



AI-Assisted Teaching on Business Interpreting Classes Based on Cooperative Principle

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Abstract: With the development of AI tools, researchers have done a lot of work to implement AI-teaching in their classes. To better understand how AI is used for Language majors, teachers have made their efforts to evaluate the whole process of English-learning. Empirical studies have been conducted in real Business English classes and students' feedback have been collected by the teacher to examine how AI help students in interpreting. This paper integrates AI-assisted teaching with Cooperative Principle in business interpreting classes. The framework emphasizes systematic use of AI as well as the application of cooperative principle in real business contexts. By adjusting the AI evaluation model of interpreting, interpreters can be better trained to produce more precise and concise texts. It is found that with the integration of AI in the interpreting class, the basic maxims of communication could be achieved by control and adjustment by the teacher and students.

Keywords: cooperative Principle; business interpreting; AI-assisted teaching; human-machine collaboration

1. Introduction

Business interpreting, by its very nature, demands strict adherence to human-to-human communication. Traditional business interpreting faces obstacles, including large class sizes, limited opportunities for personalized feedback, and insufficient practice time for students to develop autonomous learning habits. In 2026, Zhou pointed out that AI technology offers promising solutions to these challenges through the implementation of "teacher-led, AI-assisted" human-machine collaborative teaching models[1].

With the development of AI, particularly of Chatgpt and Deepseek, AI has transformed its role from an assistant to a partner[2]. Nowadays AI has been commonly used in the classroom to help students enhance their English learning, and the practices of AI in the SL field have been researched and a lot of empirical studies have been conducted. AI can formulate a chain of input-practice-feedback-application for the students, and the teachers should take consideration of its role. The collaboration of AI-students mode in the classroom will promote higher qualities of language learning. In 2025, Chen's empirical study implied that AI-enhanced cooperative learning model has shown notable achievements in terms of fluency, pronunciation, grammar and content[3]. Wu's study also unveils that students intend to adopt various words to express their feeling when taking with AI[4].

The AI technologies used in language teaching includes induction and deduction, searching, machine learning, natural language processing. AI could empower oral English in the following three aspects: providing richer materials, making the production more authentic, and giving scientific assessment to the user[5]. With the technology of voice recognition and evaluation system, AI could be a good partner to the class. At the same time, the teachers' role has been altered to a guide and a facilitator.

The AI-relevant technologies could be applied in oral English teaching for its creation of a simulated condition for the learners. By analyzing the students' learning behaviors, AI could use more sophisticated work to improve the students learning. In 2024, Jiang investigated that AI-assisted work in the oral English teaching could significantly improve the students' capability to communicate[6]. In the same year, Li's group also demonstrated AI's application in English courses. He identified particularly that AI can be regarded as a simulated partner to make students more active in the class[7]. AI is an cutting-edge technology of this era, and the application of this technology will truly intrigue students' interest.

Although a lot of previous empirical studies have been organized, there is still a long way ahead when it comes to the topic of AI-assisted teaching. In the previous studies, AI presented astonishing change in terms of teaching; however, AI's weakness lies in its accents comprehension and its lack of emotional communication. This research explores how AI responds to the students based on the communication framework and how effective it is from the teachers' perspective. Through specific studies, the research focuses on how to enhance cooperative work between human and machine.

2. Theoretical Basis

Grice put forward the cooperative principle, which has become the focus of pragmatics ever since its birth. It has been used to explain human interaction and communication. Grice believed that the parties involved in one conversation share the same goal. People follow certain principles and make the communication effective and successful[8]. The cooperative principle implies that the speaker and the listener obey the rules unconsciously.

Grice's definition on cooperative communication includes four maxims, which governs people's communication. It is seen as an essential theory of pragmatics and used in the analysis of discourses. Today it is still applicable in the AI-Human communication because the goal for it is to promote the students' capability of communication from simulated online work to real human interaction. To conduct a research on AI-Students oral English promotion, it is still an indispensable way to evaluate the quality of the conversation.

