## **JALTCALL 2024 Conference**



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## Can ChatGPT help with Chinese grammar error correction and explanations?

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With the development of new technologies, the performance of English grammar checkers has improved significantly in recent years. However, the performance of Chinese grammar checkers is still not satisfactory. Although there are some new Chinese grammar checkers, their performance is still not widely accepted. Although OpenAI ChatGPT includes Chinese language data, few studies have investigated whether Chinese data available via ChatGPT can be used for Chinese grammar checking.

This study thus used the Chinese data from ChatGPT 3.5 and ChatGPT 4.0 to serve as Chinese grammar checkers. To test if the ChatGPT-based Chinese checker can help detect and correct Chinese L2 errors, we used the data provided by a book called "Speed Up Your Chinese" by Routledge. This book is an innovative resource that identifies and explains the 150 common errors that English-speaking learners of Chinese repeatedly make. We then used ChatGPT 3.5 and ChatGPT 4.0 to check and correct this set of 150 common learner errors. After we collected the correction and feedback/explanations from ChatGPT, we further invited three highly experienced Chinese teachers to help check these corrections and explanations. The survey results show that three teachers agree that both ChatGPT 3.5 and ChatGPT 4.0 can help detect learners' errors and produce correct and fluent Chinese sentences. Additionally, ChatGPT can also offer useful and clear explanations. However, teachers found that ChatGPT 4.0 consistently outperformed ChatGPT 3.5 in providing error corrections and explanations.

Even though the Chinese data in the current version of ChatGPT is much smaller compared to the English data in ChatGPT, the outcomes are still very impressive. If Chinese data continues to grow in the future, it can be expected that ChatGPT-based Chinese grammar will become an indispensable tool for most Chinese teachers and learners.

## Is this a sponsored session?

## **Keywords**

Chinese, grammar checkers, errors, ChatGPT, AI, feedback

Primary author: CHEN, Hao-Jan Howard (National Taiwan Normal University, Taiwan)

Presenter: CHEN, Hao-Jan Howard (National Taiwan Normal University, Taiwan)

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