教育研究報告匯編

教育研究獎勵計劃 14/15

ACTION RESEARCH

香港教師中心　　HKPERA 香港初等教育研究學會

目錄

編者的話

　　香港教師中心教育研究小組收到參與「教育研究獎勵計劃2014/15」的研究報告超過十篇。編輯委員會從中選出七篇刊登於《教育研究報告匯編》。本年度的研究範圍相當廣泛，包括透過合作學習提升學生的課堂參與、把朗讀劇場融入文言文教學，以至透過電子教學平台提升學生辨析修辭手法的能力等。

　　整體來説，參與計劃的同工均按研究計劃設定的研究議題，先進行文獻探究，再提出有理據支持的合適研究方法。他們將有關結果進行分析，再作出結論和建議，最後以系統化的格式將研究心得表達出來。研究報告反映他們在文獻比較和數據分析方面，都有相當深入和精闢的見解，對學生的學習問題，以及教師持續改進教學策略都有詳盡的討論，並提出具體可行的建議。

　　本人代表編委會感謝所有參與「教育研究獎勵計劃」的同工，在有限的時間及經驗下，仍然全力以赴，成功完成整項研究計劃。他們為提升教育質素所付出的努力，值得讚賞。我們深信輯錄在匯編的作品，均能夠為課堂學習提供實際而深入的分析基礎，並闡釋當中行之有效的方法。讀者可以多參考研究報告的建議，應用在日常教學工作，進一步優化教學的效能。我們更希望這些報告能啟發同工就相關的課題，展開更多、更全面的研究。本人亦謹此向《教育研究報告匯編》眾編輯委員致意，感謝他們在百忙中抽空審閱各篇研究報告。

　　得到同工積極的參與和多方面的支持，本小組定能持續推動教育研究，鼓勵教師進行更深入和持續性的教育研究，不斷提升教學效能和質素。他山之石，可以攻玉。期望各位讀者對《教育研究報告匯編》內的文章提出意見，相互交流，集思廣益。

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《教育研究報告匯編》主編
楊沛銘博士
2016 年 12 月

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透過合作學習提升中一級學生課堂參與的教育行動研究

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摘要

　　不少學術研究都發現，合作學習不單能有效提升學習動機，使學生積極參與課堂討論，亦能提升學生的學業成績 (Arends, 2004；Jacob, 1992, 1999；Johnson 及 Johnson 等，2000；Slavin, 1990, 1995, 1999；黃政傑及吳俊憲等, 2006)。本行動研究目的是探討合作學能否有效促進學生的學習動機和課堂參與，並進而提升學生的學業成績。研究小組透過質化與量化相結合的混合研究策略，除了有系統地運用問卷調查、訪談、文件分析及課堂觀察等多元化方法來進行本行動研究之外，更在資料來源（教師、學生等）方面採取三角校正，以進一步提升研究的信度和效度。研究結果發現中一級學生透過合作學習，在短短四個月，其學習動機和課堂參與都得到明顯的提升，而學生在通識、中文、數學及英文科的學業成績亦得到不同程度的提升。

研究背景和目的

　　課程發展議會於 2002 年公布了《基礎教育課程指引－各盡所能 ● 發揮所長（小一至中三）》，而課程改革在過去十年取得不少成就、優勢和經驗，而學校在這十多年課改中的主要進展，包括學與教範式的轉移，即教師更注重提供機會讓學生參與學習，並體現了從教師主導轉移向以學生為本的學與教範式（課程發展議會，2014）。然而，本校雖然有七十年的歷史，但在教學上仍以教師主導為主，學生在課堂上的學習動機和課堂參與都偏低，亟待改善。從 2014 年持分者問卷數據反映不同持分者包括教師、家長和學生本身都認同學生對學習的觀感偏低。在數據為本的基礎下，本校《2014-2017 三年發展計劃》的其中一個重要關注事項便是推動教學範式轉移，即推動各科的課堂教學模式由講授式（老師主講學生多聽）轉移至體驗式（老師少講學生多做）；並透過合作學習策略的運用將學生的學習逐步由被動式學習轉移至參與式學習。

我們相信合作學習只是眾多教學策略的其中一種，它絕不是最好，更不是唯一的教學策略。鄧耀南曾明確指出在設計任何課堂教學時，首要考慮的是適當教學目標的釐定（包括學習及過程目標），而不單只是教學策略的考慮。我們應根據不同的教學目標去設計相應的教學策略，而絕不應該片面地及機械地運用某一類教學策略（例如合作學習），否則就容易出現誤用及濫用的情況（鄧，2012)。

我們深信前線老師能明白學生的學習需要，亦最瞭解學生的已有知識基礎和最能拿捏適切的教學目標。故任何人在未充份考慮學校文化脈絡、課室實際環境、老師的專業發展配套、學生的教育需要及具體的課程和教學目標下，便聲稱某一個教學策略是最好的，「鼓勵」甚至由上而下地「指令」老師在課堂中「必須採用」某個教學策略的話，這不單違反教師發揮教學專業判斷的重要原則，亦對促進學生的有效學習未必有實質的幫助。

然而，我們為什麼決定要推行合作學習呢？這個決定主要是建基於學生學習需要的考慮。事實上，2014 年 11 月初的先導訪談結果顯示，本校中一級學生的課堂參與並不理想，這和老師常用的講授式教學策略及課堂上缺乏參與機會有關。因此，藉著今次教育研究獎勵計劃，我們成立「透過合作學習提升中一級學生課堂參與」行動研究小組，在中一級中文、英文、數學及通識課堂引入合作學習，並在「教學策略」、「小組常規」和「課堂環境」三方面作出調整，希望透過合作學習，首先改善學生的學習動機和課堂參與，再進而提升學業成績。此乃本行動研究的目的。基於以上的構思，本行動研究訂立了一道探究問題：本校中一級學生能否透過合作學習，提升其學習動機、課堂參與和學業成績？

文獻析評

很多研究都證明合作學習能提升學習成效 (Slavin，1990，1995)。Jacob 在 1992 年的研究結果顯示，教師和學生在合作學習過程中變得更為主動、有創造力、理解、探究、具冒險精神及喜愛上課 (Jacob，1992)。Slavin 的研究亦指出教師在教學過程中善用合作學習的結果，不單使學生在讀、寫及語文等方面的學習出現明顯的進步，也促使家長和教師們均十分支持這樣的教學方式，其中最顯著的情況是大多數學生能培育出熱愛學習的態度，並獲致具體的學業成就 (Slavin，1999)。合作學習成為課堂教學中經常使用的學習策略，尤其深受中、小學教師所喜愛，同時被公認為教育改革中最成功的項目 (Jacob，1999；Slavin，1999)。Arends 亦認為合作學習能完成小組共同的學習目標，包括：提升學習成就、學會包容及接納的態度及發展良好的社交技巧 (Arends，2004)。事實上，Arends 在 2004 年曾綜合分析 45 篇有關於合作學的研究，發現其中有 37 篇都是明顯地指出，運用合作學習比一般學習方式更能有效提升學生的學業成就，另外 8 篇則發現與一般的學習方式沒有太大的差別，但沒有任何一篇相關研究顯示合作學習會為學生的學習帶來負面影響 (Arends，2004)。

黃政傑及吳俊憲 (2006) 曾就台灣有關合作學習的不同研究成果作出了綜合分析 (meta-analysis)，指出運用合作學習確能提升學生學習成效，並表示合作學習是可行的一種教學 (或學習) 策略或方法，值得推廣和落實。實施合作學習帶來的其中一些成果包括能提升學業成績，例如相關學科或學習領域知識和技能的掌握；增進弱勢學生學習成效及促進正面的學習態度，即能有效提升學習動機，使學生喜愛上課，並願意積極及主動參與課堂討論 (黃政傑及吳俊憲，2006)。由此可見，「合作學習」不單具有實證研究基礎，更是經實踐驗證的有效教學策略 (Johnson 及 Johnson 等，2000)。

研究方法

本研究是教育行動研究。研究小組基於 Lewin（1946，1948）和 Kemmis（1981，1982）規劃、行動、觀察和反思的行動研究精神，及參照 Sagor（2006）所提倡的選擇一個焦點 → 明確理論 → 確定研究問題 → 收集數據 → 分析數據 → 報告結果 → 採取明智的行動之行動研究模式來開展的。

由於受到人力資源及時間所限，是次的研究對象只聚焦於中一級三班共 113 位學生，年齡為 12 至 13 歲。至於搜集資料的方法，則是採取質化與量化相結合的研究方法，包括：1. 透過量化問卷調查，了解學生在本行動研究前後，在課堂參與及學習動機上的轉變；2. 對學生的個別質化訪談，深入了解實施合作學對學生的課堂參與及學習動機所帶來的影響；3. 將中一級學生在中文、英文、數學及通識科在上學期考試成績與下學期考試成績作出比較，以了解實施合作學對學生學業成績的影響和變化；4. 教師量化問卷調查和質化訪談，了解教師對實施合作學的評價、觀感、觀察及意見； 5. 共同備課、同儕觀課及發展性評課的參與和課堂實地觀察，以互相印證從學生問卷調查、老師意見調查、老師訪談、學生訪談及文件分析 (包括教案、教材及考試成績) 所得的研究資料。

為了確保研究的信度和效度，除了在研究方法（問卷調查、訪談、文件分析和觀察等）及資料來源（教師、學生等）方面採取三角校正外，在整理和分析資料階段，研究小組亦邀請了小組以外的教師和學生代表，共同審視研究資料與研究報告。

行動研究計劃進度

　　基於校本情況，並配合是項獎勵計劃的時間表，行動研究小組按照以下的工作進程來推展本行動研究。大致而言，2014 年 11 月至 2015 年 1 月是研究的計劃期；2015 年 2 月至 5 月是實施期，過程中會有系統地收集評估數據，並持續地作出檢討和改進；而由 2015 年 6 月至 8 月，研究小組總結與反思是項教育行動研究的得失，並撰寫成書面報告，呈交教師中心。基於行動研究的精神，本校在等待教師中心評審本研究報告的同時，已逐步把是項行動研究擴展至中二級實施。

表 1　行動研究進程及時間表

階段	時間	研究事項
先導訪談	2014 年 11 月	了解中一級同學在課堂參與及學習動機的情況。
計劃	2014 年 11-12 月	中一級四個核心科的科任老師、教務組成員、副校長共同討論是否參與本計劃；其後，正式成立研究小組，著手分析中一級學生先導訪談結果，以取得初步的基線資料，並遞交申請表格參加研究獎勵計劃。
	2014 年 12 月 - 2015 年 1 月	待教師中心審批的同時，研究小組進一步探討落實本研究計劃的可行方法，並初步擬訂相關「學生問卷」，期望有助完善本研究計劃（參閱附件一）。
實施與評估	2015 年 2-5 月	研究小組根據上述的研究計劃，正式開展本行動研究；研究計劃正式在改善「教學策略」、「小組常規」和「課堂環境」三個方面進行調整；過程中根據上文所提及的研究方法，有系統地搜集各類研究數據，藉此得以持續地評估計劃並作改善實踐之用。以冀發揮進展性評估的效益。
總結與反思	2015 年 6 月	研究小組總結及反思整個研究計劃的得失，以助將來進一步完善相關的策略與措施。
	2015 年 7-8 月	研究小組依據本獎勵計劃的要求，撰寫書面報告，並於 8 月底呈交教師中心。
下一輪研究	2015 年 9-12 月	等待評審研究結果的同時，本校將基於行動研究的精神及首輪行動研究的經驗及其後檢討、反思的結果，逐步把合作學習擴展至中二級實施。如果時間與人力資源許可，本校亦將持續地參與未來的獎勵計劃，以冀透過循環不息的教育行動研究，達至持續改善，並擴大教育成果的目的。

　　基於上述的校本情況和學生背景，以及本研究所定下的研究目的和研究問題，研究小組從以下三個層面（「教學策略」、「小組常規」和「課堂環境」來推動中一級合作學習先導計劃。

　　在教學策略方面，主要研究員在校內前後舉行了三次有關合作學習的校本工作坊，除了介紹合作學習的定義、優點、限制，並重點介紹了合作學習最常用的六個教學策略：包括「數字頭」(Numbered Head)、「閱讀及相互解釋二人組」(Read and Explain Pair)、「獨思、配對、分享」(Think- Pair- Share)、「圓桌輪流寫」(Round table)、「三步採訪」(Three-step interview) 及「拼圖法第二代」(Jigsaw II)。研究小組與中一級老師合作，就著教師在中一級日常教學中所面對的問題，先進行共同備課，然後由其中一位教師進行第一輪教學，其他教師則共同參與觀課，並於課後進行同儕式發展性評課，除了肯定教師的良好教學實踐之外，亦力求改善課程內容和教學的安排及合作學習教學策略的運用，以便實施第二輪教學。如此循環往復地進行了三輪的備課、觀課和評課活動，中一級四個科目在四個月內前後總共進行了八個學習圈。
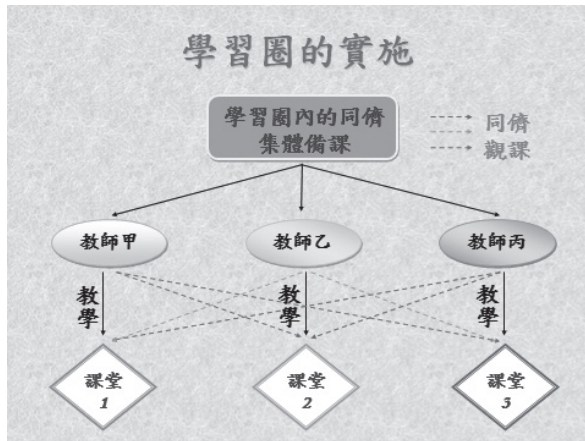

圖 1: 中一合作學習計劃學習圈的運作流程

　　在訓練學生小組常規方面，我們於 2014 年 7 月中的新中一英語學習銜接課程按同學在中一入學試中、英、數的平均分，進行排序，再按性別進行異質分組，並將 4 人小組組員的角色分配為組長、總書記、匯報員及大總管。在 8 月尾進行的中一迎新課程，除了教授合作學習基本常規，例如「開始手號」及「停止手號」之外，並透過教師講解、片段展示和個別示範去教導中一學生如何在 4 秒內由 2 人小組轉變為 4 人小組的座位安排，能夠快而靜地達標的小組獲 1 個「小組學習龍虎榜」的積點。我們透過組名和學習歷程案檔的設計來促進合作學習小組的形成，並透過「反思咭」、「讚賞咭」及「小組承諾書」的運用來促進「小組反思及展望」。此外，所有學習活動都以合作學習的形式來進行，讓中一學生能熟習合作學習的教學策略及常規之餘，亦同時培養學生的小組社交技巧和匯報能力。

在課室環境方面，我們從新規劃中一級課室的硬件安排，以方便合作學習的實施。除了設計了小組座位安排之外，亦購置了小組文具、計時器和設計了「反思咭」、「讚賞咭」、「小組學習龍虎榜」(Bonus Point)、「小組承諾書」及「合作學習守則」等（參閱附件二）。

研究分析及結果

本研究小組經過四個月的實踐和研究，並基於問卷調查、訪談、文件分析及課堂觀察的結果，得知中一級學生在學習動機和課堂參與方面出現了以下的轉變。在學習動機方面，實施了合作學習之後，中一級學生對「我覺得上課是一件有趣的事」及「我樂意參與老師要我進行的課堂活動」的認同感大幅提升。在「我覺得上課是一件有趣的事」的意見上，同意的百分比 (即完全同意 + 大部分同意，下同) 由前測的 21.9% 大幅上升至後測的 67.2%，不同意的百分比 (即完全不同意 + 大部分不同意，下同) 則由 34.1% 大幅下降至 8.9% (見表二)。在「我樂意參與老師要我進行的課堂活動」的意見上，同意的百分比由 33.8% 大幅上升至 73.4%，不同意的百分比則由 43% 大幅下降至 5.4% (見表三)。由此可見，在實施合作學習之後，大部分中一級學生都認為上課是一件有趣的事，並進而樂意參與老師要同學進行的課堂活動。學生問卷的分析結果與學生訪談的結果脗合，合作學習能有效地提升學生的學習動機。

表二　中一級學生對「我覺得上課是一件有趣的事」的意見 (N=113)

	學生百分比 (%)				
	完全同意	大部分同意	沒有意見	大部分不同意	完全不同意
前測 (2/2015)	0.0%	21.9%	44.0%	18.4%	15.7%
後測 (6/2015)	31.7%	35.5%	23.9%	5.4%	3.5%

表三　中一級學生對「我樂意參與老師要我進行的課堂活動」的意見 (N=113)

	學生百分比 (%)				
	完全同意	大部分同意	沒有意見	大部分不同意	完全不同意
前測 (2/2015)	6.7%	27.1%	23.2%	16.2%	26.8%
後測 (6/2015)	32.9%	40.5%	21.2%	3.0%	2.4%

　　在課堂參與方面，在實施了合作學習之後，中一級學生對「我會主動投入時間參與學習」及「我能專心上課」的認同感大幅提升。在「我會主動投入時間參與學習」的意見上，同意的百分比由前測的22.7% 大幅上升至後測的 69.2%，不同意的百分比則由 43.9% 大幅下降至 5.5% (見表四)。在「我能專心上課」的意見上，同意的百分比由22.8%大幅上升至67.4%，不同意的百分比則由42.9%大幅下降至5.5%(見表五)。由此可見，在實施合作學習之後，大部分中一級學生都認同自己會主動投入時間參與學習，並能專心上課。學生問卷的分析結果與學生訪談的結果一致，合作學習能有效地促進學生的課堂參與。

表四　中一級學生對「我會主動投入時間參與學習」的意見 (N=113)

	學生百分比 (%)				
	完全同意	大部分同意	沒有意見	大部分不同意	完全不同意
前測 (2/2015)	1.8%	20.9%	33.4%	21.9%	22.0%
後測 (6/2015)	28.0%	41.2%	25.2%	3.2%	2.3%

表五　中一級學生對「我能專心上課」的意見 (N=113)

	學生百分比 (%)				
	完全同意	大部分同意	沒有意見	大部分不同意	完全不同意
前測 (2/2015)	0.9%	21.9%	34.3%	12.4%	30.5%
後測 (6/2015)	29.1%	38.3%	27.2%	3.6%	1.9%

　　在學習成效方面，在實施了合作學習之後，中一級學生對「我覺得我的學習成績在進步中」、「我覺得班上整體的學習成績在進步中」及「我對自己在這個學科的學習能力有信心」的認同感大幅提升。在「我覺得我的學習成績在進步中」的意見上，同意的百分比由前測的 25.7% 大幅上升至後測的 66.2%，不同意的百分比則由 47% 大幅下降至 7.2%(表六)。在「我覺得班上整體的學習成績在進步中」的意見上，同意的百分比由前測的 20.1% 大幅上升至後測的 63.1%，不同意的百分比則由 44.8% 大幅下降至 9% (表七)。在「我對自己在這個學科的學習能力有信心」的意見上，同意的百分比由前測的 23.8% 大幅上升至65%，不同意的百分比則由 39.2% 大幅下降至 8.5% (表八)。由此可見，在實施合作學習之後，大部分中一級學生不單認為自己的學習成績在進步中和感到對自己在學科的學習能力上具有信心，亦認同班上整體的學習成績都在進步中。學生問卷調查的研究結果顯示，在實施了合作學習之後，能有效地提升學生對課堂學習的信心及成效。

表六 中一級學生對「我覺得我的學習成績在進步中」的意見 (N=113)

