical uses: interlocutors, simulations, transmission devices, helplines, and recommendation systems.
- Chatbot challenges: technological limitations, novelty effects, and dealing with cognitive load.

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ChatGPT in Education

1. Most of the current discussions about ChatGPT's implications for education focus on the accuracy and the quality of the content it provides (Rudolph, et al., 2023).

2. Policies and frequently raise cautionary flags about the potential for misuse (e.g., Yurkevich, 2023)

3. Provide guidance (e.g., Cox Communications, 2023; McAfee, 2023) and education on ethical use (e.g., Baidoo-Anu & Owusu Ansah, 2023; Mhlanga, 2023)

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ChatGPT in Language Education

1. Baskara and Mukarto (2023) explored the integration of ChatGPT into language courses, considering the associated benefits and challenges in higher education.

2. Kohnke et al. (2023) examined the affordances of the ChatGPT for language teaching and learning.

3. Koraishi (2023) examined material development and assessment in teaching English as a foreign language (EFL), highlighting ChatGPT as a valuable tool for EFL teachers.

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ChatGPT in Language Education

4. Hong (2023) investigated the implications of ChatGPT for foreign language teachers, shedding light on its mechanisms and misconceptions.

5. Ali et al. (2023) revealed the positive impact of ChatGPT on reading and writing skills, while, at the same time, attitudes toward listening and speaking skills were neutral



Why YouTuber?

Content creators who facilitate learning on YouTube are often deemed digital pioneers (Chao, 2022; Zavyalova & Galvin, 2022).

- · YouTubers are:
 - 1. Early adopters.
 - 2. Digital pioneers.
- · YouTube videos:

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3. Play a key role in shaping the ways in which the newly emerging learning tools are perceived and used.



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June 17, 2023, YouTubers using ChatGPT

Learning is Increasingly Informal Will AI change the future of language learning?

June 12, 2023 **ShuoshuoChinese** .com/watch?v=-JgGtrjhFis&t=727s

Reach a Conversational Level Fast by Learning what Really Matters

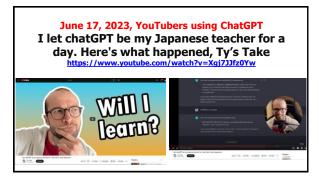
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Data Sources for Studies (#1-#4) Embracing the disrupted language teaching and learning field: Analyzing YouTube content creation 140 YouTube Videos related to ChatGPT. YouTube videos & 2. Exploring the multilingual applications of ChatGPT: comments Uncovering language learning affordances in YouTuber across 18 languages videos. 14 YouTubers (teacher/professor) 3. Exploring inventions in self-directed language learning with generative AI: Implementations and perspectives of YouTube content creators. 4. Reconceptualizing the self-directed language learning 19 YouTubers & in the era of generative AI: An exploratory analysis.

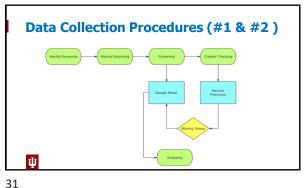
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Research Methods for Studies (#1-#4)

- 1. Mixed-methods: netnographic approach (Hine, 1994; Kozinets; 2002) #1-140 YouTube Videos
 - online observations
 - content publishing tracking
 - systematic content analysis of online videos.
- 2. Qualitative: Inductive content analysis (Elo & Kyngäs, 2008; Stemler, 2000) #2-YouTube videos & comme
- 3. Qualitative: Iterative thematic analysis (Braun & Clarke, 2006; Braun et al., 2014) #3-14 YouTubers (teacher/professor)
- Qualitative: Iterative thematic analysis (Braun & Clarke, **2006)** #4-19 YouTubers

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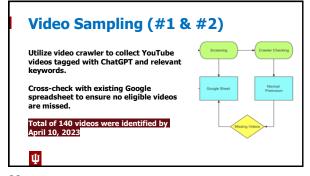
Video Sampling (#1 & #2)

"ChatGPT AND language learning," "ChatGPT AND language education," and "ChatGPT AND (Chinese OR Japanese OR Spanish OR French OR English OR German OR additional languages here).'