From Grice's point of view, there are four maxims associated with the cooperative principle: Quantity, Quality, Relation and Manner. Under Grice's cooperative principle, people follow the principles will achieve expected results of the conversation thus making the communication effective; people violating the principles will get failure of the communication, sometimes even conflicts. This principle underscores human's rationality when being involved in conversations. The maxims of cooperative principle have been demonstrated in details by Grice.

The maxim of Quantity refers to the condition that one must convey enough information as required. The purpose of your counter partner is on information exchange. However, one should not provide too much information as the other person conveyed or implied; the maxim of Quality emphasizes one's integrity. Do not give false information or the ones lacking support; the maxim of Relation means the production shall be connected to what kind of information is being exchanged; the maxim of Manner means that one shall be clear in communication, that is to say, when people try to give information, he or she shall deliver it without ambiguity or obscurity. This also requires the speaker equipped with certain logic, organizing the speech orderly.

In the era of AI, large language models and text-to-speech technology have make it reality to create a platform to train the students with dialogues and conversations. Other technologies such as computational vision and multi model technologies could also make the students to talk to the AI model in real time. learners can take practices in a simulated computational environment. Zhou investigated teaching oral English with cooperative principle[9]. A research team developed an Artificial Intelligence-Assisted English Speaking Teaching System through AI and LLM technologies[10]. But today, when AI's role in the classroom has been identified as a counter partner instead of searching tools, AI-Human Oral English practicing tool should use the basic principles of pragmatics to re-examine whether or not AI can achieve the same goals as humans do in real conversations[11]. If so, the educators could better use this technology to train the students.

3. AI-Assisted Business Interpreting

3.1 AI-aided feedback of Interpreting assignments

By grounding AI-generated feedback in Grice's Cooperative Principle, educators can ensure that students develop not only linguistic competence but also pragmatic awareness essential for effective business communication. The AI system analyzes student interpretations against source texts to detect quantity-related deviations: under-information (too little) and over-information (too Much); In business interpreting, quality violations can have serious legal, financial, and reputational consequences. The AI system cross-references student interpretations against factual errors and unsubstantiated Information. The Maxim of Relation requires that contributions be relevant to the ongoing exchange; the AI system evaluates the contextual relevance of student interpretations by analyzing the broader discourse structure, dealinhg with Off-Topic Content and Contextual Misalignment; The AI system evaluates the structural and stylistic clarity of student interpretations. If a student produces interpretation with Obscurity and Complexity or Lack Logical Organization, AI helps simplify the organizational pattern of the speech.

3.2 AI-aided interpreting production on cooperative principle

Beyond maxim-specific modules, the AI platform offers integrated scenario-based practice where all four maxims operate simultaneously. In a simulated cross-border M&A negotiation, for example, students must interpret discussions covering valuation, due diligence, regulatory approval, and post-merger integration, with the AI tracking performance across all maxims and helps students identify which maxims they need to prioritize. Teachers facilitate debriefing sessions, ensuring that AI-mediated practice is not merely a technical exercise but a pedagogically rich opportunity for deep learning.

3.3 Evaluation of AI tools

The first evaluative dimension concerns the quality of AI-generated feedback with respect to the four maxims. The

second evaluative dimension concerns whether AI-mediated production practice effectively cultivates students' adherence to Gricean maxims. The third evaluative dimension concerns the quality of AI-student interaction itself, assessed through criteria. Evaluators analyze whether the AI models cooperative communication in its own behavior—whether AI responses are appropriately informative (Quantity), factually accurate and free from hallucination (Quality), relevant to the student's query and context (Relation), and clear, unambiguous, and logically organized (Manner). Evaluators also assess the AI's capacity for pragmatic repair. A mixed-methods evaluation design integrates quantitative measures scored by experts, maxim adherence scores from AI-generated profiles, user satisfaction surveys, system usage logs tracking with qualitative measures[12].

4. Conclusion

In conclusion, AI-aided feedback, practice, and systematic evaluation help the students apply all four maxims simultaneously in authentic business contexts. AI could be regarded as a partner and a teacher guiding reflective interpreting; it also offers a promising way for the next generation of business interpreting educators.

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