	學生百分比 (%)				
	完全同意	大部分同意	沒有意見	大部分不同意	完全不同意
前測 (2/2015)	3.7%	22.0%	27.4%	15.4%	31.6%
後測 (6/2015)	29.0%	37.2%	26.6%	4.6%	2.6%

表七 中一級學生對「我覺得班上整體的學習成績在進步中」的意見 (N=113)

	學生百分比 (%)				
	完全同意	大部分同意	沒有意見	大部分不同意	完全不同意
前測 (2/2015)	2.9%	17.2%	35.1%	18.8%	26.0%
後測 (6/2015)	25.2%	37.9%	27.9%	5.5%	3.5%

表八 中一級學生對「我對自己在這個學科的學習能力有信心」的意見 (N=113)

	學生百分比 (%)				
	完全同意	大部分同意	沒有意見	大部分不同意	完全不同意
前測 (2/2015)	1.8%	22.0%	37.0%	12.4%	26.8%
後測 (6/2015)	27.0%	38.0%	26.6%	5.0%	3.5%

　　從 2014 年 11 月初向三班中一，每班抽取高、中及低學業成績水平學生各一名，共九名學生所進行的先導訪談（參閱附件三）中，學生表示在實施合作學習先導計劃之前，教學較為「傳統」及以教師主導為主，「多數依據教科書教學」，而「每科都以抄筆記及直接講授為主」。學生甚少有課堂參與的機會，「未有太多小組學習的經驗」。更有三位同學表示由於「對老師及學校都欠歸屬感，以致降低學習動機和課堂參與意欲」，即使有課堂參與的機會都「不想參與」。簡而言之，學生的課堂參與很低，亦缺乏學習動機。

　　在 2015 年 6 月初再訪談同一批學生，在後續訪談中發現，教師在實施合作學習之後，教學轉變為以學生為本，受訪學生表示在通識和英文課堂中「分組是常態」，同學亦已「習慣小組教學」。在課堂參與方面，同學認為合作學習能促使組員「更重視完成學習任務，組長和組員之間會互相支援，以鼓勵全組參與及順利達成任務」，亦認為這種學習模式「較適合自己」，並引用例子指出「覺得學習英文時有機會多與同學交談是較好的，同學亦已經習慣互相支援」。在學習動機方面，同學表示「很喜歡中文科一起寫作的教學活動」，並對通識科角色扮演的討論活動留下深刻印象，認為「角色扮演很有趣味」，因為與同學一起參與學習時既有「小組之間的競爭和小組之內的合作」。在學習成效方面，同學表示經歷合作學習活動之外，「對活動學習內容有更深刻的印象」，

亦有同學表示對英文科一個關於健康食物的活動留下深刻的印象，因為「在小組活動中一次過運用 (遷移和應用) 了之前在同一單元中所學的很多英文生字」。正如馮停珍 (2013) 的研究發現，合作學習能提升學習興趣，亦令學生的學業成績有增長的趨勢。

從學生訪談結果分析，合作學習能鼓勵教師推動教學範式的轉移，令學生角色由「被動的聆聽者」轉化為「主動的學習者」。受訪同學亦認為合作學習能促進課堂參與和提升學習動機，並對提升學習有一定的成效。

由於很多研究都證明合作學習能提升學生學習成效 (Slavin, 1990, 1995)，故當本行動研究發現合作學習能有效促進學生的學習動機和課堂參與之後，亦想進一步檢視合作學習能否提升學生的學業成績。研究小組將中一級上學期考試成績平均分與下學期考試成績平均分作出比較，發現通識科的升幅最大，上升了 9.2 分 (見表九)。這可能與師生互動和生生互動的增加，促進了通識科的知識和概念建構有關。而中文科和數學科增加了 1.4 分，英文科則增加了 1.1 分。由於實施時間只有短短的四個月，對基礎知識要求較高的學科而言，時間可能並不太充裕。從本校 2014 年中一生入學前香港學科測驗的成績數據得知，當年中一級新生在語文和數學的知識基礎一般較薄弱，合作學習對該些學科的成效相對較一般。黃政傑及吳俊憲 (2006) 的綜合研究發現合作學習在中文、英文、數學及社會科能有效提升學生的學業成就。雖然研究小組相信合作學習的實施，對學生的學業成績有正面的影響，但在中文、英文及數學科的成效只屬一般，這值得進一步的探討和研究。

表九 中一級學生在中文、英文、數學及通識科上學期與下學期考試分數的比較 (N=113)

	上學期平均分	下學期平均分	平均分的變化
中文科	46.17	47.57	增加 1.4 分
英文科	39.1	40.2	增加 1.1 分
數學科	55.7	57.1	增加 1.4 分
通識科	44.8	53.5	增加 9.2 分

研究小組總共觀察了 8 個連堂課節，透過課堂觀察 (附件四及五) 所得，教師所採用的合作學習策略主要是「獨思、配對、分享」、「閱讀及相互解釋二人組」、「數字頭」、「圓桌輪流寫」、「三步採訪」及「拼圖法第二代」等。小組人數由 2 人、4 人至 6 人都有，主要視乎教學目標和策略的配合而靈活調配。在課堂裡，教師的角色由以往的「知識直接倒灌者」逐漸改變為「輔助學習的促導員」(facilitator)，而學生的角色亦漸由被動的接受者 (passive learner) 逐漸改變為主動學習參與者 (active learner)。整體而言，課堂的教學效果良佳，教師的教學設計大都能提供充足的課堂參與、師生互動和生生互動的機會。

據課堂觀察所得，學生的學習動機良佳，能積極參與教師所設計的課堂活動。學生的課堂表現與學生訪談、學生問卷及教師問卷的結果脗合。自實施合作學習之後，學生在上課時「魂遊四海」、「打瞌睡」及「無所事事」的偏離學習行為 (off-task behaviour) 的現象顯著地減少，而「課前預習」、「小組討論」和「回答問題」，甚至「主動提出問題」的行為則大幅提升。此外，所有學生全部能於 4 秒之內將坐位面向黑板的傳統課室安排轉變為小組坐位安排，並迅速組成 2 人、4 人或 6 人小組。教師在課堂上亦能善用「開始手號」及「停止手號」協助課堂管理及小組活動的進行。教師將同學以數字頭方式分派角色，並以正面獎勵的方式來運用「小組學習龍虎榜」(bonus point)，以提升小組組員的學習動機和課堂參與。整體而言，學生的學習動機和態度有明顯的改善。

據課堂觀察所得，全部被觀察的課堂都以小組形式安排座位，以方便合作學習活動的實施，讓同學進行互動，交流意見，補充說明、指出建議和疑問。在進行小組合作學習活動時，全部教師都會巡視各個小組進行學習活動的情況，主動識別學生的學習需要和給予適時的支援。而大部分學生除了關心自己的學習，亦積極上課發言願意主動和小組組員分享學習成果。整體而言，課堂的學習氣氛變得更和諧、更積極。

教師問卷 (參考附件七) 以不記名方式進行，共派出 10 份問卷，收回 9 份有效問卷。所有受訪老師都認同合作學習能提升學生的學習動機和課堂參與，他們認為「能提高學生參與課堂的程度，使學生較以往主動投入課堂」、「學生上課參與增加，課堂學習氣氛亦提高」、「能提高學生參與課堂的程度，使學生較以往主動投入課堂」及「學生的課堂參與提升了，師生關係更好，學生學習動機得到提升，專業成長令人感到開心」。在提升學習成效方面，88.9% 的受訪老師認同採用合作學習之後，學生的整體學習成效有所提升 (見表十)，然而亦有教師指出「課堂學習氣氛提高，對數學概念的理解有幫助，但學生在準確地表達及運用相關概念上，尚需改善。」

表十 中一級合作學習教師意見調查 (N=9)

	項目	同意	不同意
1	採用合作學習後，我覺得學生的課堂參與有提升。	100.0%	0.0%
2	採用合作學習後，我覺得能提升學生的學習動機。	100.0%	0.0%
3	採用合作學習後，我覺得學生的整體學習成效有提升。	88.9%	11.1%

　　另一方面，有教師表示因為實施合作學習，「教師工作量增加」了，並表示因為「課前預備所花的時間較多」，故「希望在共同備課的工作上，能得到更多的專業指導」。在 2015 年 6 月 18 日舉行的中一合作學習先導計劃分享會中，教師明確表示為實施合作學習先導計劃而付出了精神和時間。然而，當觀察到學生在課堂參與及學習效能的提升時，教師取得了成功感。正如資深的黃老師說：「辛苦是一時，學生和教師的獲益卻是終生的」。

總結、反思和建議

　　綜合以上的研究分析，本校透過實施合作學習先導計劃，發現中一級學生在短短四個月，其學習動機和課堂參與都得到顯著的提升。總結而言，合作學習對學生的學業成績產生了正面的影響，而學生在通識、中文、數學及英文科的學業成績亦得到不同程度的提升。回顧整個行動研究歷程，本研究小組從確定研究焦點，到撰寫研究計劃，然後執行實施，並在行動過程中持續收集數據，以作為檢討改善的依據，此一過程有效地促進了教與學的發展。當本研究小組基於校本發展的需要，建立起學習圈，並聚焦於學習動機和課堂參與的問題，及透過系統化的行動研究來探討教學問題之同時，亦發展出探究教學的專業習慣、能力與態度，此乃教學相長之謂也。

　　當然，在整個研究過程中，本研究小組亦面對不少的困難和挑戰，包括：(1) 研究小組需要在學校忙碌的工作之中抽時間收集、整理及分析研究數據和撰寫研究報告，這是相當奢侈的行為，故建議學校盡可能在人力資源方面作出支援，例如調動教學助理協助收集研究資料及處理研究數據；(2) 在推展本行動研究的過程中，研究小組發現計劃對提升學生的學習動機和課堂參與具卓越成效，相信只要持之以恆，將可優化課堂教學，擴大學術成果，故建議學校把合作學習定為學校重點發展的教學策略之一；(3) 共同備課、同儕觀課及發展性評課的配合對推動合作學習至關重要，故除建議學校邀請學者專家為教師提供專業指導之外，亦會要求相關科長參與計劃，收以身作則之效。來年將實施第二階段計劃，故需要建立機制，監督、檢討實施成效；(4) 上文曾提及學生的學習動機及課堂參與雖然得到大幅提升，但語文及數學科的學業成績卻仍未見顯著的提升，這問題有賴研究小組進一步研究，探求良方；而在資源許可的情況下，亦和邀請大學專家提供專業意見和支援，促使理論與實踐互相結合，進一步推動合作學習。

　　基於行動研究的精神，本研究小組將在來年繼續研究，將合作學習先導計劃推展至中二級，期望能進一步提升學生的學習動機和課堂參與。此外，本研究小組亦希望以此回饋社會，為其他有意推廣合作學習的學校分享相關經驗，以實現本獎勵計劃的精神及兌現我們在本研究計劃中的承諾。

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附件一 「透過合作學習提升中一級學生課堂參與」計劃之前測及後測問卷調查 (2015 年 2 月及 2015 年 6 月)

勞工子弟中學中一學生學習經驗問卷調查（前測）

親愛的中一同學：

　　這份問卷可以讓我們瞭解你的學習情形。請先細閱每句句子，然後想一想您自己的內心感受。請用鉛筆將選項空格填滿 (只選一項)，它們並沒有絕對正確答案，請依您自己的經驗選取不同程度的選項，研究結果可作教師改進教學之用，個人填答結果絕對不會被公開，也不會影響你的成績，請放心。

　　「透過合作學習提升中一級別學生課堂參與」行動研究小組 謹啓

2014-15 年度中一級 ＿＿＿ 班，學號：＿＿＿＿＿＿＿＿，性別：☐男生 ☐女生

一、課堂參與和學習動機

題號	對於整體科目而言	完全同意	大部分同意	沒有意見	大部分不同意	完全不同意
1	我覺得上課是一件有趣的事。	☐	☐	☐	☐	☐
2	我會主動投入時間參與學習。	☐	☐	☐	☐	☐
3	我能專心上課。	☐	☐	☐	☐	☐
4	我樂意參與老師要我們進行的課堂活動。	☐	☐	☐	☐	☐
5	我覺得我的學習成績在進步中。	☐	☐	☐	☐	☐
6	我覺得班上整體的學習成績在進步中。	☐	☐	☐	☐	☐
7	我對自己在這個學科的學習能力有信心。	☐	☐	☐	☐	☐

勞工子弟中學中一學生學習經驗問卷調查（後測）

親愛的中一同學：

這份問卷可以讓我們瞭解你的學習情形。請先細閱每句句子，然後想一想您自己的內心感受。請用鉛筆將選項空格填滿（只選一項），它們並沒有絕對正確答案，請依您自己的經驗選取不同程度的選項，研究結果可作教師改進教學之用，個人填答結果絕對不會被公開，也不會影響你的成績，請放心。

「透過合作學習提升中一級別學生課堂參與」行動研究小組 謹啟

2014-15 年度中一級 ＿＿ 班，學號：＿＿＿＿＿＿，性別：□男生 □女生

一、中文科的課堂參與和學習動機

題號	對於中文科	完全同意	大部分同意	沒有意見	大部分不同意	完全不同意
1.	我覺得上課是一件有趣的事。	□	□	□	□	□
2.	我會主動投入時間參與學習。	□	□	□	□	□
3.	我能專心上課。	□	□	□	□	□
4.	我樂意參與老師要我們進行的課堂活動。	□	□	□	□	□
5.	我覺得我的學習成績在進步中。	□	□	□	□	□
6.	我覺得班上整體的學習成績在進步中。	□	□	□	□	□
7.	我對自己在這個學科的學習能力有信心。	□	□	□	□	□

二、英文科的課堂參與和學習動機

題號	對於英文科	完全同意	大部分同意	沒有意見	大部分不同意	完全不同意
1.	我覺得上課是一件有趣的事。	□	□	□	□	□
2.	我會主動投入時間參與學習。	□	□	□	□	□
3.	我能專心上課。	□	□	□	□	□
4.	我樂意參與老師要我們進行的課堂活動。	□	□	□	□	□
5.	我覺得我的學習成績在進步中。	□	□	□	□	□
6.	我覺得班上整體的學習成績在進步中。	□	□	□	□	□
7.	我對自己在這個學科的學習能力有信心。	□	□	□	□	□

三、數學科的課堂參與和學習動機

題號	對於數學科	完全同意	大部分同意	沒有意見	大部分不同意	完全不同意
1.	我覺得上課是一件有趣的事。	☐	☐	☐	☐	☐
2.	我會主動投入時間參與學習。	☐	☐	☐	☐	☐
3.	我能專心上課。	☐	☐	☐	☐	☐
4.	我樂意參與老師要我們進行的課堂活動。	☐	☐	☐	☐	☐
5.	我覺得我的學習成績在進步中。	☐	☐	☐	☐	☐
6.	我覺得班上整體的學習成績在進步中。	☐	☐	☐	☐	☐
7.	我對自己在這個學科的學習能力有信心。	☐	☐	☐	☐	☐

四、通識科的課堂參與和學習動機

題號	對於通識科	完全同意	大部分同意	沒有意見	大部分不同意	完全不同意
1.	我覺得上課是一件有趣的事。	☐	☐	☐	☐	☐
2.	我會主動投入時間參與學習。	☐	☐	☐	☐	☐
3.	我能專心上課。	☐	☐	☐	☐	☐
4.	我樂意參與老師要我們進行的課堂活動。	☐	☐	☐	☐	☐
5.	我覺得我的學習成績在進步中。	☐	☐	☐	☐	☐
6.	我覺得班上整體的學習成績在進步中。	☐	☐	☐	☐	☐
7.	我對自己在這個學科的學習能力有信心。	☐	☐	☐	☐	☐

附件二：「透過合作學習提升中一級學生課堂參與」計劃之課室環境剪影 (2015)

合作學習小組座位安排

合作學習小組文具匣
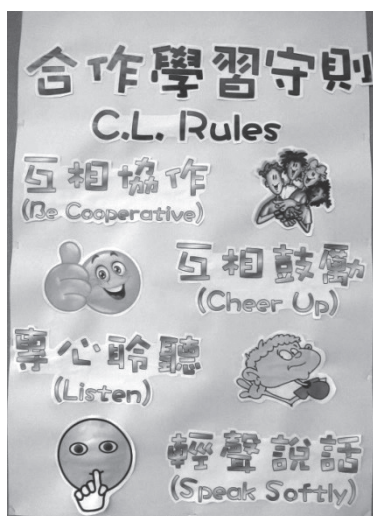
合作學習守則
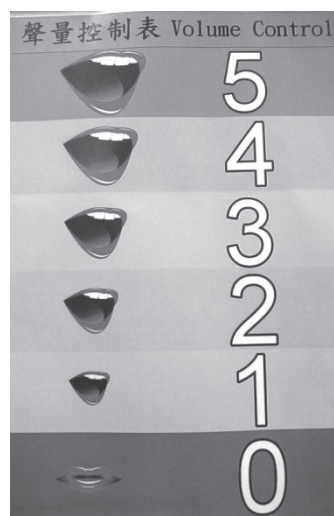
小組活動聲量管理
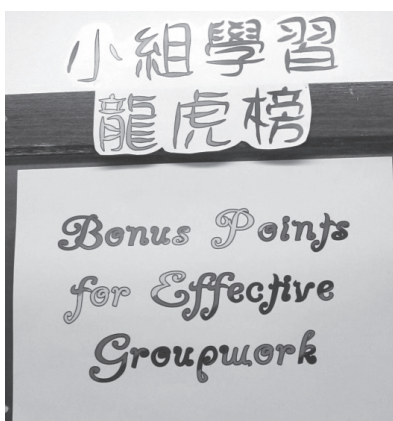
小組學習龍虎榜
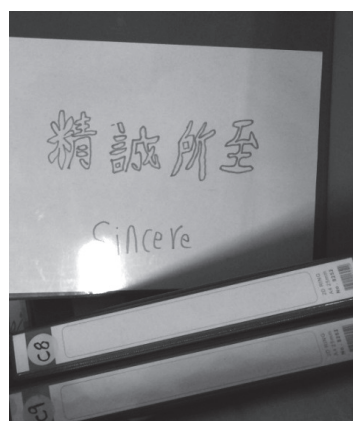
小組學習歷程檔案

附件三：「透過合作學習提升中一級學生課堂參與」計劃之學生訪談

先導及計劃後訪談：焦點訪談小組

目的： 了解中一級同學在核心科目及通識科的學習現況 (重點了解課堂
　　　參與情況)
訪問安排： 中一級三班各 3 名同學 (高、中、低能力各一位)，分班進
　　　　　行小組訪談。
計劃前的訪問日期：
1A 2014 年 11 月 5 日，1B 11 月 4 日，1C 11 月 5 日
計劃後的訪問日期：
1A 2015 年 6 月 9 日，1B 6 月 8 日，1C 6 月 8 日

1. 現時中、英、數及通識課堂的上課情況是怎麼樣的？

　　➤ 同學的座位編排 (課堂環境)
　　_____
　　_____

　　➤ 老師通常是怎樣進行教學的呢 ?(教學策略)
　　_____
　　_____

　　➤ 有沒有讓你們坐在一起討論？(小組常規)
　　_____
　　_____

　　➤ 有沒有讓你們每個人都參與課堂活動 (怎樣參與)? (小組常規)
　　_____

　　➤ 印象最深刻的活動 (每人 1-2 個)? (小組常規)
　　_____
　　_____

2. 比較現時 (中學) 和小學在課堂上的分別 (先導) / 比較計劃前和計劃後在課堂上的分別 (計劃後)

  ➢ 上課模式 (小組常規、課堂環境)