- Include videos directly discussing or representing ChatGPT in language education.
- · Exclude videos not primarily focused on language education (e.g., academic writing).
- Exclude videos shorter than a certain duration (e.g., less than 2 minutes).



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Video Sampling (#1 & #2) Coding Script Tom Gally Your Favorite English Teacher Youtuber Code 45 Charlie's Lesson Project Manager 1 **Dustin Schermaul** Youtube Videos_4/10 45 X channel code.xlsx

33 34

Data Analysis (#1- systematic content analysis of online videos) alraders.com It provides users with a personal tutor-like experience where they can pract English language skills through chat conversations with J GPT. Users can or paste dislogues from J GPT into Nationalreaders.com, and practice their list and comprehension skills by having the text read back to them in different onal tools for language learning, such as text to-speech conversion - didn't sp Need help Introduce ChatGPT Inoq (105)

I ling() is an online language learning platform that provides a variety of language skills. It was fix our series and resources to help learners improve their language skills. It was fix yis texe Kaufmann in 2002 and offer courses in over 20 languages.

Sites Kaufmann mentioned that he uses Ling() to learn new languages and to practice writing and per feedback on his writing.

I was not series and dedoes that can be added to ChatGPT to give it the ability to speak and in the ChatGPT (79)

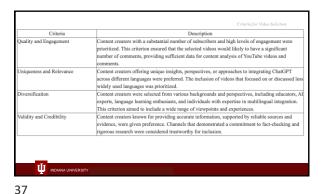
Talks to ChatGPT (79)

The chatGPT (79) Hands-on Demonstration (Foc... Tips for teachers Affordance of ChatGPT in ter... Affordance of ChatGPT in ter... Integrated with other tools

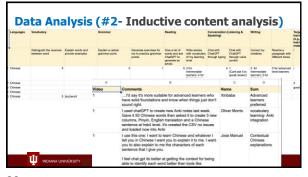
Video Selection Criteria (#2)

- 1. Quality and Engagement
- 2. Uniqueness and Relevance
- 3. Diversification
- 4. Validity and Credibility

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Study #1

1. What is the focus of the discussion and demonstrations by the YouTube content creators of ChatGPT in language education?

2. How do content creators describe their current practices of using ChatGPT in language education?

RQ1: What is the focus of the discussion and demonstrations by the YouTube content creators of ChatGPT in language education?

a. How has the discussion around ChatGPT and related AI technologies evolved during its' brief history as a tool for language education on YouTube?

b. Who is producing videos about ChatGPT in language education on YouTube?

c. What are the common topics and themes present in these discussions and demonstrations?

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RQ1: What is the focus of the discussion and demonstrations by the YouTube content creators of ChatGPT in language education?

1a. How has the discussion around ChatGPT and related AI technologies evolved during its' brief history as a tool for language education on YouTube?

Figure 1. Trends in Video Releases from November 30, 2022 to April 10, 2023

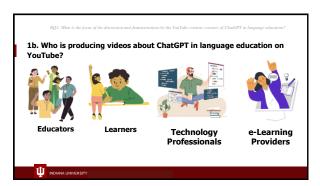
Figure 2. Trend of videos posted in different languages

RQ1: What is the focus of the discussion and demonstrations by the YouTube content creators of ChatGPT in language education?

1a. How has the discussion around ChatGPT and related AI technologies evolved during its' brief history as a tool for language education on YouTube?

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RQ1: What is the focus of the discussion and demonstrations by the YouTube content creators of ChatGPT in language education?

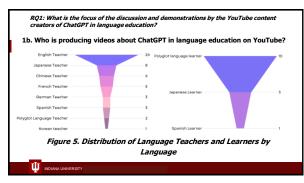
1b. Who is producing videos about ChatGPT in language education on YouTube?

