

論文名稱：鷹架輔助與線上索引工具作為語言學習工具之成效初探

校所組別：國立交通大學英語教學研究所

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指導教授：孫于智教授

研究生：張文俐

## 中文摘要

本研究旨在探索引工具 (web concordancer) 與鷹架輔助 (scaffolding prompts) 對於學生修正英語詞搭錯誤的影響。學生學習成果 (learner product) 及學生自評 (learner perception) 是檢視上述輔助工具成效的主要面向。具體的研究問題包含：(一) 索引工具搜尋如何影響學生訂正詞搭錯誤的表現？(二) 索引工具搜尋輔以鷹架說明如何影響學生訂正詞搭錯誤的表現？(三) 鷹架輔助移除後，是否持續對學生使用索引工具完成詞搭訂正的表現具有影響？(四) 鷹架輔助是否能夠增強學生對於訂正詞搭表現的信心？(五) 學生本身對於使用索引工具與鷹架輔助的評價為何？26 名高中學生參與本實驗；他們被要求在有索引工具輔助的情況下，完成訂正英語詞搭錯誤的任務。每一份改錯題目中包含了十題字詞搭配有誤的句子。學生可以透過索引工具在語料庫中搜尋相關的資訊來幫助他們完成改錯。鷹架輔助說明的使用進一步將學生區分為實驗組及對照組，而接受鷹架輔助的組別在搜尋語料庫的過程中會接收到階段性的引導，分別包含關鍵字選擇、語料分析、語法選定、搜尋結果評量等四個主要階段。待學生利用索引工具及鷹架輔助完成改錯之後，學生被要求在問卷中表達對於使用這兩種輔助工具的觀感。學生的改錯成績以前測與後測為分界，再依此進行獨立 T 檢定與組內 T 檢定。問卷資料也同樣進行統計，並輔以學生的描述性回饋。研究結果顯示，索引工具搜尋有助於學生在修正英語詞搭的表現上，達到顯著性的進步。至於輔以鷹架說明的學生，在詞搭修正的分數表現上也顯著優於沒有受到鷹架輔

助的學生。儘管鷹架輔助在稍後已經移除，兩組的表現仍然維持顯著差異。學生對於自己修正英語詞搭的信心也在鷹架輔助過程中顯著提升。問卷的回饋則顯示學生普遍對於索引工具及鷹架輔助介入語言學習持有正面的看法，儘管學生的反應包含了這兩種學習輔助工具的優點及缺點。整體而言，本研究證實了索引工具及鷹架輔助對於語言學習的正面效益，也呼應了先前文獻對於鷹架輔助索引工具搜尋的需求，更進一步透過研究結果呈現出未來相關研究的發展方向，例如擴大學生差異、延長觀察時間、增加改錯項目或難度、調整鷹架輔助工具對於適應學生程度的彈性、綜合學生學習過程的角度來共同檢視學習成效等。



## ABSTRACT

The present study aimed to investigate the effects of web concordancer and scaffolding prompts on the students' proofreading performance. Both perspectives of learner product and learner perception were taken to examine the collected data. Specific research questions to be addresses included: (1) How does concordancer search affect students' proofreading performances? (2) How do scaffolding prompts and concordancer search affect students' proofreading performances? (3) Do scaffolding prompts have lasting effect on students' concordance-assisted proofreading performances after removal of prompts? (4) Do scaffolding prompts affect students' level of certainty about their proofreading performances? (5) What is the students' perception of the effects of web concordancer and scaffolding prompts?

A class of 26 senior high school students participated in this study. These students were asked to perform proofreading tasks, aided by corpus and concordancer. Each task contained a series of ten collocationally problematic statements that required the students to make revision after they analyzed concordance output for illustrative information. The students were later divided into an experimental group and a control group, so that scaffolding prompts were provided as further support to the scaffolded group during their concordancer search that was categorized into four major stages (keyword selection, concordance analysis, rule specification, outcome evaluation), as opposed to the non-scaffolded group. An evaluation questionnaire survey was conducted after the students used web concordancer and scaffolding prompts to help them perform proofreading tasks. Specifically in analyzing the data, the students' proofreading scores in pretests were statistically compared with their scores in posttests, mainly based on the results of independent *t*-tests and within-group *t*-tests. The students' responses to the questionnaire were also analyzed for basic statistic

information and further supported with their open-ended responses. Results from the present study evidenced the students' significant improvement in proofreading performances with the support of concordancer search. Proofreading scores of the scaffolded group were also shown to be significantly higher than the scores of the non-scaffolded group, and this improvement remained after the removal of scaffolding prompts. Moreover, the prompts also boosted the students' level of certainty about their performances in proofreading tasks. As for the results of questionnaire survey, a favorable perception was reported from the students' responses, even though their comments suggested both the advantageous side and disadvantageous side of concordancer search and scaffolding prompts. Overall, this study evidenced the positive effects of both computer-based language learning tools, further consolidating the actual need of being mediated by the scaffold in concordancer search, as discussed in several previous studies. Future research are also suggested considering participants with greater diversity in proficiency, student engagement in the experiments for a longer period of time, proofreading tasks at higher difficulty level or tasks of greater diversity in language focus, scaffolding prompts that become more adaptable to students' changing level of understanding, as well as students' strategy employment during their learning processes.

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