  _____

  _____

  ➢ 教學方式 (教學策略)

  _____

  _____

  ➢ 參與方式 (小組常規)

  _____

  _____

3. 對現時各科學習的觀感 (1 - 5 分) 以 5 分為最高

  ➢ 有多喜歡？為什麼？

  _____

  _____

  ➢ 有多大的盼望想參與課堂活動？為什麼？

  _____

  _____

4. 有什麼具體活動建議給老師去改善你們的課堂參與？

  _____

  _____

附件四：「透過合作學習提升中一級學生課堂參與」計劃之觀課表

勞工子弟中學「小組合作學習」觀察表

教師姓名：＿＿＿＿＿＿＿ 科目、任教單元：＿＿＿＿＿＿＿＿＿＿

公開課日期：2015 年　 月　 日

層面	評鑑標準	評鑑項目	文字敘述	傑出	優良	滿意	待改進
A 教學前的準備	A-1 選用適當教學策略來配合單元	A-1-1 教學目標及主題能與選用的合作學習策略配合： 使用的合作學習策略是： ＿＿＿＿＿＿					
	A-2 小組人數適切	A-2-1 小組人數合宜 (2-6 人)，能兼顧學生的參與機會與小組意見的多樣性					
	A-3 課室空間安排合宜	A-3-1 班級座位能合理地採用小組形式					
		A-3-2 小組與小組的距離合宜					
		A-3-3 學生進行分組合作學習時，彼此採用面對面良性生互動					
B 教學中的實施方式	B-1 教師講解合作學習策略和配合事宜	B-1-1 說明學習目標 (小組任務)					
		B-1-2 強調積極互賴					
		B-1-3 提醒個別的績效責任					
		B-1-4 解釋成功標準或獎勵標準					
		B-1-5 說明期望的合作社交及行為表現					
	B-2 教師隨時掌握並適時介入	B-2-1 教師能巡視各小組的學習情況					
		B-2-2 教師能為小組適時提供協助 (介入)					
		B-2-3 教師能指導 / 提醒學生與人合作的技巧					
	B-3 學生積極參與	B-3-1 所有學生都積極與組員互動 □ 用心聆聽 □ 幫助同學 □ 鼓勵同學 □ 發言討論 □ 認真參與 □ ＿＿＿＿＿＿ □ ＿＿＿＿＿＿					

層面	評鑑標準	評鑑項目	文字敘述	評　量			
				傑出	優良	滿意	待改進
C 完成合作學習後的評估	C-1 評估小組合作學習的成果	C-1-1 小組進行滙報／總結／測驗或考試達標的人數					
		C-1-2 給予小組表揚及鼓勵					
		C-1-3 評估小組運作效能：在課堂最後，預留時間給學生進行自我反省					

課堂軼事紀錄表		
時間	學習活動或小組事件紀錄	備註

附件五 「透過合作學習提升中一級學生課堂參與」計劃之教師工作坊及觀課活動剪影 (2015)

教師分配小組角色及運用
「開始手號」

教師即時介入小組及促進小組
課堂參與
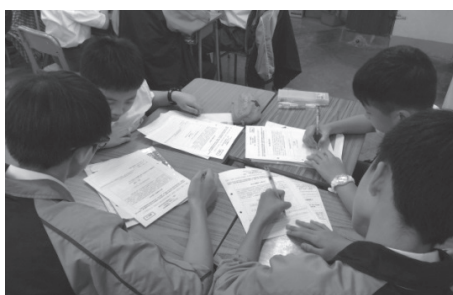
學生運用「拼圖法第二代」
進行合作學習

同學展示小組學習成果

教師進行同儕觀課

合作學習教師工作坊

附件六：教學設計及教材示例

1. 中文科教案

《一家九口的支柱》 分析文章如何運用借事抒發情感 辨識直接及間接抒情	引入：何謂「支柱」？ 開展： 1. 同學朗讀第一段。 2. 老師請學生刪去第一段中不重要的句子。 　　刪除準則：（補充、舉例、解釋說明） 3. 兩人一組，分甲同學、乙同學 4. 甲同學先向乙同學分享自己刪減及保留的原因；然後乙同學向甲同學分享。（每人約 1 分鐘）（合作學習策略：Think Pair hare） 滙報指引： 你好，我刪去了……，保留了甚麼……因為……。 謝謝你聆聽我的分享。 5. 老師選取 2-3 位同學向全班分享（最好是選取有差異的，便於比較）。 6. 老師引導學生歸納第一段段意及作用，可先請同學自行於筆記簿或工作紙上擬寫，再作評講。 7. 同學朗讀第二段。 8. 老師以提問方式引導學生找出該段的主要事件。（運用時、地、人、事） 　i. 記敍六十年代暴動時，建築系畢業的父親到紡織廠工作，養活一家九口。 　ii. 記敍父親為子女織毛衣 9. 同學填寫工作紙。 10. 老師引領學生歸納第一件事 11. 學生仿照第一件事，歸納第二件事 12. 老師總結 1/1-2 段（總寫 [符號] 分寫、襯托），並著同學仿作：_____的支柱。 13. 如時間許可，請同學分享，老師即時回饋。 總結：學生反思 1. 在這一堂學會了甚麼？ 2. 我是否做到 (學到) 我所訂的目標？ 3. 如果我做到，我究竟用了甚麼方法？哪個方法是最好，我下次也繼續用？ 4. 如果我未能做到，究竟是甚麼原因？ 5. 我在學習的過程中，我曾經遇到甚麼困難？我用了甚麼方法解決這個困難？	撮寫 綜合 時間線

分析文章如何運用借事抒發情感 辨識直接及間接抒情	引入：重溫上節課所學 開展： 分析 3-6 段 1. 分四人小組 A 總隊長　　　　　　B 大總管 C 秘書　　　　　　　D 滙報員	時間線 綜合 時地人事 綜合

A	B
D	C

每位同學獲分配一段（不同顏色）
A 總隊長（第 3 段）　　B 大總管（第 4 段）
C 秘書（第 5 段）　　　D 滙報員（第 6 段）

指引：
(1) 每位同學閱讀各段，並運用曾學過的方法（如刪除法、時地人事）找出該段所記敍的事情及所反映的父親形象。（約 3 分鐘）
(2) 形式專家小組，各專家分享自己的分析，並互相給予意見。（約 5 分鐘）
(3) 各專家回到自己的小組，輪流滙報自己的分析，秘書負責摘錄筆記及完成工作紙上的時間線。
(4) 同學滙報時要控制聲量
同學必須細心聆聽
同學必須投入
同學必須尊重他人
3. 老師檢視同學是否已完成工作紙，並邀請 1-2 組滙報，請同學評價，老師回饋。
4. 老師引導同學分析各事的共通點（父親為家庭默默 [符號][符號] 犧牲了甚麼？付出了甚麼？刻畫了父親甚麼形象？）
5. 老師引導同學分析文章鋪排的策略。
6. 老師引導同學分析全文的情感及表達手法。（總寫 [符號] 敍事 [符號] 抒情）
7. 全文表達作者對父親的感情的詞句不多，但我們卻能感受到作者所抒之情，為甚麼？

總結：學生反思
1. 合作學習跟以往的學習模式有甚麼不同？
2. 合作學習對你的學習有甚麼幫助？
3. 在這一堂學會了甚麼？
4. 我是否做到 (學到) 我所訂的目標？
5. 如果我做到，我究竟用了甚麼方法？哪個方法是最好，我下次也繼續用？
6. 如果我未能做到，究竟是甚麼原因？
7. 我在學習的過程中，我曾經遇到甚麼困難？我用了甚麼方法解決這個困難？

2. 英文科教材

Healthy Schools, Healthy Kids
Text 1 for Treasurers

Schools should offer students' nutritious, well-rounded lunch at a lower price. School meals should be lower in fat and higher in nutrients that a growing child needs. The average school lunch should cost about $20, as suggested the Education Department.

Take a look of the following two menus provided by a school tuck shop and a fast food shop close to school.

Hamburger Meal			
School Tuck Shop A		Fast Food Shop A	
Contents	Price	Contents	Price
7 oz. fresh beef burger Mixed Vegetable Salad 10 oz. Fresh Fruit Juice	$20	3.5 oz. frozen beef burger French Fries 8 oz. Coca Cola	$40
Pizza Meal			
School Tuck Shop A		Fast Food Shop A	
Contents	Price	Contents	Price
Low-Fat Cheese Pizza Slice Tossed Green Salad Fresh Whole Orange 8 oz. Skimmed (Fat free) Milk	$20	Special Pepperoni Pizza Slice 8oz Chocolate Sundae 8 oz. Soda	$40

In your group,
1. *compare the prices of school canteen lunch meals provided;*

2. *discuss if our school canteen provides reasonably priced meals. Support your points with evidences.*

Part 1　Problem & suggestions

In your **expert group**, find out the problems and give some suggestions with specific examples.

Problems			Suggestions		
	points	examples		points	examples
1			1		
2			2		
3			3		
(new)			(new)		

Part 2　Presentations

Welcome back to your **home group**! Now it's time for you to give a presentation on the passage you read.

	Content
(a) Greeting	Good morning, everyone! I am the treasurer.
(b) Idea 1 ⬇ Explanation ⬇ examples	I think the price of our school lunch is _____ (adjective) because _____ _____ _____ I suggest that _____ _____ _____
(c) Idea 2 ⬇ Explanation ⬇ examples	I think the portion of our school lunch is _____ (adjective) because _____ _____ _____ I suggest that _____ _____ _____
(d) Ending	

Healthy Schools, Healthy Kids
Text 2 — For the Chairpersons of the Student Union

Before deciding on the lunch menu, schools should

	Does our school do that? (Yes / No)
1. Interview students and teachers	
2. Give out questionnaires	
3. Ask dietitians	
4. Meet the service providers who can provide healthy, nutritious and environmentally friendly meals	
5. Examine / check the new menu and take out foods which have a lot of fat, salt and sugar.	
6. Run activities for students	
7. Offer students a clean and pleasant place for students staying in for lunch.	
8. Give students enough time for lunch	
9. Encourage parents to prepare healthy lunch boxes for students	
10. Give lessons on health education	

In your group, discuss if your school has done the above.
(a) Do all people get involved?
(b) Is there anything which can be better?

Part 1   Problem & suggestions

In your **expert group**, find out the problems and give some suggestions with specific examples.

Problems			Suggestions		
	points	examples		points	examples
1			1		
2			2		
3			3		
(new)			(new)		

Part 2   Presentations

Welcome back to your **home group**! Now it's time for you to give a presentation on the passage you read.

	Content
(a) Greeting	Good morning, every one! I am the Chairperson of the Student Union.
(b) Idea 1 ⬇ Explanation ⬇ examples	I think all people _do / don't_ get involved because ____ _____ _____ I suggest that _____ _____ _____
(c) Idea 2 ⬇ Explanation ⬇ examples	I think _____ _can be better because_ _____ _____ _____ I suggest that _____ _____ _____
(d) Ending	

Healthy Schools, Healthy Kids
Text 3 for Green Officers

Schools should use environmentally friendly lunch service and go with the rule of 'Reducing Waste and Minimizing Wastage' promoted by the Environmental Protection Department. The following green practices are strongly encouraged at school.

	Has our school canteen done that? (Yes / No)
1. On-site portioned meal service is preferred.	
2. Polystyrene boxes should be avoided. 3. Reusable lunch containers and cutlery should be used.	
4. If disposable lunch containers have to be used, schools should find an environmentally friendly way to recycle to products.	
5. Portion food in a flexible manner to avoid wastage.	
6. Provide students with reheating facilities like microwave ovens for students.	

In your group, discuss if your school canteen is a green canteen.

Part 1   Problem & suggestions

In your **expert group**, find out the problems and give some suggestions with specific examples.

Problems			Suggestions		
	points	examples		points	examples
1			1		
2			2		
3			3		
(new)			(new)		

Part 2   Presentations

Welcome back to your **home group**! Now it's time for you to give a presentation on the passage you read.

	Content
(a) Greeting	Good morning, every one! I am the Green Officer.
(b) Idea 1 ↓ Explanation ↓ examples	I think _____ because _____ _____ I suggest that _____ _____ _____
(c) Idea 2 ↓ Explanation ↓ examples	I think _____ because _____ _____ I suggest that _____ _____ _____
(d) Ending	

Healthy Schools, Healthy Kids
Text 4 for Health Officers

The quality of school lunch depends very much on the choice of ingredients and the cooking methods used. An ideal and healthy lunch should provide for one third of the daily nutritional needs of a school child. The following are rules of a healthy lunch. A healthy school canteen should

	Has our school canteen done that?(Yes / No)
1. Provide grains and cereals such as rice or noodles, vegetables and meat in the ratio of 3:2:1 by volume;	
2. Contain fresh vegetables and fruits;	
3. Provide whole grains, fat reduced dairy products and other calcium-rich food items;	
4. Use lean meat, fish or skinned poultry;	
5. Use low fat cooking methods such as steaming, boiling, minimal oil stir-frying or baking;	
6. Use only vegetable oils, such as olive oil, in limited amount for cooking; and	
7. Limit the use of foods with added fat or oil, poultry with skin, whole fat dairy products, preserved food and sauce of high fat or salt content.	
8. Keep hot dishes above 60℃ and cold dishes at 4℃ or below.	

In groups, discuss if your school canteen provides proper lunch meals. Support your points with evidences.

Part 1　Problem & suggestions

In your **expert group**, find out the problems and give some suggestions with specific examples.

Problems				Suggestions		
	points	examples			points	examples
1			1			
2			2			
3			3			
(new)			(new)			

Part 2　Presentations

Welcome back to your **home group**! Now it's time for you to give a presentation on the passage you read.

	Content
(a) Greeting	Good morning, every one! I am the Health Officer.
(b) Idea 1 ⬇ Explanation ⬇ examples	I think _____ because _____ _____ _____ I suggest that _____ _____ _____
(c) Idea 2 ⬇ Explanation ⬇ examples	I think _____ because _____ _____ _____ I suggest that _____ _____ _____
(d) Ending	

附件七：「透過合作學習提升中一級學生課堂參與」計劃之教師意見調查

一、教學成效評估

題目	同意	不同意
1. 採用合作學習後，我覺得學生的課堂參與有提升	☐	☐
2. 採用合作學習後，我覺得能提升學生的學習動機	☐	☐
3. 採用合作學習後，我覺得學生的整體學習成效有提升	☐	☐

二、對合作學習的觀感

實施合作學習後，我的觀感是：
經過實施合作學習，我覺得有困難 / 需要學校支援的是：

朗讀劇場融入初中文言文教學之研究

吳善揮
五育中學

摘要

　　香港學生一向視文言文學習為畏途。當中的主要原因除了是因為他們認為文言文過於艱深之外，還因為文言文作為中文科考試必考的材料，使他們在學習的時候倍感壓力。在久而久之的情況下，學生自然失去學習興趣，部分學生更選擇放棄學習。在這樣的背景下，本研究立足於學生的學習興趣，以 40 名初中一年級學生為研究對象，探討朗讀劇場如何提升中一學生學習文言篇章的興趣，進而影響他們的文言文學習效能。研究結果發現，朗讀劇場能夠提升中一學生學習文言文的動機，並有助改善他們理解文言篇章的能力。

關鍵字：文言文教學、閱讀能力、朗讀劇場、學習興趣

前言

　　香港學生失去學習文言文的興趣，不願意學習。學生因為學習困難而逃避文言文的學習，致使他們不願意接觸文言作品，在這樣的情況下，他們連最基本的文言字義和句式也不懂，最終使到他們的文言理解水平每況愈下（吳善揮，2014）。同時，大部分教師在教授文言篇章之時，只強調背誦當中的名句、思想重點、寫作特色等，結果使到學生之學習目標失去焦點，而且更沖淡了他們的學習興趣（莊豐石，2009）。其實，文言文學習既與學生的生活經驗脫節，而學生也不明白學習文言文的作用為何。再者，在現今的教育制度下，他們學習文言文的唯一目的，就是為了應付公開考試中文言篇章理解的部分，這本已大大增加了他們的學習壓力，再加上沉悶死板的教學方法，這更使到他們對文言文學習不感興趣，乃至產生厭惡感。由是觀之，若要提升文言篇章的學與教成效，教師便必須要由學習興趣著手。

教師宜運用創新的文言文教學方法，一洗文言文古板沉悶的形象，培養學生之學習興趣，進而提升文言篇章的學與教效能。例如：有研究者以多媒體動畫配以白話解說來施行文言文教學，結果發現大部分研究對象學習文言篇章的興趣都得以提升，並且成為了主動的學習者，促進了整體的學習成效（羅綸新、齊珮琛，2012）。有研究亦指出教師可以借助圖畫、音樂、遊戲等不同的手段，誘發學生學習文言篇章的興趣，以有效地加深他們對文本的深入理解（李迎春，2012）。教師在教學實踐的時候，可以引入故事性較強的篇章，並將之改編為小話劇、小品，讓學生表演後再進入教學的環節，當中的視聽效果可以加強學生領悟篇章內容的能力（嚴春香，2010）。由此可見，只要教師能夠活化教學方法，學生的學習興趣便能夠得以激發出來，而他們理解文言篇章的水平也得以提升。

由是之故，本文旨在透過實徵性研究，以朗讀劇場為文言篇章主要的教學法，探討朗讀劇場如何提升初中學生學習文言篇章的興趣，以及能否藉此提升他們閱讀文言篇章的基礎能力。

文獻回顧

文言篇章教學能夠提升學生對中國文化的認知水平。文言篇章作品是中國歷史及文明重要的組成部分，當中蘊含著極為豐富的文化內涵、以及人文精神價值 （安傳芳，2011）；文言作品是中國古代傳統精英文化的象徵，大部分作品皆出自於古代優秀的才子之手，蘊含中國古代文化精神重要的精髓。因此學習文言作品，不但能夠加深學生對文化發展脈絡及其價值之了解，而且亦能夠提升他們的文化及人文素養（梁義勇，2013）。文言文知識是學習中國傳統文化的重要基礎，只有學生能夠培養出一定程度的文言文閱讀能力，便能夠有效學習中國傳統的文化，並且讓中國寶貴而優秀的傳統文化得以傳承下去（呂筱晶，2008）。由此可見，文言篇章蘊含著豐富的文化知識，亦是中國文化精神傳承下一代的重要媒界，因此只要教師能夠提升學生的理解能力，那麼他們定必可以藉此掌握中國文化的知識，並且讓中華民族的優良傳統精神得以繼續傳揚下去。

文言篇章學習能培養學生的品德情意。文言文不但是古代文章的精華，而且更承載了中華民族優秀之傳統文化，具有極為重要的人文教育功能（呂小平，2013）。文言篇章包含著多樣性的道德教育價值，例如：愛國精神、仁愛思想、孝親美德、天人合一的精神、自強不息的態度等，這都有助促進青少年的心理健康和道德成長（李平，2011）。中學時期階段正是個體身心發展之重要階段，亦是青少年內在的人生觀、價值觀、道德觀漸漸形成的關鍵時期，文言文教學正好滿足了青少年的成長需要，讓他們藉此學習傳統的優良品德，使人格得以變得更完備，進而促進身心健康的發展（晉春，2008）。由是觀之，作者在創作文言作品

之時，往往在字裡行間寄寓了德育思想，體現了「文以載道」的精神。只要教師按著學生之需要而選取適合的文言作品作為教學材料，那麼他們的道德情操便可以得以培養，並成為社會的良好公民。