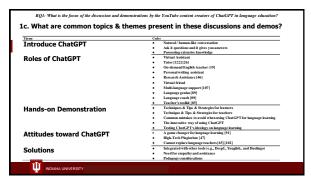
| Content to the content creators producing Videos | Figure 3. Distribution of Content Creators Producing Videos about ChatGPT in Language Education on YouTube

| Figure 3. Distribution of Content Creators Producing Videos about ChatGPT in Language Education on YouTube

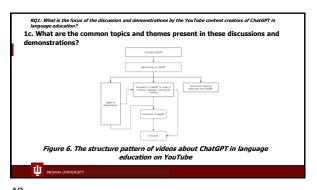
| Figure 4. Distribution of Educators Producing Videos about ChatGPT in Language Education on YouTube

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RQ2: How do content creators describe their current practices of using ChatGPT in language education?

- a. How do they perceive the potential benefits and drawbacks of incorporating ChatGPT in language learning?
- b. What strategies do they use to mitigate any drawbacks and ensure that ChatGPT is effectively used in language education?

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RQ2: How do content creators describe current practices of using ChatGPT in language ed?

Q2a. How do they perceive the potential benefits and drawbacks of incorporating ChatGPT in language learning?

Benefits of ChatGPT

- 1. Providing optimization and enhancement of language learning platforms
- as an augmentative learning device.

 2. Assistance with general questions, vocabulary building, writing tasks, language practice, test preparation, annotating texts, translations, and
- personalized learning.

 3. Acting as an accessible and affordable 24/7 tutor providing relevant information to users as it learns from their interactions.
- Engaging in conversations and practicing the language in a safe and comfortable environment without fear of judgment or mistakes.
 Being especially beneficial for students who struggle with traditional
- Being especially beneficial for students who struggle with traditional teaching methods or have special learning needs.

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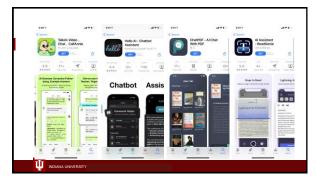


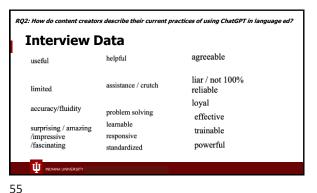
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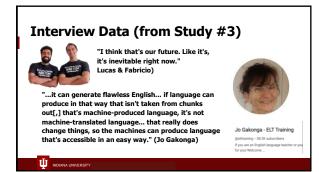
RQ2: How do content creators describe their current practices of using ChatGPT in language edit Q2a. How do they perceive the potential benefits and drawbacks of incorporating ChatGPT in language learning?

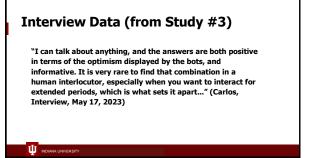
Benefits of ChatGPT

6. Creating bespoke content such as learning texts, worksheets, and lesson plans. 7. Helping with job interviews in a foreign language and practicing conversation by generating responses to questions.
8. Providing highly tailored content and transforming how individuals learn languages.
9. Enhancing the language learning experience by fostering learner motivation, improving efficiency, and promoting attentiveness and observation skills
10. Creating an engaging and accessible learning environment that makes language education more enjoyable and readily accessible for learners.
11. Reducing the workload of language teachers.









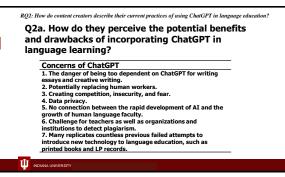
RQ2: How do content creators describe their current practices of using ChatGPT in language ed? Q2a. How do they perceive the potential benefits and drawbacks of incorporating ChatGPT in language learning? Drawbacks of ChatGPT Lack of emotional or empathetic responses.
 Limited creativity. Lack of context awareness.
 Potential of generating inaccurate or inappropriate responses. 5. Incomplete information. 6. Repetition of information. 7. Potential for bias. S. Inability to learn beyond its training data which goes up until 2021.

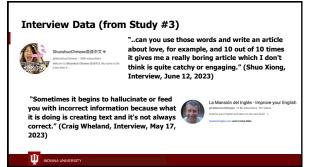
9. Potential misuse for malicious purposes.

