









## 4.2 資料品質影響

由於教育資料集大部份音訊是以現場授課的形式呈現，因此裡面包含著學生的說話聲、環境音等，再加上收音裝置與錄音軟體對音訊品質的影響，以上各種因素也直接影響了模型效能，因此在錯誤率方面仍然有進步空間。

## 5 結論

由本次實驗能發現在特定領域中時常出現專有名詞的狀況，例如在課程上可能會有至少一半的句字出現專有名詞，若 ASR 模型在訓練過程中未學習過此領域的資訊，此因素將會使效能銳減。另外，在實際情況下專有名詞也常會以英文的形式出現，因此我們使用遷移式學習的方式先使模型在資料缺乏的情況下，能夠擁有語碼轉換與特定領域的能力，而在我們的實驗結果上有顯著的改善。

另外，由於教育資料集大部份帶有環境雜音的關係，因此錯誤率仍然還有很大的進步空間，其中我們也嘗試過使用語言模型輔助，但也許是語言模型訓練資料的問題造成實驗上錯誤率不減反增，因此我們仍然會對語言模型部份持續實驗，並嘗試加入語言分類器來增加中英語碼轉換的效能。

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