　　文言篇章學習能夠加強學生的審美能力。中國語文科課程的主要宗旨，在於培養學生的審美能力及情趣，即能夠透過美文的欣賞過程，領略語言文字及思想內容之美（香港課程發展議會、香港考試及評核局，2007）；教師應藉著文言文教學引導學生發展自主的審美意識，即透過歷代美文的鑑賞去培養學生賞析藝術的能力，最終達至陶冶學生性情、提升個體品位、昇華內在思想的最終目標（文娟，2008）；文言文具有多樣化的教學美，包括形式美（文體及語言）、人物美（主角的人格美）、情感美（作者抒發的感情）、哲思美（正確的思想及價值觀）、意境美（作者建構的意象氣氛）（陳靜嬋，2005）。由此可見，文言文篇章既能夠作為審美教育的工具，也能藉之提升學生的語文能力，實在是語文教師不能夠忽略的學習瑰寶。

　　朗讀劇場，顧名思義就是戲劇的一種，當中包含了朗讀及戲劇兩個主要元素。朗讀劇場與一般戲劇表演的最大分別，就是朗讀劇場不需要學生設計道具、服裝、化妝、背景音樂、舞台走位等。演員既不需要背誦台詞，也不需要在舞台上頻繁走動，只需要在舞台上坐下或站立，以富於感情、抑揚頓挫的聲線去把劇本的一字一句朗讀出來，即以聲線打動觀眾的心，進而使觀眾從中有所領悟（何洵怡，2004）。當然，演員也可以配以簡單的動作及表情，以加強朗讀劇場表演的傳情達意。在朗讀劇場裡，一般由敘事者（介紹背景或總結）、數名演員（透過朗讀劇本以互相對答）所組成。在劇場落幕後，擔任主持的同學便會提問觀眾問題，以確保他們對劇場內容有所掌握，接著教師可以因應不同的學習目標而進行延展活動。例如說話方面，教師可以要求觀眾向演員提問交流。寫作方面，教師可以要求觀眾撰寫信件給特定的演員；文學方面，教師可以引領同學分析朗讀劇場裡不同人物的性格或內容主題（何洵怡，2005）。

　　朗讀劇場能夠提升學生學習文言篇章的學習動機。學習動機的多寡對於語言學習能否取得最終的成功具有極為關鍵的作用（Kimura, Nakata & Okumura, 2001）。有研究顯示，以戲劇融入寫作教學，不但能夠提升學生的學習動機、提升他們的課堂參與度，而且更能夠藉此提升他們的寫作能力，即對語文學習具有正面效益（Cremin, Goouch, Blakemore, Goff & Macdonald, 2006）。實徵性研究亦發現以戲劇融入幼兒的美感教育之中，不但能夠提升他們的想像力、創造力及表達能力，而且更能夠大大提升他們的學習動機及興趣（鄧詠之，2011）。由是觀之，學習興趣及動機是學生學習的首要前提。戲劇既然能夠提升學習者的學習興趣及動機，將之應用於文言篇章的教學之中，相信亦可以具有同等的成效。

朗讀劇場能夠有助學生深刻地掌握文言讀本的內容。有研究發現以戲劇教學法融入通識教育科的學習之中，能夠加強學生對學習議題的思考深度（Chan & Law, 2012）。以戲劇手法教授文學作品，既能夠讓學生有效而有趣地去探索這個世界，也能夠讓他們更深入地檢視所閱讀的故事，促進了他們綜合及理解之能力（李瑞媛，2012）。研究發現，以朗讀劇場融入國中融合班之中文教學，學生能夠藉此加深對文本內容及感情的掌握，並且獲得一定的效益（吳善揮，2015）。由此可見，戲劇教育能夠提升學習興趣。在這樣的基礎上，學生的自發性學習行為便能夠得以誘發出來，使他們更願意在相關的議題進行自主學習，乃至因發掘到更多的樂趣而不能自已。同時，學習不再是走馬看花，而是刻在他們的心板上，使他們的學習體會可以變得更深刻。

朗讀劇場能夠拉近學生與文言篇章的距離。研究顯示戲劇表演能夠為課堂營造輕鬆的學習環境及氣氛，為聽障孩子的學習帶來很大的樂趣（陳晞如，2014）。在課外閱讀活動中，讀者劇場能夠有效提高不同學生之閱讀興趣，並且為增進閱讀理解能力及技巧，建構了一個娛樂性與實用性兼備的平台，使他們變得更願意學習（梅明玉，2007）。在教授文言文的時候，教師可以引入課本劇，讓學生根據原著作品的版本，發揮自身的創造力——加入現代的元素，以改編原有的故事情節，這項作法能夠有效地拉近文言文與學生之間的距離（馮素琴，2011）。簡言之，朗讀劇場不但使課堂變得輕鬆，而且更能夠照顧到不同學生的學習需要，大大增加了他們的學習意願，拉近了學生與文言文的時代距離，為提升文言篇章理解能力建立了良好的前設基礎。

研究方法與程序

本文的研究假設是：
1. 朗讀劇場能夠提升初中學生學習文言篇章的興趣。
2. 朗讀劇場能夠提升初中學生理解文言篇章的能力。

本研究以筆者任教學校的 40 名初中一年級學生為研究對象，並將之分為「實驗組」及「控制組」，並盡量確保兩組學生之能力相若，以提升本研究的信度。前置測試（下稱前測）的成績顯示兩組學生的文言篇章理解能力大致相約。兩組學生對文言篇章的學習興趣不大，並且出現逃避學習的情況，不願意認真學習文言文作品，而考試成績亦自然不理想（文言篇章理解部分）。研究對象的人數分佈如下：

表 1 研究樣本的分組

組別	實驗組	控制組
人數	18	22

　　本研究把研究對象分為兩個組別：「實驗組」與「控制組」，教師皆對兩組學生實施合共二十節（每節課為 35 分鐘）之文言篇章教學，研究歷時四個月；當中的教學內容、方法和程序如下：

　　筆者於「實驗組」的班別施行以朗讀劇場為本的文言篇章教學，教學材料為四篇故事性較強的文言短文，包括：〈濫竽充數〉、〈刻舟求劍〉、〈狐假虎威〉、〈紙上談兵〉，以讓語文能力較薄弱的研究對象可以更易掌握當中的內容，並對相關的文言文學習產生更大的學習興趣，同時此舉亦能夠配合朗讀劇場的實施，這是因為朗讀劇場是由人物角色、情節等基本要素所組成，而文言文故事正好具有此等基本要素。當中的教學過程側重於提升學生理解文言篇章內容的能力。當中的作法和程序如下：（1）學生參與前測，以讓筆者在開展研究之前，初步掌握學生的文言篇章理解問題及水平，進而設計更切合學生需要的教學計劃；（2）教師直接教授閱讀文言篇章的基本方法，包括：常用文言字詞、文言句式等，以使他們能夠具備閱讀文言文的基礎知識；（3）教師與學生重溫六何法，以提醒學生記敘文的基本要素，以利他們擷取文言文故事內容的重點，而在往後的文言篇章學習，教師也會要求學生以六何法擷取文章中的要點；（4）教師教授學生朗讀劇場的理念、元素及實施方法，並以上年度學生創作的劇本為例，教授學生如何撰寫劇本；（5）教師邀請學生一起表演預先設計的朗讀劇場，以為同學作朗讀劇場的示範，並使他們可以更具體地掌握朗讀劇場的實際流程；（6）教師播放相關的文言篇章動畫，以使學生對文言篇章的內容具有基本的理解，並作為引起他們學習動機的工具；（7）教師與學生討論相關的文言篇章內容，並一起完成學習工作紙；（8）在教師引導學生完成簡短的劇本後，便收集劇本進行批改；（9）教師向學生發還劇本，讓他們自行分組及練習朗讀劇場表演；（10）教師於課堂實施朗讀劇場，當中的流程包括：學生表演、敍事者提問觀眾劇場的基本內容（答對者可獲教師獎勵朱古力乙枚）、同學向表演者作出深度提問、教師給予口頭回饋及評語；（11）學生參與後置測試（下稱後測）及半結構式訪談，以讓筆者量度是次研究的真實成效。由於筆者合共教授學生四篇文章，故步驟（6）至（10）會重複四次。

　　至於「控制組」方面，其教學程序與「實驗組」之主要分別，在於「控制組」沒有實施朗讀劇場的教學法，當中的教學程序為：（1）學生參與前測；（2）教師直接教授學生閱讀文言篇章的基本方法，包括：常用文言字詞、文言句式等，以使他們能夠具備閱讀文言文的基礎知識；（3）教師教授學生指定四篇的文言篇章（與「實驗組」相同），並一起討論及完成學習工作紙；（4）學生參與後測。

　　本研究透過紙筆評估（前測和後測）、學生訪談，量度是次研究的真實成效。筆者對「實驗組」實施前測、後測（附件一及附件二），並透過 SPSS23.0（統計產品與服務解決方案）的 Independent Samples T-Test 及 Paired Samples T-test，量度研究對象在前測、後測中所取得之平均得分，並對所取得的結果進行分析，以瞭解研究對象在參加是次以朗讀劇場為本的文言篇章教學後，能否提升自身的文言文理解能力。同時，本研究亦會對「控制組」實施前測、後測，以確保研究的信實度。前測、後測的設計模式如下：

(1) 以故事性較強、篇幅較短的文言篇章作為兩次測試之閱讀材料；
(2) 兩次測試的題型皆相同，以免學生因為測試模式不同而影響到作答的表現，進而影響到研究的信度；
(3) 為保持評閱的準確度，在批改開始前，筆者先從所有答卷中抽取三份試卷作為樣本，之後邀請了具豐富教學經驗的中文科教師一起進行試改，然後再就評分標準進行討論，最後由筆者按照共同制訂的評分標準評閱所有答卷。

學生訪談方面，筆者將就以下問題與受訪對象進行討論：

(1) 學生如何看待朗讀劇場對提升他們學習文言文的興趣之作用？
(2) 學生如何看待朗讀劇場對於提升他們的文言文理解能力之作用？
(3) 學生如何評價這次研究的成效？

　　是次研究將實施半結構式訪談，即是由研究者先按著研究的核心問題，設計相關的訪談問題，以引導受訪者環繞研究所關注的核心議題表達看法。其後研究者會按照訪談的實際情況而提出開放式的問題，一方面可以避免訪談內容偏離研究所關注的問題，另一方面亦可以提供一定的自由空間讓受訪者表達內心的看法。本研究邀請了五名「實驗組」學生 （三男、兩女） 參與訪談，以讓筆者了解是次教學的真實成效；筆者採用了便利取樣法，即按照受訪者的意願邀請受訪對象，雖然這個取樣方法的限制就是未必能夠確保受訪者之代表性，可是由於筆者與受訪者之間存有高度的信任，使他們更願意說明最真實的看法，這有助提升本研究的信度。本研究的結果雖然未必能夠推論至全香港的學生身上，可是對於前線中文科教師在文言篇章教學設計及實施方面，仍然具有一定的參考價值；基於研究倫理的關係，本文將以「學生 A 至 E」來代替學生的真實身分，以利本文的分析。

　　在研究信實度方面，筆者在徵得受訪學生之同意後，採用了錄音機作為工具，以保留原始的訪談資料。之後，筆者再將之化為文字稿，並整理成一份摘要，邀請受訪學生檢核當中的內容，以確保筆者沒有誤解他們的看法；接著，筆者便對錄音稿的內容進行篩選、分類，並邀請了擁有質性研究經驗的大學研究助理共同參與資料分析的工作，以增進彼

此的思考，以及避免筆者的主觀看法影響到研究結果的客觀性。同時，本研究亦採用了多角檢核法，透過收集、結合和分析多元化的資料，包括：學生訪談、學生課業、教師反思日誌，以相互印證筆者所發現的研究成果。以上作法都有助維持資料分析過程的客觀度，進而提升整項研究的信實度。研究流程如下（圖 1）：

圖 1 研究流程圖
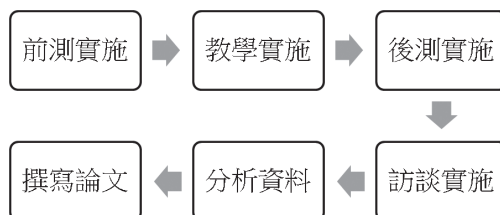
研究結果與討論

整體而言，參與是次研究的學生之文言篇章理解能力均得到明顯的提升，當中紙筆評估的測試結果如下：

表 2 實驗組、控制組之前測成績比較 (Independent Samples T-Test)
測試滿分：25 分

	學生數目	平均差	顯著性	顯著性 (雙尾)
A—B	40	-0.747	0.611	0.367

注：A 為實驗組，B 為控制組。*p<.05、**p<.01、***p<.001。

根據 Independent Samples T-Test，「實驗組」(M=3.3889、SD=2.58705) 與「控制組」(M=4.1364、SD=2.56896) 在前測之成績並沒有顯著分別，而 p>.0 5(p = 0.367)；可見「實驗組」與「控制組」學生之文言篇章理解能力相約。

表 3 實驗組、控制組之前測及後測成績比較 (Paired Samples T-Test)
測試滿分：25 分

	平均數	學生數目	標準差	平均數的標準誤	t 值
A (前測 — 後測)	8.91667	18	5.90675	1.39223	6.405***
B (前測 — 後測)	0.50000	22	2.70361	0.57641	0.867

注：A 為實驗組，B 為控制組。*p<.05、**p<.01、***p<.001。

根據 Paired Samples T-test，「實驗組」學生的得分平均數有著極為顯著之上升，而 p < .001（p = 0.000）；「控制組」學生的得分平均數則沒有任何顯著的改變，而 p > .05（p = 0.396）；簡言之，以朗讀劇場提升學生閱讀文言篇章之理解能力是具有一定的成效。

　　整體而言，受訪學生均認同本次研究之成效，並指出朗讀劇場能夠引起他們學習文言文的興趣之原因，包括：提供活動機會、課堂氣氛輕鬆、表演有趣、減少理解的阻礙。由此可見，朗讀劇場拉近了文言文學習與學生的距離，誘發出他們對文言文的學習興趣，化被動學習為主動學習，開啟了文言文學習的首要一步。

　　　　「我沒有想過可以把文言文的故事表演出來，而比較老師以
　　　　往在教授文言文時，自己只顧自己不斷說，我比較喜歡這樣
　　　　有趣的上課形式。」（同學 A）

　　　　「朗讀劇場的教學方法很輕鬆，既不用死記硬背劇本，也不
　　　　用像真的戲劇一樣準備道具和服裝，只要看一看劇本便可以
　　　　了，沒有很大的壓力，我很喜歡這樣的學習方式。」（同學
　　　　B）

　　　　「有些同學在朗讀劇場的表演很好笑，他們扮演得很神似，
　　　　所以讓你很留心地看他們表演。」（同學 C）

　　　　「朗讀劇場不是用文言文表達，所以會較有興趣，至少你聽
　　　　得明白，不會感到想睡覺。」（同學 D）

　　受訪同學認為精彩的朗讀劇場表演，不但有助提升他們的學習專注度，而且更使到他們的學習過程可以變得更深刻，進而提升當中的學習成效。

　　　　「有一組同學的表演很好笑，表情誇張、動作生動、聲線洪
　　　　量，使我至今還記得那篇文章的內容。」（同學 B）

　　　　「雖然不是所有同學的表演都很精彩，可是有一組同學扮演
　　　　的狐狸真的很奸，而那個老虎亦真的扮得很蠢，令人發笑，
　　　　記憶很深刻。」（同學 E）

　　朗讀劇場的環節及流程設計，包括提問角色問題、角色回答問題、給予獎勵分數、給予小禮物等，對於學生而言都具有一定的趣味性，也能使他們專注於課堂學習之上，這對於文言篇章學習而言，具有誘發學生積極學習的作用。

　　　　「作為觀眾的我可以向同學提問問題，這個真的很好玩，因
　　　　為我可以藉此機會挑戰表演的同學，又可以取得老師的獎勵
　　　　分數。」（同學 C）

　　　　「同學需要以表演角色的身分，在限時內回答同學指定的問
　　　　題，真的是很刺激，因為有些問題很尖銳。」（同學 D）

> 「朗讀劇場很好玩，既可以看表演，回答問題又可以有糖吃……我們又可以學習到文言文的內容，完全不會覺得沉悶。」（同學 E）

從以下受訪同學之意見中，我們可以知道朗讀劇場劇本的編撰模式，讓學生建立解讀文言篇章的常規模式，即學會了從何入手解構文章的內容重點，包括先以六何法找出文章內容的關鍵、思考文章背後所帶出的道理，這都有助學生更有效地解讀故事性較強的文言篇章。

> 「老師教授我們以六何法找出文言篇章的重點內容，以讓我們可以得以掌握故事當中的重要人物、情節、過程等，以便編寫劇本……這使我學會閱讀文言篇章的時候，都會先以六何法去分辨當中的內容，我發覺這會比較容易理解當中的要點。」（同學 A）

> 「朗讀劇場要求我們在結尾的時候，由敘事者總結出劇場所帶出的道理及教訓，這讓我每次看文言篇章的時候，都會思考一下作者想藉故事說明什麼道理。」（同學 C）

受訪同學都認為是次朗讀劇場教學的活動，為他們介紹了自學文言篇章的工具，讓他們在遇到文言篇章理解的困難時，可以嘗試自行解決當中的問題，這為他們自我提升文言篇章之理解能力建立了一定的基礎。

> 「老師會要求我們在撰寫劇本的時候，自己上網尋找語譯，又或者查網上文言文字典，若下次不明白的時候，也可以自己上網找。」（同學 B）

> 「老師曾在課堂播放那些文言故事的動畫片段，而影片所展示的情節都是故事的重點內容，幫助我們理解文言篇章故事的內容……下次遇有不明白的地方，我也可以嘗試從 youtube 上看看有沒有相關的影片。」（同學 C）

部分受訪同學指出雖然朗讀劇場能夠提升他們學習文言篇章的興趣，可是若教師沒有重點教授他們閱讀文言文的方法，那麼對於提升解讀文言篇章的能力之效用則不大，可見本研究在文言文閱讀方法之教學方面仍然有所缺乏。

> 「雖然朗讀劇場很有趣，但是我覺得未必可以因此而明白文言文的內容，因為我覺得自己仍然未看得懂那些字句。」（同學 D）

> 「我覺得若不明白那些解讀文言文的方法，縱使老師用了朗讀劇場的方法教導我們學習文言文，也是沒有什麼用。」（同學 E）

　　受訪同學 C 認為朗讀劇場為他提供了思考的空間，即其在撰寫或演出劇本之時候，需要扣連文意，思考角色的感情，使他對於文章內容有更深入的理解；受訪同學 D 則認為朗讀劇場的角色扮演環節能夠讓他深刻地體會角色的感受，進而產生較深刻的感悟。

> 「在寫台詞和代入角色演出的時候，我需要揣摩角色的感情……這使我更加明白文章作者想透過文言文表達什麼感情思想。」（同學 C）

> 「在演出過後，我依然未能夠忘記我扮演〈濫竽充數〉南郭先生的情節 …… 因為我在扮他害怕被拆穿的時候的心情，我覺得自己扮得很神似，也真的能夠明白騙人那種極為恐懼的心情，所以感受較深。」（同學 D）

　　從以下的訪談結果中，我們可以得知以朗讀劇場融入文言篇章教學取得一定的教學成效，包括培養學生的學習興趣、提升學生之專注力、推進學習之深度。這就是說朗讀劇場可以作為教師教授文言篇章的導入工具，以有效地引起學生學習文言篇章的動機及興趣。