10. Syntax and grammatical errors.

11. Does not provide much opportunity for speaking practice.

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Interview Data (from Study #3)



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"We have a lot of different versions of English, but it produces this kind of very white bread textbook style, not too old fashioned, not too slang." (Tom Gally, Interview, May 2, 2023)

"There are concerns when we've got to think about how we are going to make sure that chatGPT is a tool that helps students and doesn't basically undermine some of the skills that really we do believe are fundamental for them." (Russell, Interview, May 7, 2023)



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RQ2: How do content creators describe their current practices of using ChatGPT in language education?

Q2b: What strategies do they use to mitigate any drawbacks and ensure that ChatGPT is effectively used in language teaching and learning?

- The need for empathy and assistance for those who cannot use ChatGPT.
- 2. Overcoming Limitations of ChatGPT through Using it together with other language learning tools and resources.
- Double-checking the answer received from ChatGPT and using other resources such as native speakers or online checking tools.
- 4. Integrating effective methods of learning and pedagogy before using ChatGPT in language learning and teaching.

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RQ2: How do content creators describe their current practices of using ChatGPT in language education?

Q2b: What strategies do they use to mitigate any drawbacks and ensure that ChatGPT is effectively used in language teaching and learning?

- 5. Emphasizing the importance of a learner's motivation and efforts.
- What you get depends on what you ask—users need to learn how to write effective prompts.

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RQ1. How do these communities perceive the

across different languages?

Based on Lai et al. (2023)

"High resource" languages, including English, Japanese, Chinese, French, Spanish, German, Portuguese, and Russian.

educational affordance of incorporating ChatGPT

Korean, Bulgarian and Turkish were categorized as "medium resource" languages.

Lai et al.'s research didn't include the remaining six languages, Latin, Sorbian, Tajik, Irish, Kashubian, and Latgalian.

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 ChatGPT is its resemblance to a knowledgeable native speaker rather than a professional language teacher.

 ChatGPT's behavior can be both positive and informative for users: In situations where finding a human interlocutor who possesses these qualities can be challenging, ChatGPT serves as a valuable tool in avoiding language fatigue during extended conversations.

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Study #2

- 1. How do these communities perceive the educational affordance of incorporating ChatGPT across different languages?
- 2. What are the best practices for utilizing ChatGPT in language education, as observed within these communities on YouTube?

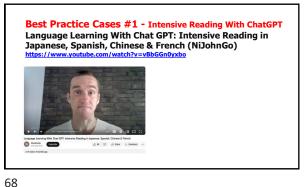
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- 1. Learning Optimization Gap: The first gap arises from learners' inability to fully leverage ChatGPT's technical affordances, leading to reduced educational affordability.
- Knowledge Comprehension Gap/ Cognitive Alignment Gap: The second gap emerges between the materials presented by ChatGPT and the learners' capacity to comprehend and absorb the knowledge being conveyed.







Best Practice Cases #3 - PPP Approach With ChatGPT ChatGTP for language learning

https://www.youtube.com/watch?v=vBbGGnDyxbo

PPP (present-practice-produce) approach
using various tools

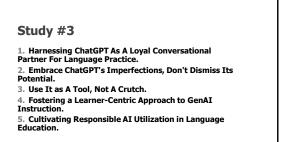
| Other arms | Other arms

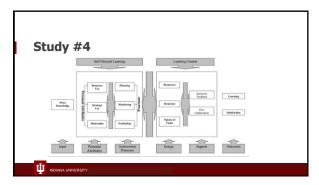
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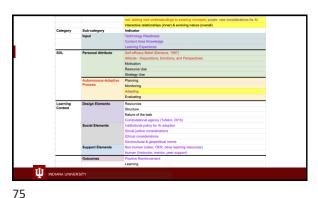


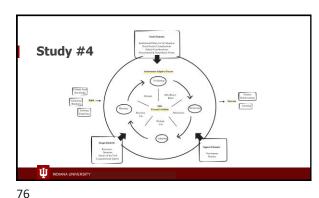


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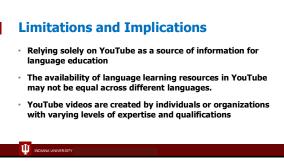


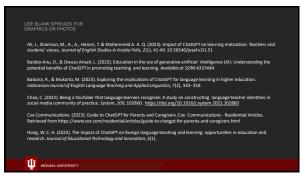






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