> 「我覺得朗讀劇場的確使文言文課堂變得有趣，亦會使我較專心觀賞同學的表演。」（同學 A）

> 「朗讀劇場使我對所學的文言篇章有更深入的了解，這大概可能是因為我們要編寫和熟讀劇本才可以演出吧！」（同學 C）

> 「老師用朗讀劇場教導我們學習文言篇章，的確讓同學們變得比較專心，也使我們更願意聆聽老師的教導。」（同學 D）

　　由於學校中文課堂的時數有限，再加上實施朗讀劇場需要耗費不少的時間，包括監察學生撰寫劇本、修訂學生的劇本、讓每組同學表演等。筆者只能於班級內實施為數四次的朗讀劇場；所謂「熟能生巧」，實施短短四次的朗讀劇場，未必能夠完全有效、全面地提升學生閱讀文言篇章能力，故有受訪同學表示朗讀劇場未能夠提升他閱讀文言篇章的信心。

> 「我覺得學習興趣是能夠得到提升的，可是我覺得四次的劇場完結後，我還是沒有信心可以解讀文言篇章的內容。」（同學 E）

受訪同學 D 表示他仍然未能夠掌握很多不同的文言字詞之意思，這反映了在施行朗讀劇場融入文言篇章教學的模式時，筆者在文言字詞及句式的基本教學方面仍然有所不足。

> 「遇有較深奧的文言篇章，我還是未必能夠掌握其內容大意，因為我不會解釋很多的字詞。」（同學 D）

受訪同學 B 認為若教師一起參與朗讀劇場的表演，定必可以提升課堂的氣氛，筆者亦相信此舉能夠促進學生與教師的關係，進而有助提升課堂教學之成效。

> 「如果老師可以經常與我們一起組成朗讀劇場表演，我想我們都會更開心。」（同學 B）

總結

透過朗讀劇場的實施，學生學習文言篇章的興趣得以提升。學習興趣是有效學習的前提，若個體對於學習欠缺興趣，那麼他們便會視學習為苦事，學習成效亦自然變得低下；相反，當個體對於所學習之事產生濃厚的興趣，那麼興趣便會化為他們努力追求的推動力，使他們更願意自發自主地學習。事實上，是次研究站立在學生的興趣之上，以戲劇之方式作為文言篇章之教學工具，既不要求學生背誦台詞，也不用他們製作繁複的道具，他們只需要嘗試以帶有感情的聲線讀出台詞，並配以簡單的動作即可，這對於能力稍弱、學習動機低的學生而言，尤見成效。因此，本研究能夠有效提升學生學習文言篇章之興趣。

經過朗讀劇場的實施後，學生閱讀文言篇章的能力得到一定的提升。本研究施行之時，著重學生運用六何法去理解篇章內容和編寫劇本，這為學生建立了閱讀故事性文言篇章之常規，使他們可以掌握解構文言篇章內容的切入點，在經過四次的訓練後，他們自然可以六何法從文言讀本中擷取重要的資訊，並由此發掘重要的文章脈絡及線索，進而對內容大意作出更準確的推敲。可見，以朗讀劇場為本的文言篇章教學有助提升學生閱讀故事性較強的文言篇章之能力。

朗讀劇場融入文言篇章教學能夠強化學生對篇章的感悟。閱讀文學作品的最終目的，就是讓學生產生個人的感悟，進而反思自己的生命問題；本研究讓學生扮演文言故事裡的不同角色，使學生透過代入角色，思考角色背後的感情思想，以使他們在演出時可以掌握到適當的語氣及聲線。經過這樣的思考過程，學生自然能夠產生更深刻的內在感受，並從文本內容中得到更大的啟發，進而提升他們的文言篇章理解能力。可見，本研究能有助學生對文本內容產生更深刻的感受。

建議

　　香港中學文憑考試經過改革及檢討後，香港教育局於高中重新實施範文教學及考核，學校可以藉此機會重整校本的文言篇章課程，例如：學校可以提升學生學習文言篇章興趣為初中級別中文科課程之教學目標，並以故事性較強之文言篇章為主要的教學材料，同時把故事性較強的指定文言範文〈廉頗藺相如列傳〉劃分至初中教授，那麼教師便可以更具空間及彈性實施朗讀劇場，以建立初中學生學習文言篇章之興趣，為他們於高中階段學習指定文言範文建立厚實之基礎，同時減少了他們學習文言篇章的焦慮感。

　　為配合於文言篇章教學裡實施朗讀劇場，故筆者選取了四篇文言故事為教學材料；筆者發現學生普遍喜歡閱讀具故事情節的文言篇章作品，也比較喜愛聽別人説故事；因此筆者認為中文科教師可以在日常教學裡，多説文言故事，以引起學生對之的學習興趣。當然教師亦可以考慮設置讀書會，於午休或放學的時間，為學生講解文言故事，這既可以增加他們的學習興趣，亦可以在日積月累的情況下提升他們的文言文理解水平。

　　本研究只以文言故事作為朗讀劇場的主軸，故此筆者建議後續研究者可以朗讀劇場教授其他類別的文言文，如：説理、議論等，以驗證朗讀劇場能否提升其他類別文言文之教學成效；另外，礙於課堂時數所限，本研究只能於班級裡實施為數四次的朗讀劇場，而研究時間亦只有四個月，因此筆者建議後續研究者可以增加研究的時間，以驗證實施朗讀劇場的時間長短會否影響學生的文言理解水平之提升。

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附件一：〈濫竽充數〉工作紙

吳善揮老師製作

中一級　中國語文科
閱讀能力　文言文學習　朗讀劇場(一)
篇章：《濫竽充數》

35/40

excellent

(一) 文本理解 (20%)

原文：

> 齊宣王使人吹竽，必三百人。南郭處士請為王吹竽。宣王悅之，廩食以數百人。宣王死，湣王立。好一一聽之。處士逃。

表現良佳！請繼
續努力！欣賞你！

1. 試根據文意，把以下文句譯為白話文。

① 齊宣王使人吹竽，必三百人。　(4%)

齊宣王喜歡聽竽，尤其是三百人大樂隊的吹奏。　4

② 宣王悅之，廩食以數百人。　(4%)

宣王很高興，於是由官家供食養活吹竽的人，共上百個。　4

2. 本文的寓意為何？試解釋之。　(6%)

本的沒本事的人試圖混入有本事的人，以瞞騙他人，或以次貨冒充好貨。　6

3. 承上題，你同意本文的觀點嗎？　(6%)

同意。我認為這個觀點是正確的，這是因為很多人為了生存，都會用盡辦法，希望讓別人覺得自己是很厲害的，以讓別人任用自己。但是，很多時候，經過一段時間，別人會發現你的底子，例如我們的特首梁振英在選舉的 種 沒有本事時候，他說自己可以解決很多問題，可是上任三年是一事無成。　4

吳善揮老師製作

(二) 劇本創作 (20%)

評分簡表

內容(8%)	文句(6%)	結構(4%)	字體標點(2%)
7	5	3	2

試根據以上篇章的寓意，撰寫一個為時約一分鐘的短劇，字數約 250 字。

1. 角色分配簡表

角色	敘事者	齊宣王 / 齊湣王	處士
同學姓名			

2. 劇本內容：

敘事：齊宣王喜歡聽竽，尤其是百人大樂隊的吹奏。

齊宣王：我很喜歡聽人體吹竽，現在招聘樂師。

南郭先生：我現在來應徵，希望齊宣王讓我為你吹竽。

齊宣王：我喜歡人集體吹竽，這因為這種竽是好聽，你能為我演奏嗎？

南郭先生：可以的，但我比較擅於集體表演，可以在集體表演時才演奏給你聽嗎？

齊宣王：好的，反正我也喜歡聽集奏。

敘事者：到此之後，宣王因為以為南郭先生的表演欠聽出耳進，所以不斷獎賞他，使他愈來愈富有財富，過了不久，齊宣王死了，齊湣王出任君主，他喜歡聽獨奏。

南郭先生：這次死定了，我一定要逃走，以免被齊湣王發現我不懂吹竽。

敘事者：這個故事教訓我們如果沒本事的人試圖混入有持的人，以瞞騙他人，最終都會被人發現。

附件二：〈刻舟求劍〉工作紙

表現良好
excellent
吳善揮老師製作

中一級　中國語文科
閱讀能力　文言文學習　朗讀劇場(二)
篇章：《呂氏春秋‧刻舟求劍》

39 /40

姓名：＿＿＿＿＿＿（　）班別：＿＿＿＿＿＿

(一) 文本理解 (20%)

欣賞你認真的求學態度！表現良佳！

原文：

> 楚人有涉江者，其劍自舟中墜於水，遽契其舟曰：「是吾劍之所從墜也。」舟止，從其所契者入水求之。舟已行矣，而劍不行，求劍若此，不亦惑乎？以故法為其國與此同。時已徙矣，而法不徙，以此為治，豈不難哉？

1. 試根據文意，把以下文句譯為白話文。
① 楚人有涉江者 (3%)

有一個楚國人在渡江時 ✓ 2+1

② 舟止，從其所契者入水求之 (5%)

等到船停了，他就從記號處找劍水 5

2. 本文的寓意為何？試解釋之。 (6%)

該寓言著力勸勉為政者要明白世事轉變，若不知改革，就無法治國。後引伸成不懂變通、墨守成規的意思 6

3. 承上題，你同意本文的觀點嗎？ (6%)

我同意靈活變通這個觀點，因為香港是不可以只用金融業來發展，要用其他行業求發展，否則如果就沒法發展。6

可持續 1 Good!

吳善揮老師製作

(二) 劇本創作 (20%)

評分簡表

內容(8%)	文句(6%)	結構(4%)	字體標點(2%)
8	5	4	2

試根據以上篇章的寓意，撰寫一個為時約一分鐘的短劇，字數約 250 字。

1. 角色分配簡表

角色	敍事者	船夫	楚國人
同學姓名			

2. 劇本內容：

敍事者：有個楚國人在渡江時，不幸將他的佩劍掉到水裏去，然後他在船上刻了一個記號。

船夫：你為甚麼丟在船上刻了一個記號呢？

楚國人：因為我的劍是從這裏掉下去的，只要刻好，停筆了的時候就撐，我便可以下水尋回自己的劍。

敍事者：到了船要停的時候，他根據船上刻的記號去尋找，但他沒法找到。

楚國人：為甚麼沒法找到我的佩劍，我明明將劍掉在這裏的？

船夫：船是不會動嘅阿，水火不會在這裏的。

敍事者：最後我知道了我們是用舊法治理國家，就與這個人一樣，時代已經變了，但方法還不改變，用這種方法來治理國家，怎麼會不困難呢？

附件三：〈狐假虎威〉工作紙

狐假虎的逼真！

做得好！😊
吳善揮老師製作
excellent

中一級　中國語文科
閱讀能力　文言文學習　朗讀劇場(三)
篇章：《狐假虎威》

40/40

姓名：＿＿＿＿＿＿（　）班別：＿＿＿＿＿＿

表現極為優秀！

(一) 文本理解 (20%)

原文

　　虎求百獸而食之，得狐。狐曰：「子無敢食我也！天帝使我長百獸，今子食我，是逆天帝命也。子以我為不信，吾為子先行，子隨我後，觀百獸之見我而敢不走乎？」
　　虎以為然，故遂以之行。獸見之皆走。虎不知獸懼己而走也，以為畏狐也。

1. 試根據文意，把以下文句譯為白話文。

① 子無敢食我也！天帝使我長百獸，今子食我，是逆天帝命也。　(4%)

你是不敢吃我的，天帝派我來做百獸王。你現吃了我，便是非天帝的命令！ 4

② 獸見之皆走。虎不知懼己而走也，以為畏狐也。　(4%)

百獸大皆爭相逃命。老虎不懂得百獸是害怕自己才逃走的還以為是害怕的狐狸。 4

2. 你從本文之中得到什麼啟示？試解釋之。　(6%)

作者借這則寓言諷刺了人間那種依別人的威勢來其欺壓弱者的奸狡之徒，同時也藉以嘲笑那種被人利用卻蒙在鼓裏的愚蠢的強權者。 6

3. 試舉出一個現實的生活例子說明當中的道理。　(6%)

在學校裏，陳俊偉經常都借吳Sir的名字來欺騙老師，領到不用交堂。 6

他
└ 是真的嗎？哈哈！

吳善揮老師製作

(二) 劇本創作 (20%)

<table>
<tr><th colspan="4">評分簡表</th></tr>
<tr><td>內容(8%)</td><td>文句(6%)</td><td>結構(4%)</td><td>字體標點(2%)</td></tr>
</table>

試根據以上篇章的寓意，撰寫一個為時約一分鐘的短劇，字數約 250 字。

1. 角色分配簡表

角色	敍事者	虎	狐
同學姓名			

2. 劇本內容：

敍事者：在一個森林裏，有一隻老虎找尋各種野獸來吃。

老虎：為甚麼沒有食物啊？有一隻狐狸出現，等我衝過去吃了牠。

狐狸：啊……有老虎啊！

老虎：小狐狸快行過來，給給我吃。

敍事者：這個時刻，狐狸想到一個絕世好計謀。

狐狸：你是不可以吃我的！天帝派我來做百獸之王。你要是吃我，便是違抗天帝的命令！如果你不自信，那麼，我走在前面，你跟在後面，看看百獸見到我，有那個敢不逃跑的呢？

敍事者：於是老虎真是聽從狐狸的說話，而所有動物都見到牠們都逃跑，然而老虎就認為這個故事跟我們訴說諷刺了人間那種狐假虎威的人，藉譏諷那些恃勢凌人之徒，同時也藉此嘲笑那種被人欺騙卻懵然不知的愚蠢的領袖。

附件四：〈紙上談兵〉工作紙

吳善揮老師製作

中一級　中國語文科
閱讀能力　文言文學習　朗讀劇場(四)
篇章：《紙上談兵》

34/40

姓名：＿＿＿＿＿＿＿（　）班別：＿＿＿＿＿＿

(一) 文本理解 (20%)

表現不錯！

原文：

趙括自少時學兵法，言兵事，以天下莫能當。嘗與其父奢言兵事，奢不能難，然不謂善。括母問奢其故，奢曰：「兵，死地也，而括易言之。使趙不將括，即已；若必將之，破趙軍者必括也！」

趙括既代廉頗，悉更約束，易置軍吏。秦將白起聞之，縱奇兵，佯敗走，而絕其糧道，分斷其軍為二，士卒離心。四十餘日，軍餓，趙括出銳卒自搏戰，秦軍射殺趙括。括軍敗，數十萬之眾遂降秦，秦悉坑之。

1. 試根據文意，把以下文句譯為白話文。

① 嘗與其父奢言兵事，奢不能難，然不謂善。 (4%)

曾經和他的父親，趙奢談論兵事，趙奢都難不到他，但是並不去讚他。　4

② 趙括既代廉頗，悉更約束，易置軍吏。 (4%)

趙括代替廉頗以後全部變更軍法，輕率的任用軍官。　4

2. 你從本文之中得到什麼啟示？ 試解釋之。 (6%)

本文中的啟示是根據書談論軍事，比喻空發議論，不解決實際問題，不會隨機應變。　6

3. 試舉出一個現實的生活例子說明當中的道理。 (6%)

林暐然只會說不要做的小朋友，因為他欠交功課的時候會說「我明天帶」但是他明天是不會交。　4

1

吳善輝老師製作

(二) 劇本創作 (20%)

評分簡表

內容(8%)	文句(6%)	結構(4%)	字體標點(2%)
			2

試根據以上篇章的寓意，撰寫一個為時約一分鐘的短劇，字數約 250 字。

1. 角色分配簡表

角色	敘事者	趙括	趙括父	趙括母
同學姓名	盧駿軒	林祖麟	林旭中	鄧智朋

2. 劇本內容：

敘事者：在春秋戰國的時候，趙國被秦國攻打，而廉頗已經很老沒法再帶領軍隊，就在這時趙括出現。

趙括：我曾經和父親談論兵事，都是難不倒我。

趙括父：但是我並不會稱讚他。

趙括母：打仗是生死攸關的地方，而趙括太輕率的討論它，如果趙王不讓他當將軍就算了，如果一定要讓他當將軍，打敗趙軍的必定是趙括。

趙括父：沒錯

敘事者：當趙括變了軍法之後，輕率任用軍官，劉俊冠斷了趙軍的糧道，把趙軍一分為二，趙軍士氣不能統一。最終秦軍用箭射死趙括，秦國將趙國的人注埋坑。最終教導了我們是只會談論事，批衝座發議論不解決實際問題，不會隨機應變。

Teacher as the Change Agent: Implementation and Impact of a Learner-centered Approach in Teaching Argumentative Essays to Senior Secondary ESL Learners in Hong Kong

Kwun-hung Li
Caritas Tuen Mun Marden Foundation Secondary School

Abstract

Key themes in Applied English Linguistics include ESL writing and the quest for suitable instructional approaches. This article investigates the practicability of implementing a learner-centered approach in teaching argumentative writing to senior secondary ESL learners in Hong Kong. This article presents a quasi-experimental pretest-posttest classroom-based research study conducted by a front-line English teacher documenting the effects of utilizing a learner-centered approach on teaching argumentative essay-writing based on the learning needs stated in the initial needs analysis questionnaire filled by the experimental group. Subjects were 60 Secondary Five ESL students in a secondary school with mainly Non-Chinese Speakers in Hong Kong. By collecting quantitative data including the pretest and posttest scores and running descriptive statistical analysis, it was found that a learner-centered teaching approach enhanced learners' motivation and performance in ESL writing. Pedagogical implications are then discussed from the point of view of extending the learner-centered approach to teaching other ESL skills including reading, listening and speaking skills because a learner-centered approach seems to be beneficial to learners with low motivation and lower ability.

Introduction

(A) Background
     Learner-centered curriculum is a large area of investigation developed by various professional educators. However, according to the English Language Curriculum and Assessment Guide (2007), the main focus of curriculum development is on 'School based curriculum', of which schools are free to design their own approaches of teaching based on the general guidelines of the Education Bureau (EDB). Since this approach is still fresh and at the testing stage in education sector in Hong Kong, there is a need to test its validity in a practical manner before including other areas of ESL teaching and learning.

     Also, as most of the subjects are working adults who want to improve themselves and get good results in the public examinations, this learner-centered approach of learning may best suit them. As they are more mature, they could be able to identify their learning needs clearly and they can provide feedback to the teacher using this approach. This can facilitate the research in this area and hence provide possible suggestions for improvement of this program which can pave the way for further implementation of this program in other aspects of English language learning.

(B) Area of investigation
     Therefore, this research only applies on the writing part of ESL teaching. In this research, Several aspects on the implementation of learner-centered curriculum to local secondary school ESL students would be investigated, including:
1. Students' interest in ways of learning writing skills;
2. The impact of implementing a learner-centered approach of teaching on students' learning outcomes;
3. The impact of implementing learner-centered approach of teaching on students' motivation of learning.

Literature review

     The main focus for this research would be the implementation of a 'learner-centered curriculum'. The word 'implementation' refers to 'realization of an application, or execution of a plan, idea, model, design or specification, etc.' (Ellis, 1994, p.11), and this research study was to 'plan and design' as well as evaluate the learner-centered curriculum. According to Burton (1987), there are three main foci in a learner-centered curriculum. First, it focuses on the individual learner.

Second, the materials should be selected from various sources since the teaching methodology may not suitable for every student. Third, it focuses on how to train students to deal with practical needs in the society. The same view is shared by Nunan (1997, p.5) who views that this curriculum involves 'collaborative effort between teachers and learners since learners are closely involved in the decision-making process on the content of the curriculum'.

But before implementing such a curriculum, a needs analysis should be conducted in order to identify the 'language proficiency and literacy' of students (Ferris & Hedgcock, 2005). Needs analysis is common for teachers who teach English for Specific Purposes (ESP) as a tool to assess the needs and ability of students in different settings (Dudley-Evans, 1998). In a needs analysis questionnaire, there are mainly two parts—current situation and expected situation, assisted by some questions on how the students would like the teachers to conduct the course (Dudley-Evans, 1998). In this research, the types of questions will be set according to secondary school setting and focus on the writing part of English. Only the concepts of a needs analysis will be used but not the format of it because the questions should be set according to the junior students' level and so the language and format cannot be too sophisticated.

The questions in the needs analysis were set according to the content that was to be covered in the writing lessons and different methods of assessments and course design with reference to various journal articles. For example, in the needs analysis for this research, the first part of the interview was adopted from Dudley-Evans (1998)'s sample 'Pre-course information questionnaire' on the background information of participation in the course. Question 5 on students' knowledge on writing an essay is to check their understanding towards ESL writing skills. This is essential as suggested by Ferris & Hedgcock (2005), before the design of the course, teachers must know their understanding towards the target knowledge so that the teachers can develop the teaching materials accordingly. As for the expected situation part in the needs analysis, the questions on how the students like to learn writing skills was based on several concepts adopted from McGarrell and Verbeem (2007) and Reid (1993). McGarrell and Verbeem (2007) suggest that asking students to hand in drafts and provide instant feedback can draw the motivation for instant and 'substantive revision' so as to allow students to have chances to express their opinions quickly which enhance their learning and motivation to learn. The same view is shared by Reid (1993) that students would be more interested in revising their drafts in order to

present their better piece of work to the others and students would be more confident in their works if they are given chances to revise their work under suitable instructions.

According to Dudley-Evans (1998), every learner-centered course needs to have feedback and assessment in order to check if the course is conducted according to the needs analysis and whether it achieved the expected outcome of participants. Course evaluation for motivation change and understanding checking will be conducted at the end of the course, as suggested by Shin (2003), a 'reflective teacher' should not only keep a journal as a lesson record, but conduct course evaluation so as to evaluate on the lessons conducted and make improvement. Here, the authors of the article disagree with the concept of writing an entry at the end of course evaluation. This is not applicable to the current research as this research focus on learner-centered teaching, the teachers' own assumption may not help to improve the quality of the course and to evaluate the overall performance of students (Shin, 2003). Therefore, in the research, the end of course questionnaire has been set, apart from the end-of-unit writing.

Research questions

Set against the background that has been examined, the present study aimed to investigate the practicability of implementing a learner-centered approach in teaching argumentative writing to senior secondary ESL learners in Hong Kong. The specific research questions are:

1. What were the preferred ways of students in learning writing skills?
2. Would students be highly motivated if they can learn according to their own preference and needs?
3. Would students have a better understanding towards the subject matter and improve their academic results if they can learn according to their own preference and needs?

Research design and methodology

(a) Subjects
Students included 60 students from two Form 5 classes from a secondary school that mainly admits Non-Chinese Students (an Affordable International School) in Hong Kong. This school was selected on the basis of convenience and the writers' sufficient

knowledge and understanding with the students as the teacher-researchers have had nearly 5 years of contact with them. One class received the learner-centered approach of instruction while the other class received the teacher-centered approach. Both courses lasted for 4 lessons in 4 weeks. Each lesson comprised one hour.

(b) Procedures

The analysis started with students' essay writing. The two groups of students would write up one piece of essay with a given topic closely related to their life: the negative effects of playing computer games. The writing time was limited to 50 minutes and they were informed that this was part of a research study of educational purpose, but not to mention the pieces of writing would have no effect to their examination results in order to maintain their motivation. This test served the initial test for the research.

Questionnaires (Needs analysis) were then given at the beginning of the course as the foundation for further analysis. A set of questionnaires were distributed and the students were given 20 minutes to complete the questionnaire which included their learning behavior on English writing and the advice on their preferred way of learning. The questionnaire aims at collecting information of 1) Students' own ways of handling writing questions; 2) Students' preferred mode of learning; 3) Preferred content of learning materials. The questions are used to finding out the desired ways of learning to fulfill the needs of the students.

Sets of teaching material were developed according to the students' responses collected from the questionnaires. It is believed that a more learner-centered design for the materials would better arouse students' learning interest on writing.

The two groups of students were then divided into two groups: the experimental group and the control group. The experimental group was given instructions according to the materials with emphasis on students' opinions and preferences stated in the needs analysis questionnaires. To be exact, the material chosen were also 'suggestive' rather than 'definitive' (see appendix), acting as a model for teachers to develop their own variations, which is the nature of the learner-centred curriculum (Nunan, 1989); the other group would be taught in a more traditional or conventional chalk-and-board method without the implementation of a learner-centered approach. It is thought that the students' performances can be compared by using this format.

Yet, the school authority did not allow the video-taping of lessons in class. Therefore, in order to look at the situation of lessons, teacher's observation was used to serve this function. It is believed that since the first author of the article was the one who delivered the course, he would be more sensitive towards the understanding of students and their learning needs as well as their abilities.

Furthermore, 4 sets of interviews were conducted. There were 2 sets of individual interviews and 2 sets of focus group interviews, and all of them were based on the questions at the end of evaluation questionnaire (see Appendix 3). Participants of the focus groups were selected from the experimental group in order to have a better understanding on students' attitude towards the course. On the other hand, the participants of individual interviews were selected in a random basis from both the control group as well as the experimental group in order to gather feedback from both groups. Interviewing was selected as the research method because it was the appropriate method to understand students' thoughts in a greater detail. Further analysis would be taken by transcribing the recorded data.

Evaluation sheets were given to all students participating in the research study to obtain the feedback opinion of the students. It was designed in a questionnaire format with questions covering different aspects of teaching and learning in the implementation of learner-centered curriculum. This questionnaire aimed at obtaining a more comprehensive understanding of students' own personal reflection towards the introduced way of teaching.

After that, an end-of-unit test was taken. The teacher asked the students from both groups to complete another piece of writing which shared a same topic with the one before the research study. This procedure was believed to be able to provide evidence of students' progress after the implementation of learner-centered approach of teaching.

To sum up, the flow of the study could be expressed in a flow chart as follows:

Table 1.1
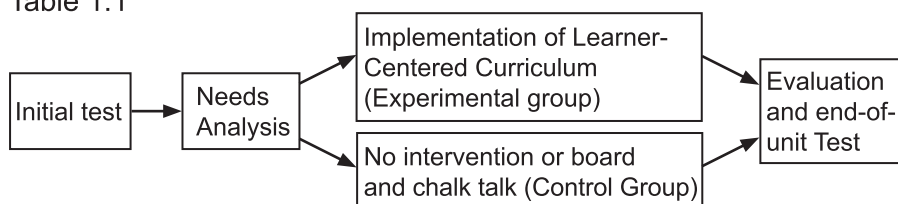
(c) Data analysis

In the post-course analysis, 4 sets of materials were used for the complete analysis in this project, namely: 1) Needs Analysis questionnaires, 2) teacher observation form, 3) initial and final test paper and 4) end-of-unit evaluation form.

The results of the needs analysis questionnaires would be processed right after data collection. The questionnaires were grouped and analyzed carefully. This would prevent the potential setbacks of qualitative analysis of being subjective in the process of analysis.

The initial and final test papers were used to identify students' abilities and performance before and after the course.

Teacher observation forms were used to analyze student's motivation throughout the lessons in both the experimental and control groups. Teacher noted the class atmosphere as well as students' responses when delivering lessons with sets of materials that were suggested by the students in the questionnaire.

Students' writings were analyzed and evaluated with the marking scheme of HKDSE writing rubrics. The results were analyzed from the following aspects, including the structure of writing, the organization of writing and forming ideas. The rubric was important to assess students' performance as well as the impact of implementing the learner-centered curriculum to the experimental group.

The end-of-unit evaluation forms were used to cross-check students' motivation and learning atmosphere as stated in the teacher observation form. Questions consisted of their perception on writing after receiving the learner-centered approach of teaching and their knowledge on writing argumentative essays after the course. These kinds of knowledge testing could also cross-check the validity of the improvement or performance in the initial and post course writing test.

Results and discussion

(a) Needs Analysis

The aim of this analysis was to identify students' needs and their learning behaviour in English. The format of this needs analysis was modified from the needs analysis form in Teaching ESL Writing (Reid, 1993) because of its comprehensiveness. This kind of needs analysis also serves the function of knowing what we did not know,

not wasting our students' time, appearing much more professional and knowing how we should analyse the data (Reid, 1993). On the other hand, other than these, another crucial point of using this analysis is that whenever data is being collected, is to know beforehand what will happen to the raw data and to the information derived from it. Therefore, a further discussion can be facilitated in the later part of this research to serve this purpose. There were altogether 60 forms received (30 from control group and 30 from experimental group).

Here are some of the important questions stated in the questionnaire and their results:
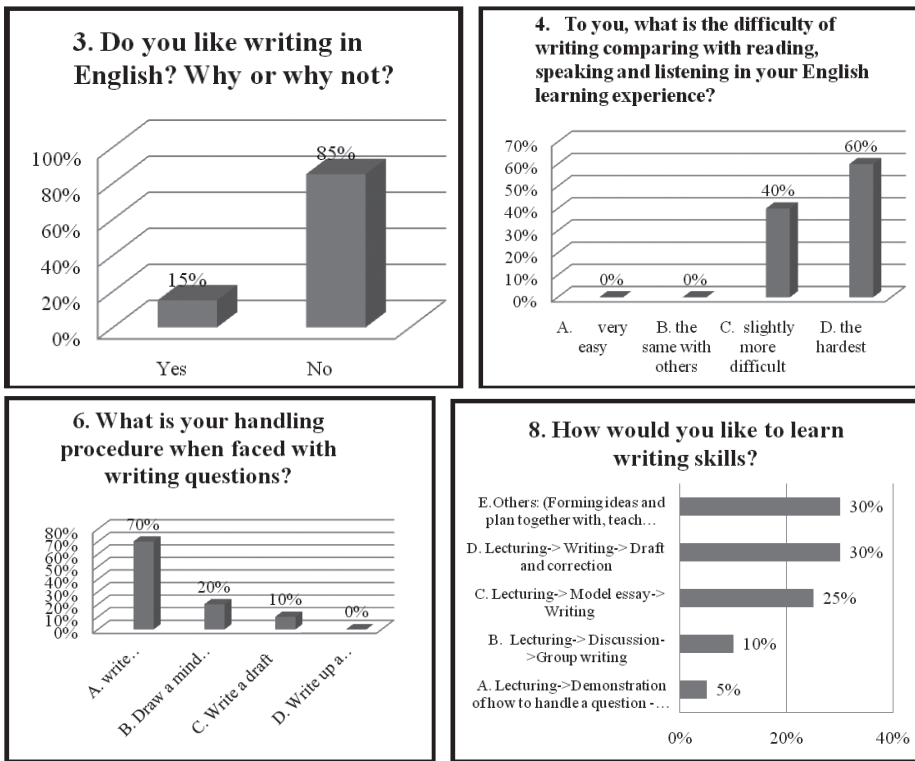
From the above results, it is suggested that students had more anxiety in writing in English than other aspects in learning English. They had very limited chances to learn English apart from the English lessons. They also regarded English as a tool only for their career and many of them did not truly want to learn English for interest. Moreover, most of the students wanted to improve their forming ideas in writing essays as well as organization. They may have already realized that it would be hard to improve their language within a short period of time. Judging from their learning behavior, it is suggested that students in general had very limited exposure in learning English through visual

aids and they seldom had the chance to develop ideas with teachers directly.

(b) Initial test (Without giving grades)

After the needs analysis questionnaires, students were given the initial test. The assessment rubric was Grammar, Organization and forming ideas. The topic was 'Physical Education should be made compulsory in schools'. After the extensive marking of the test, both groups were proven to have similar abilities. Students had weak understanding on the structure of an argumentative essay and they lacked language abilities and ideas to express themselves in the essay.

(c) Teacher Observation (Delivery of the course)

Instruction for the control group with teacher-centered approach: Students in this group were quite shy in answering questions asked by the teacher, like what the model essay was about. Some students lacked motivation as they were just given structured notes, a draft paper and model essays. Some of them gave up the lesson and did something else in the lesson which may cause behavioural problems at the same time.

Instruction for the experimental group with learner-centered approach: Students were attracted by the PowerPoint slides possibly because of the visual impact. Also, students were more willing to answer questions. Some students even copied down the points that the first author of the article made in analyzing the model essays. Moreover, they took the initiative to ask questions in Cantonese like repeating the main points that the first author had advised to seek confirmation. It is obvious that students were more motivated in attend the experiential lessons.

(d) End-of-unit test

The aim of this test was to test the effectiveness of the approach and compare the results of students receiving different teaching approaches. A question with the same format as the initial test was given to students as the End-of-unit test. It is because the results could hopefully be easier to compare if the format (elements) of both tests are the same.

Experimental Group: Most of them did improve when compared with the initial test. But those that under-performed in the initial test
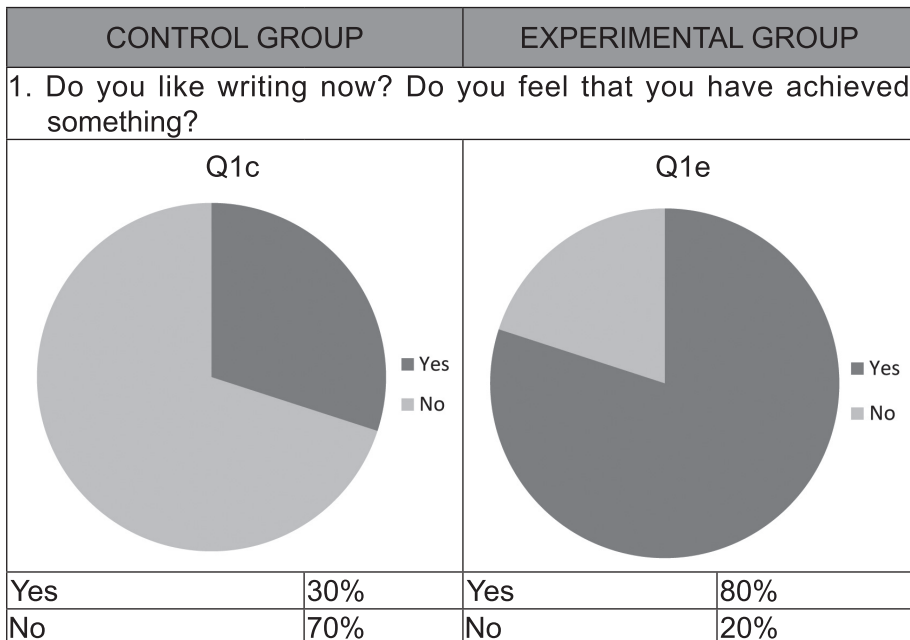
attained greater improvement and the quality of their pieces kept up with the rest of the class. It may be because the teacher provided face-to-face support in forming ideas and drafting essays so that they were motivated to write something for the sake of the public exam later on. For those students who performed better in the first test, probably because they lacked grammatical accuracy and sentence forming skills and this course mainly focused on the organization and forming ideas in writing essays, according to the needs analysis.

Control Group: Students' performance was as expected. Students improved in terms of organization and forming ideas, but for the low achievers in the first test, it seemed that they did not have improvement, probably because they lacked motivation or the lessons were too boring for them, such as examining the model essays with lecturing and some planning.

(e) End-of-unit evaluation
The aim of this evaluation was to evaluate and cross-check the effectiveness of different teaching approaches through receiving written feedback from students apart from the test. There were altogether 60 forms received (30 from control group and 30 from experimental group).

Here are some of the results:

CONTROL GROUP		EXPERIMENTAL GROUP	
1. Do you like writing now? Do you feel that you have achieved something?			
Q1c		Q1e	
Yes	30%	Yes	80%
No	70%	No	20%

CONTROL GROUP	EXPERIMENTAL GROUP
2. What areas of writing would you like to know more about after completing the unit of lessons?	

Q2c		Q2e	
Sentence forming	70%	Sentence forming	50%
Grammar	30%	Grammar	50%

CONTROL GROUP	EXPERIMENTAL GROUP
3. Do you find the teaching methods and content used by the teacher help you to understand more on writing an essay? Why or why not?	

Q3c		Q3e	
Yes, provide good model and they are useful	60%	Yes, because it is interesting	70%
No, it is boring	40%	Yes, it is useful	30%

CONTROL GROUP	EXPERIMENTAL GROUP
4. Please write down your understanding of argumentative essay again at the best of your knowledge.	

Q4c

Q4e

A. Discuss things on two sides	20%	A. Talk about things on both sides	40%
B. Can you tell me once more	20%	B. Persuade the others	40%
C. Introduction, body and conclusion	20%	C. Don't know	20%
D. I don't know	40%		

CONTROL GROUP	EXPERIMENTAL GROUP
5. Do you want to have the similar teaching methods applied to other areas of English like reading, speaking and listening?	

Q5c

Q5e

Yes, it is similar to what we learnt before	80%	Yes	100%
Leave it blank	20%		

CONTROL GROUP		EXPERIMENTAL GROUP	
6. Can you suggest some ways to improve the course?			
Q6c		Q6e	

No	100%	More model essays	20%
		More vocabulary items	40%
		No	40%
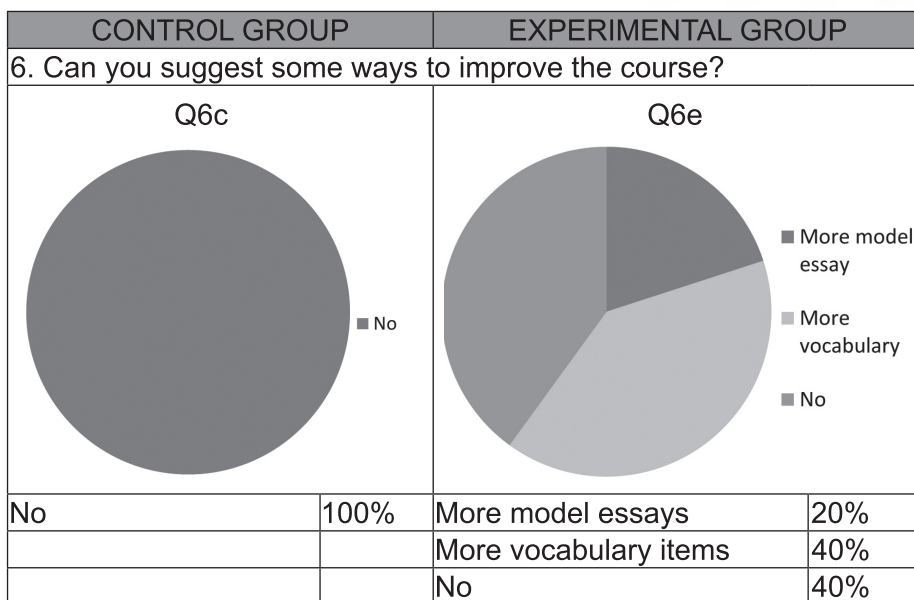
Experimental group: Students viewed that the new (learner-centered) approach of teaching writing was quite successful although they did not show a sheer 'passion' in writing right after the lesson. The PowerPoint slides grabbed their attention and they were more confident in writing the piece of essay with teacher guidance in essay planning and forming ideas.

Control group: Students viewed that the conventional (teacher-centered) approach was generally okay and the approach was similar to what they faced when they were in the daytime secondary schools. However this approach was quite boring and some of the students were playing cards at the back of the classroom. They did not think their interest in writing would be enhanced after that writing lesson.

Both groups had a rough idea on what an argumentative essay was and they deemed that they could handle the next piece of essay with what they have learnt in the lesson.

Conclusion

The results show the success of the implementation of a learner-centered approach in helping students improve the writing performance in argumentative essays. The first author developed materials with reference to students' preference in the needs analysis.

The teacher-researcher then delivered the materials and jotted down his observation in class. Later, the teacher-researcher evaluated the effectiveness of this course through an end-of-unit test and evaluation forms. Generally speaking, students had greater improvement in both learning motivation and performance after receiving the learner-centered instructional approach, as shown in the evaluation forms and end-of-unit test scores. Therefore, the pedagogical implications will be to extend the learner-centered approach to teaching other ESL skills including reading, listening and speaking skills because a learner-centered approach seems to be beneficial to learners with low motivation and lower ability.

Yet, it should be noted that the dynamics and culture of the two classes may affect the validity of this test. The experimental group students were generally more willing to learn and the atmosphere was more welcoming while the control group students were more susceptible to the lack of learning interest and they tended to be more reticent. Therefore, when implementing this approach, the teacher may need to take into consideration of the classroom dynamics whether this approach will be suitable for different learners. This needs further research by frontline ESL teachers and teacher-educators.

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Appendix 1

Initial Test: Writing task
Time limit: 1 hour

Situation: You are Chris Wong, a student of Happy Secondary School. Since you are one of the top students in the school, your teacher asks you to write an essay on **'Physical Education should be made compulsory in schools'** and you essay will be posted on the main notice board at school in order to let other students see how clever you are. Write an essay on that topic with no more than 250 words

Appendix 2

Need Analysis on writing an essay in junior secondary level

Part 1 Current Situation

(A)Background knowledge
1. How much time do you spend on English every day? Please circle the answer.
   A.0-2 hours   B. <2-4 hours   C. More than 4 hours

2. Do you like English? Please circle the answer.
   |------------------------|--------------------------|---------------------------|
   Love   Like   Fair   Hate

3. Do you like writing in English? Why or why not?
   _____

4. To you, what is the difficulty of writing comparing with reading, speaking and listening in your English learning experience?
   A. It is already very easy
   B. B. I think it is just the same with the others
   C. It is slightly more difficult than the others
   D. It is the hardest one among the others

(B) Operational questions
5. Do you know what any essay is? What is the structure of it? Please write down your understanding at the best of your knowledge.
   _____
   _____

6. What is your handling procedure when faced with writing questions?
    A. Write immediately (just write what you think instantly)
    B. Draw a mind map and then write accordingly
    C. Write a draft on another paper and then copy it into the answer book
    D. Write up a structure of the essay on another paper first and then write a full text on the Answer book with complete sentences and ideas.

Part II Expected situation:

7. Which part of writing do you want to improve more?
    A. Organization
    B. Language structure and usage
    C. Ideas forming

8. How would you like to learn writing skills?
    A. Lecturing→ Demonstration of how to handle a question → Writing
    B. Lecturing→ Discussion →Group writing
    C. Lecturing→ Model essay → Writing
    D. Lecturing→ Writing → Draft and correction
    E. Others: (Please specify)
    _____

9. Mode of instruction that you preferred: you can circle more than one
    A. Chalk and board
    B. PowerPoint slides
    C. Games
    D. Video Clip on how to learn writing skills

Appendix 3

End of unit evaluation

1. Do you like writing now? Do you feel that you have achieved something?
    _____

2. What areas of writing would you like to know more about after completing the unit of lessons?
    _____

3. Do you find the teaching methods and content used by the teacher help you to understand more on writing an essay? Why or why not?
   _____
   _____

4. Please write down your understanding of argumentative essay again at the best of your knowledge.
   _____
   _____

5. Do you want to have the similar teaching methods applied to other areas of English like reading, speaking and listening?
   _____

6. Can you suggest some ways to improve the course?
   _____
   _____
   _____

Appendix 4 Teacher Observation Form

	Control Group	Experimental Group
Attentiveness	In these 4 lessons, students were not very attentive. Some of them ignored the instruction of the teacher and did their own things. Maybe the lessons are too boring, some mature students were too tired to be attentive throughout the lesson. Sleeping is common among them.	Since Visual Aids were used, students were quite attentive. Some of them sit straight throughout the lesson. When they were asked to participate in in-class activity, they were more willing to do it. Some students from other classes even join our lessons and become sit-in students.
Taking initiative to learn	Students in general are quite shy. They simply did not take initiative to learn actively and simply wait the teacher to spoon-feed knowledge to them.	Students were more active in answering questions raised by the teacher. Some of them even take the chance to ask questions and jot down important points that were made by the teachers.

To know is not to use: The gap between students' productive vocabulary knowledge and their actual use in free writing

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Abstract

One major goal of vocabulary learning is to empower learners to use selected words whenever they need. However, there seems to be a phenomenon that some learners possess the necessary productive word knowledge, such as spelling and grammatical features of the target words, but still find it difficult to use the words correctly. This piece of research reports the process of identifying the potential developmental gap between knowing a word and using it in writing. It involved 12 Form 6 students from a local secondary school using English as the medium of instruction. They completed the Productive Vocabulary Levels Test which measured their productive word knowledge, and the results were adjusted and compared with the lexical profiling of their four pieces of writing for investigating if the words used by the learners belong to: (1) high frequency K2 words (i.e., the second most frequent 1,000 words in English); (2) mid frequency K3 words (i.e., the third most frequent 1,000 words); or (3) low frequency K4-K5 words (i.e., the fourth and fifth most frequent 1,000 words). In order to find out whether these two measures revealed a difference between knowledge and usage, a correlation test was first performed. Results confirmed that knowledge and usage were two different concepts. A follow-up t-test comparing the expected and actual proportion of use showed a significant difference with

high frequency K2 words, but not K3 and K4-K5 words. We argued that there was a gap between knowing and using a word as well as students' strategy to opt for lower frequency words. Pedagogical implications are discussed in relation to how teachers can assist learners in bridging this gap.

Introduction

Vocabulary is an essential part of language learning. In the case of receptive skills (i.e., reading and listening), studies have demonstrated that a foreign language user needs to know a high percentage of the words within a piece of text in order to gain adequate comprehension (e.g., Hu & Nation, 2000; Laufer, 1998; van Zeeland & Schmitt, 2012). This percentage of words known by foreign language users out of the total number of words in the text is termed lexical coverage (Adolphs & Schmitt, 2003). For example, when the lexical coverage for a learner is 80%, it means that s/he knows 80% of the words in the text.

Hu and Nation (2000) used non-words (i.e., words that do not exist) to replace real words in fiction texts in order to mimic language learners' encounter of unknown words. The researchers created four levels of lexical coverage (i.e., 80%, 90%, 95% and 100%). That is, in the case of the 80% lexical coverage, 20% of the real words were replaced by non-words (e.g., 'rane'). In other words, it was expected that out of all the words of the text, 20% were unknown to the participants prior to the study. Participants were asked to read the text and complete a 14-item comprehension test in the format of multiple choice questions. Adequate comprehension was defined as being correct in at least 12 items (i.e., 86% of 14). Results showed that none could attain adequate comprehension at 80% lexical coverage; and only 4 out of 16 (25%) and 6 out of 17 (35%) passed the comprehension threshold at 90% and 95% coverage respectively. It was only when the coverage reached 100% that the majority (15 out of 17) showed adequate comprehension in the test. From these figures, the authors suggested that the lexical coverage threshold for adequate comprehension should be between 95-100%, and hence proposed the figure of 98%.

One of the key implications about this figure is that researchers can enumerate the number of words a learner needs to understand authentic texts and set a pedagogical goal for vocabulary learning. For example, van Zeeland and Schmitt (2012) suggested that a learner

needs to know 2,000 to 3,000 words based on a 95% coverage figure in order to understand spoken text. When the calculation was based on a 98% coverage figure, an understanding of 6,000 to 7,000 words was required.

For language teachers in Hong Kong, the question is whether or not this target is achievable as most of their students learn English as a foreign language. One problem is that the goal of language learning is not confined to comprehension. Helping them to use the language (i.e., to speak and write to express meaning) with proper vocabulary is also an important target. Vocabulary knowledge can be receptive (or passive) and productive (or active) in nature (Pignot-Shahov, 2012). This distinction is closely related to the question of what it means to know a word. To address the issue, Nation (2013) identified three aspects in this connection. The first aspect is knowledge of a word's form such as its written form (i.e., spelling), spoken form (i.e., pronunciation), and its word parts (e.g., prefixes like pre-). The second aspect is the understanding of its meaning, including the concepts and/or referents that the word refers to, as well as its associations with other words, such as 'good' being an antonym of 'bad'. The last one is the knowledge of its usage, namely its grammatical features (e.g., parts of speech), collocations and other constraints on use. The mastery of the first two aspects (i.e., form and meaning) would suffice for comprehension purpose. An understanding of the third aspect (i.e., use) is essential when one needs to produce language in a sensible manner. As a result, there appears to be a gap between receptive and productive knowledge. Indeed, using their Computer Adaptive Test of Size and Strength (CATSS), Laufer and Goldstein (2004) confirmed that receptive vocabulary is generally larger than productive vocabulary of an individual, and that the gap is likely to be a difficulty hierarchy.

The logical question in practical and pedagogical terms is how a teacher could bridge this receptive-productive gap. Lee and Muncie (2006) asked their participants to read a text on Titanic, the British passenger liner that sank in the Atlantic in 1917. The text contained 42 words or lexical phrases that were explicitly taught as novel vocabulary items. After that, the participants completed a writing task in which they had to describe a hypothetical experience on Titanic. The participants used only as few as 18.4-20.9% of those target vocabulary items in this piece of writing. This result is taken as evidence that reading and explicit vocabulary instruction alone cannot lead to satisfactory vocabulary use. In another attempt, the researchers asked students to

write on the same topic again. This time, the author provided students with scaffolds of a composition structure frame which helped the students focus on the target vocabulary. More than that, the target items were listed for the students, and the students were explicitly encouraged to use the target items in their writing. In this writing, the use of target vocabulary augmented to 67.5-68.7%. In the third attempt after two weeks, the scaffold was still the writing frame. Students were asked to recall the items and write them down before they started to write (instead of being able to refer to the items listed for them). This time, students produced 50.5-63% of the target items.

In a similar vein, Lee (2003) asked her participants to write about cruel sports after reading a passage on bull fighting and receiving explicit instruction on the target vocabulary items. The participants were able to produce 63.2% of the target vocabulary items in the passage that they had learnt. This percentage was compared with 13.2% of use before the vocabulary instruction. From these two studies, it may be concluded that post-reading vocabulary instruction, explicit scaffold, provision of the items as well as encouragement to use the target items could encourage students to use newly learnt vocabulary items in their production.

These studies have brought about two issues. First, two reasons could account for failure to use the target items in writing -- (1) the learners had not actually learnt the items; and (2) the learners have learnt the items but did not use them. The existence of these two possibilities makes the case obscure in the sense that teachers/ researchers may find it difficult to pinpoint specifically what caused students' failure to produce the target items.

Another issue that requires attention is that in both studies, the participants were asked to write on a topic that was very closely related to the vocabulary instruction that they had received. In the case of Lee and Muncie (2006), both the reading text and the writing task were about Titanic. Similarly, Lee (2003) had bull fighting as the topic of the reading, and cruel sports as the writing theme. On one hand, using a similar theme may offer a better context for the learners to try out with the newly learnt vocabulary items. On the other, it is not entirely clear if the learners could produce those target items in another novel context. This uncertainty is particularly important because, after all, one major goal of vocabulary learning is to empower students to use the items freely so that they are able to use the words to express themselves as they wish. In other words, these items should be readily available whenever they need them.

If the ability to produce the newly learnt vocabulary across various contexts is an important goal of teaching vocabulary for production's sake, it implies that there might be multiple levels of productive vocabulary. This notion may address a key problem which affects language teachers in Hong Kong who are used to assessing their students through different formats of vocabulary tests. Students may excel in vocabulary tests in the formats of dictation, fill-in-the-blanks and so on, showing all Nation's (2013) aspects of vocabulary knowledge of a word, such as spelling and grammatical features. However, they may still find it difficult to demonstrate a wide range of vocabulary use when they speak. It is, in fact, likely that many language teachers have been asked by students how newly learnt vocabulary could be used in everyday life.

To answer such a question, it is essential to first empirically identify such a gap between general productive knowledge and the ability to use these vocabulary items. It is only after such a gap is identified that teachers and researchers could look for ways to bridge this gap. Some may comment that this gap is commonly known, implying that teachers should notice students' problems of not being able to produce newly learnt lexical items. While we feel reluctant to agree totally, we acknowledge that some teachers may have a subjective impression from their experience, that knowing a word does not mean using a word. At the same time, we maintain that empirical identification is necessary. As far as we know, no study has specifically documented this final stage of vocabulary development. One of the many reasons why such a gap is merely taken for granted by many is that the measures of general productive knowledge and actual use are often two separate vocabulary measures that researchers employ as dependent variables. For example, looking at the vocabulary size of students in Chinese- and English-medium schools, Lo & Murphy (2010) used both measures without comparing them directly. The present study aims exactly at this comparison, and argues for the importance of bridging the gap between knowing and using vocabulary, once it is identified.

Methodology and Procedures

The participants in the present study included 12 Form 6 students in a local secondary school using English as the medium of instruction in most content subjects, such as Geography and History. These students were recruited from the same Form 6 class whose teacher the researchers of this study had personal contact with. All participants

were native speakers of Cantonese, and had learnt English as a foreign language for at least 11 years (6 years of primary and 5 years of secondary school at the time of participating in this study). These students were expected to sit for the Hong Kong Diploma of Secondary Education (HKDSE) Examination.

The Productive Vocabulary Levels Test (PVLT) (Laufer & Nation, 1999) was used to measure the general productive vocabulary knowledge of the participants. It requires test-takers to provide a vocabulary item in a given context presented in a sentence. Therefore, it is a test of controlled productive vocabulary knowledge in that test-takers are prompted to offer a word that fits into the context provided. This format of testing also echoes with the assessment practice of some local teachers who give fill-in-the-blanks exercise to students. Therefore, the findings of this test may be of particular relevance to local teachers in Hong Kong. There are two versions of the PVLT, but only Version 1 was used in this study lest doubts might be cast on any potential differences between the two versions. Two examples are given to illustrate the format of the test. They are used to elicit the target words 'hungry' and 'usual'.

1.They sat down to eat even though they were not hu_____.
2.This work is not up to your usu_____standard.

Note that the initial letters of the target words are always given so that test-takers could not insert a word other than the target word that might also be semantically appropriate in the context.

The way in which this test could determine one's productive vocabulary size is based on the frequency of occurrence of the target words in English as represented by the British National Corpus. This corpus contains a huge collection of authentic English texts, from which the frequency of occurrence is determined. The most frequently occurring 1,000 words in English are known as K1 words; K2 words are the next 1,000 words in the line of frequency; and K3 words the next 1,000 words and so on. In the examples above, 'hungry' and 'usual' are K2 words. For each level, there are 18 questions in the PVLT. Three levels were used in this study, K2, K3 and K4-K5. Laufer and Nation (1999) combined K4 and K5 into one level (i.e., K4-K5) for easier and more practical assessment of knowledge about these relatively low frequency words. With three levels used, the total score for the test in this study was 54. The items were pseudo-randomised using Microsoft Excel's RAND function which assigns a random

number to each item (one could type '=RAND( )' in any cell). The random numbers were sorted in ascending order to determine the order of the item presented in the actual test taken by the participants. The test was administered by the teacher of the class.

Within a month after the administration of the PVLT, four writing samples were collected from each student. The task requirement and the format resembled those in the questions in the HKDSE. The themes and genres are tabulated below (Table 1). Writings 1 and 2 were assigned as homework for students, and Writings 3 and 4 were parts of the students' formal assessment at school, which were timed. Participants could choose to write on one of the questions in Writings 3 and 4.

Table 1: The themes and genres of the writing tasks

	Theme	Genre
Writing 1	Walkathon	Expository in a poster
Writing 2	An artist and her exhibition	Feature article in a school newspaper
Writing 3 (participants are asked to choose one)	An outstanding student award	Nomination
	Hip-pop dance performance	Promotional leaflet
	Teenagers fighting for a girlfriend	Recount in a school newspaper article
Writing 4 (participants are asked to choose one)	Goal setting	Speech
	Popular culture	Magazine article
	Social harmony	Letter to the Editor

Results and Discussion

In this section, results obtained from the PVLT are first presented, followed by those of the free writing tasks. Recalling that the former is a measure of general productive knowledge and the latter one of actual productive use, this paper seeks to compare the findings from these two measures to shed light on the hypothesized discrepancies of the two levels of productive knowledge.

The PVLT consisted of 18 questions at each level of K2, K3, and K4-K5 words. One mark was given for every correct item. The marking of the test did not take grammatical accuracy into consideration. For example, when the word 'attached' was required, members in the same word family such as 'attach' and 'attaches' were also accepted. In other words, all inflected forms of the words belonging to the same word family were counted as correct. Although grammatical features of a word are part of word knowledge, the PVLT was treated purely as a test of vocabulary instead of a test of grammar in this study. Another rationale is related to the validity of comparison between the PVLT and free writing tasks in that grammaticality was also discounted in the corresponding measure of the students' free production. As Table 2 indicates, the 12 students who took the PVLT showed a huge variation in their productive vocabulary knowledge. Students showed a decreasing score from K2 through to level K4-K5. This was not surprising because the higher the level, the lower the frequency of the words used in everyday language and hence the more unlikely that students would have got exposed to them.

Table 2: Results of PVLT

N=12	K2 (max= 18)	K3 (max= 18)	K4-K5 (max= 18)	Total (max= 54)
Mean (SD)	12.75 (2.56)	8.92 (3.48)	4.58 (3.09)	26.25 (8.31)

Students were also asked to write four essays of 200-500 words each. Their work was then typed onto the computer. Some of the content words which had been given as prompts were removed so that the remaining words were only those given by the students instead of being copied from the questions. Incidentally, quite a number of students started their essays with a large number of words copied from the questions. The processed text was input to the Vocabulary Profilers (available on www.lextutor.ca/vp) for their analysis of their lexical frequency profiles (LFP). Table 3 shows the total number of words in the students' four writings, in their respective frequency levels of K2, K3, and K4-K5. Again, it was not surprising to find a decreasing number of words used by students as the frequency levels went up. In fact, it is normal for low frequency K4-K5 words to appear less frequently in a text given that it is their low frequency of existence in English that defines them as words at the K4-K5 level. Although this trend does echo with the results of the PVLT, we still need a valid comparison to identify the potential differences between the two measures.

Table 3: Lexical frequency profiles of the free writing tasks

N=12	K2 words	K3 words	K4-K5 words	Total number of words
Mean (SD)	107.08 (29.60)	45.67 (22.45)	17.83 (11.27)	1500.17 (237.00)

This paper compares students' PVLT scores and their free writing in order to identify whether there is a difference between general productive knowledge and the actual productive use of vocabulary. To this end, the PVLT score was computed according to the following formula so that it could be compared directly with the corresponding measures in free production.

PVLT score	X	Adjustment factor	=	Expected production

An expected proportion of production was thereby obtained for each participant and for each lexical frequency level. For example, a student (S1) knew 16 K2 words. The knowledge of these 16 K2 words represented 50% of the total of 32 marks he scored in the PVLT (i.e., all K2-K5 words that he knew). Then, this 50% was multiplied by the adjustment factor for K2 words, which is 1.4 (the calculation of the adjustment factor is described below). As a result, the expected production rate of K2 words in his free writing would be 50% X 1.4 = 70%. In other words, for every 100 K2-K5 words that he used, 70 K2 words were expected. This expected production could then be compared with his actual production in free writing as reported in the previous section.

The following explains how the adjustment factors were obtained for each level. First, the production of native speakers was considered to be a useful reference point. Corpus data (i.e., data from a huge collection of authentic texts written by native speakers) are of use here. According to Nation (1990: 17; 2001: 15), K2 words have a natural occurrence of 7.7%; K3 words 4.3%; K4-K5 words 4.6%. To put it in another way, there are on average 7.7 K2 words in every 100 words in any authentic texts. Note that these three percentages do not add up to 100% because there are also K1 words as well as K5+ words in a corpus. Rather, K2-K5 words account for only 16.6% of words in a corpus (see Figure 1 for a visual representation of these numbers). Out of this 16.6% of natural occurrence (i.e., K2-K5 words

only), K2 words have a proportion of 46.4% (7.7%/16.6%); K3 words 25.9% (4.3%/16.6%); and K4-K5 words 27.7% (4.6%/16.6%) (see Figure 2 for a visual representation). Given that a native speaker would have a full PVLT score of 100% (33.3% of the items from K2 words, 33.3% from K3 words, and 33.3% from K4-K5 words), an adjustment factor for K2 words would then be 1.4 (i.e., 46.4/33.3). It means that if a learner knows a proportion of 33.3% K2 words out of all K2-K5 words that s/he knows in the PVLT (e.g., knowing 10 K2 words and 30 K2-K5 words in total, or knowing 8 K2 words and 24 K2-K5 words in total), we expect 33.3% X 1.4 = 46.4% of his free writing production to be K2 words. By the same logic. The adjustment factors for K3 and K4-K5 words are 0.78 (i.e., 25.9/33.3) and 0.83 (i.e., 27.7/33.3) respectively (Table 4). However, this calculation was only valid if we could assume that native speakers know all of the K2-K5 words in the PVLT. Such an assumption should be valid because when Laufer and Nation (1999) designed the PVLT, native speakers were first asked to validate the test and the results indicated that all the items of the PVLT were retrieved accurately by at least six out of seven of them.

Proportion of occurence of all levels

K6+, 10.10%
K6, 1.30%
K5, 1.90%
K4, 2.70%
K3, 4.30%
K2, 7.70%
K2 - K5 16.6%
K1 72%
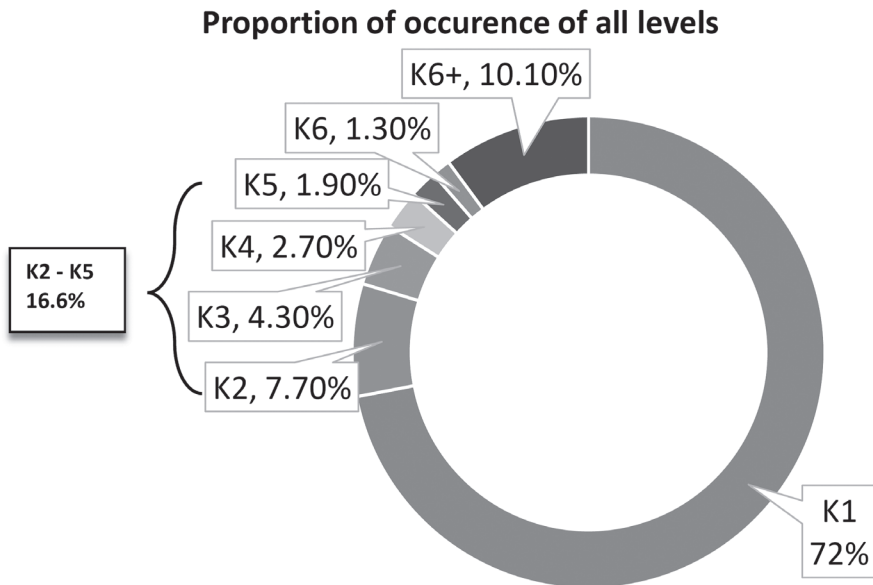
Figure 1   Proportion of natural occurrence of words at different levels
             based on Nation (1990: 17; 2001: 15)

Figure 2   Proportion of natural occurrence of K2-K5 words

Table 4 Calculation of adjustment factors for all levels based on native
speakers' production

Levels	Natural occurrence with K2-K5 (%)	PVLT by native speakers (proportions of words known in each level out of K2-K5 levels)	Adjustment factor
K2	46.4	33.3	= 46.3/33.3 =1.4
K3	25.9	33.3	=25.9/33.3= 0.78
K4-K5	27.7	33.3	=25.9/33.3=0.83

The computation of the PVLT score with the use of the adjustment factor has a number of advantages. First, as mentioned earlier, the low frequency words should be, logically, more unlikely to appear in an essay. In other words, because low frequency words are by definition less likely to appear in any texts, expecting students to use them may be problematic. For example, 'abolish' is a K5 word. It has a frequency of 545 occurrences in a million-word corpus. Therefore, it would be erroneous to assume that 'abolish' should appear (at least once) in a student's writing containing fewer than 500 words. In a similar vein, one cannot claim that students knowing

a certain proportion of low frequency words would produce the same proportion of such words actual writing. Therefore, it was considered appropriate to use an adjustment factor to ensure that the rareness of low frequency words is taken into account in the present comparison. Furthermore, the calculation of the adjustment factors also considered how native speakers actually use language. This was important because to some, at the very least, using English in a similar way to the native speakers may be one of the goals of learning the language. Finally, this way of calculation has also taken into account the 'imperfect' vocabulary knowledge of our learners at different frequency levels of K2-K5.

In sum, an adjustment factor helps to translate the PVLT scores (i.e., general productive knowledge) to an expected proportion of occurrence in free writing. For high frequency K2 words, the adjustment factor is 1.40 (46.4/33.3), with the proportion of 33.3% of the PVLT score translating into 46.4% of expected occurrence in free production. For mid frequency K3 words, the factor is 0.78 (25.9/33.3); for low frequency K4-K5 words, the factor is 0.83 (27.7/33.3).

Turning to our participants in this study, we can now calculate the expected percentage of words in the respective K2-K5 levels in a piece of free writing, which can then compared with their actual production as reported in the previous section (Table 5).

Table 5: Comparison of expected and actual production of word families in different levels

N=12	K2 (%)		K3 (%)		K4-K5 (%)	
	Expected (PVLT X 1.4)	Actual	Expected (PVLT X 0.78)	Actual	Expected (PVLT X 0.83)	Actual
Mean	70.45%	61.59%	26.28%	27.66%	13.27%	10.75%

Meanwhile, a similar trend between expected and actual production was observed in that students were expected to produce mostly K2 words, followed by K3 and finally least K4-K5 words, and they have seemingly done so in the free writing tasks. Therefore, it appeared that students' knowledge of words could be well put to actual use. This might seem contrary to the notion that there are differences between knowing a word and using a word. However, it would be too soon to arrive at a conclusion before conducting statistical tests, which could help us identify potential statistical relationships between the data.

First, we wanted to look more closely into the relationship between expected and actual use of vocabulary and identify any potential correlation. Pearson's correlation test can help us find out whether these two variables were so closely related to each other that they might be considered one single concept. If a positive and significant correlation is found, it would mean that the expected and actual use of vocabulary generally increase and decrease together. If this is the case, it will suggest that general productive vocabulary knowledge and actual use are likely to be very similar concepts and follow the same developmental pattern. In contrast, if knowledge and use are two different concepts, and hence follow different developmental patterns, negative or no correlation would be expected, meaning that the data increase and decrease in opposite direction, or that they have no linear statistical relationship at all. Shapiro-Wilk tests confirmed that the data fulfilled the normality requirement for the performance of the Pearson's correlation test (all p-values n.s.). The results are presented in Table 6.

Table 6: Pearson's correlation test results

N=12	K2 words	K3 words	K4-K5 words
Correlationn between expected and actual production	r = .098	r = -.332	r = .181
Significance value	p = .763 (n.s.)	p = .292 (n.s.)	p = .574 (n.s.)

All the correlations were non-significant in statistical terms. This lack of correlation can be explained by the arguments presented above that knowing and using vocabulary are two different concepts, and hence there was no statistical linear relationship between general productive vocabulary knowledge and actual use. In other words, we could reject the notion that knowledge is the same as use as some might suggest based on the descriptive data. To put it in a more specific way, the lack of significant correlation showed knowing more K2 (or K3 or K4-K5) words as reflected by the PVLT does not necessarily mean that learners would produce more of those words in free writing.

While the correlation tests suggested that knowing and using vocabulary were indeed different concepts, the picture of the students' use of vocabulary was still very obscure. For example, one logical question to ask was why there were such differences. To seek a clearer picture, a direct comparison of the differences in proportion between the expected and actual use of vocabulary might be revealing. As such, a statistical test of difference was required. Given that normality was met according to the results of Shapiro-Wilk tests (all p-values n.s.), a dependent-samples t-test for each frequency level was carried out. This dependent-samples t-test can identify the potential mean differences between students' expected and their actual production. If there are significant differences found, it can give indications to the existence of a gap between the two concepts. The results are tabulated in Table 7 and presented graphically in Figure 3.

Table 7: Comparison of expected and actual production of word families in different levels

N=12	K2 (%)		K3 (%)		K4-K5 (%)	
	Expected (PVLT X 1.4)	Actual	Expected (PVLT X 0.78)	Actual	Expected (PVLT X 0.83)	Actual
Mean	70.45%	61.59%	26.28%	27.66%	13.27%	10.75%
Difference (Actual-Expected)	-8.86%		1.38%		-2.52%	
	$t(11) = 2.586$, p=.025*, r=.615		$t(11) = -0.588$, p=.568, r=.175		$t(11) = 1.453$, p=.174, r=.401	
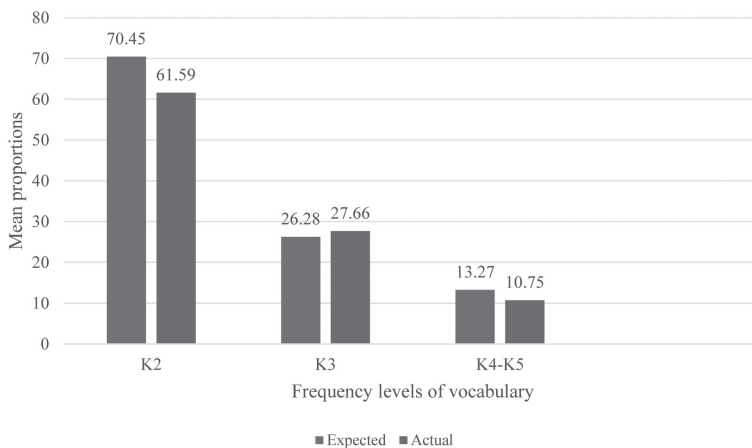
Figure 3 Mean expected and actual proportions of vocabulary at different frequency levels

In the light of the results, with high frequency K2 words, the actual percentage was significantly lower than the expected percentage of production (p<.05) with a large effect size (r=.615). It means that our participants used fewer K2 words in their free writing than what had been predicted by their knowledge in the PVLT. As for K3 and K4-K5 words, there was no significant difference. In other words, while descriptively students used more K3 words and fewer K4-K5 words than expected, these differences were not statistically significant.

Two explanations are proposed here for to account for this pattern. First, students might have given up high frequency K2 words and opt for those with lower frequency (e.g., K3 and K4-K5). Second, there might be a developmental gap between general productive knowledge and actual production. The reasons for each of these proposals are detailed in the following.

First, students could be opting for lower frequency words. There was indeed good motivation for the students to do that because two of the four writings were formal assessments which resembled the public examination format. In the HKDSE writing paper, as in the formal assessments, a good piece of writing (e.g., scoring 5 or above out of a total of 7 in the Language domain) needs to demonstrate a 'wide' vocabulary 'with many examples of more sophisticated lexis' (Hong Kong Examinations and Assessment Authority, 2012: 9). In order to demonstrate their vocabulary knowledge and score higher, they could be trying to avoid the high frequency words (i.e., K2 words) and produce words of lower frequency (i.e., K3 and/or K4-K5 words). However, whether or not this strategy to opt for lower frequency words alone could account for the data fully is reserved for discussion later.

Second, there might be a developmental gap between knowing and actually using vocabulary items. To illustrate, we can focus on the K2 level. The students appeared to have acquired general productive knowledge of the K2 level given an overall attainment of 70% in the PVLT at this level. However, their failure to use the words at this K2 level as much as expected could imply a developmental gap between general productive knowledge and actual production. In fact, the correlation results presented earlier also tended to support the existence of such a gap between knowledge and use. Given that the correlation figures were all non-significant, knowing and using vocabulary items were indeed two different concepts. At this point of discussion, one could logically doubt whether or not either one of the

explanations (either a developmental gap or opting for lower frequency words) alone could account for the data fully. It is argued that both factors could have a role to play here.

To explore how both explanations are playing a role in accounting for the t-test results, three hypotheses are proposed here for testing – (1) opting for lower frequency words alone explains our results fully, (2) existence of a developmental gap explains our results fully, and (3) both together explain our results fully.

Hypothesis 1: Opting for lower frequency words as the sole explanation

This hypothesis is that students opting for lower frequency words is the sole explanation for the t-test results. In other words, there was no developmental gap between knowledge and use. With the K2 level, the explanation seemed to hold that students might be opting for lower frequency words (i.e., K3 and K4-K5) and hence we found K2 words being produced significantly less than expected. The use of fewer K2 words, then, would logically contribute to the use of more K3 and/or K4-K5words because a decrease in proportion of actual use at one level should cause an increase at other levels. However, there was no significant difference between the expected and actual use of K3 and K4-K5 words.

With respect to the K3 level, there might still be a chance that hypothesis 1 was correct. One could argue that while students might have replaced some K2 words with K3 ones, they might at the same time have replaced some other K3 words and opted for low frequency K4-K5 ones. In other words, the effect of discarding high frequency K2 words for mid frequency K3 words might have been counter-balanced by the trend of opting for low frequency K4-K5 words. This counter-balancing might explain why we found no significant result for the K3 level and why hypothesis 1 could continue to hold.

However, when the K4-K5 level is considered, it becomes clearer that hypothesis 1 in fact could not be valid. This is because if students opted for lower frequency words to replace K2 and K3 words in a similar fashion, we would see more actual production of K4-K5 words than expected. However, the t-test revealed no such difference. In fact, the actual use of K4-K5 words was even less than expected descriptively. Taken together, while the decreased proportion of use at K2 level should logically lead to an increase in proportion at one or

more levels (K3 and/or K4-K5), this was not the case and therefore, the hypothesis of students opting for lower frequency words as the sole explanation could not hold in light of the results. Although one might suggest that the students could opt for words of even lower frequency (e.g., K5+), readers are reminded that the calculation of proportion in this study was only based on the range of K2 to K5 words. Figure 4 summarises the arguments towards such a conclusion.
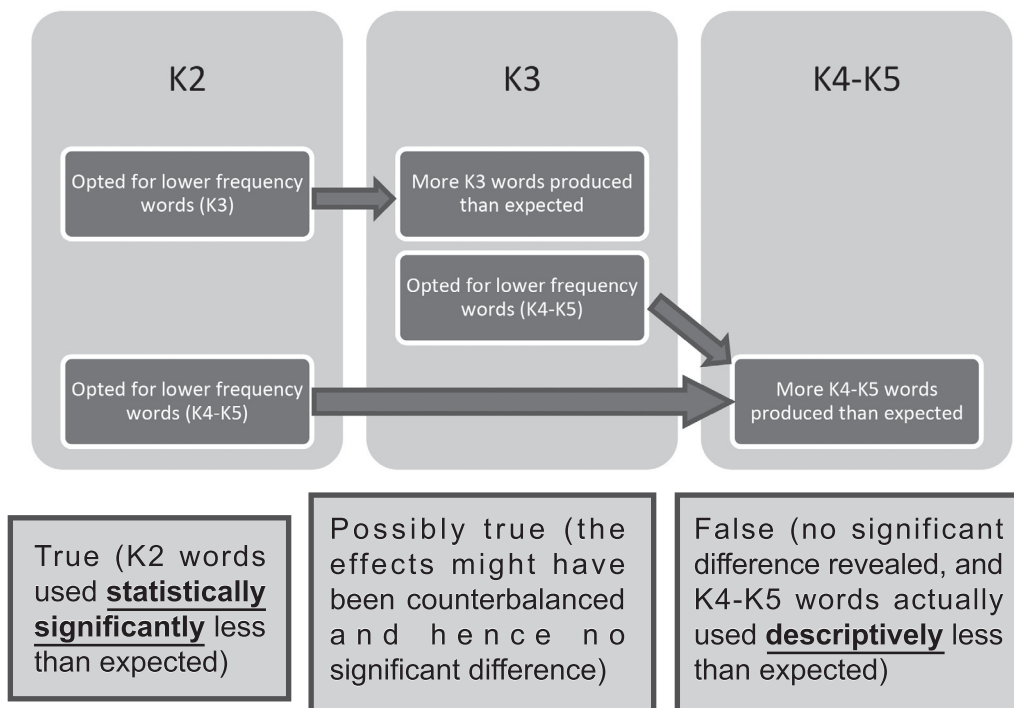

Figure 4: Summary of arguments related to hypothesis 1: Opting for lower frequency words as the sole explanation

Hypothesis 2: Existence of a developmental gap as the sole explanation

The second hypothesis contends that the existence of a developmental gap was the sole explanation for the observed pattern. First, there were significantly fewer K2 words being produced than expected in free writing, which appeared to conform to hypothesis 2. Specifically, this could have resulted from the fact that students were not able to put the words that they knew productively into actual use in free writing.

If hypothesis 2 was also true for K3 and K4-K5 production, we might as well find a similar trend of these words being used less than expected. However, this was not the case since no significant difference at these levels was found as mentioned above. In fact, students even used more K3 words than expected descriptively, counter-arguing that a developmental gap could account for the observed pattern fully. Taken together, while the pattern for K2 production might be explained by hypothesis 2, the findings with K3 and K4-K5 words did not conform to this hypothesis, which, therefore, needed to be also rejected.

Hypothesis 3: Both explanations contributed to the results together

Hypothesis 3 holds that the two explanations (i.e., opting for lower frequency words and the existence of a developmental gap) together contributed to the t-test results. First, for high frequency K2 words, the two explanations could both contribute to the observed less proportion of K2 production, that is the students would use fewer K2 words than expected.

If there was an effect of students opting for lower frequency words, more actual production of mid frequency K3 words would be observed together with the less use of fewer higher frequency K2 words (as mentioned above when discussing hypothesis 1). At the same time, this expected increase might be counter-balanced by two opposite effects – that some other K3 words were replaced by low frequency K4-K5 words, and that there was a developmental gap making students not able to produce the K3 words that they had knowledge of. Indeed, there was no significant difference between expected and actual use of K3 words and this result could be accounted for by this counter-balancing of different effects. As a result, hypothesis 3 appeared to hold.

Finally, for K4-K5 words, there was also no statistical difference between the expected and actual production in free writing tasks. Such finding can again be possibly due to the balancing of the increase of the use of K4-K5 words related to students being motivated to replace the K2 and K3 words and the effect of the existence of a developmental gap which brings about an observed less use of low frequency K4-K5 words in free writing. Hypothesis 3 still holds for this frequency level of vocabulary. Figure 5 summarises all these arguments related to hypothesis 3.
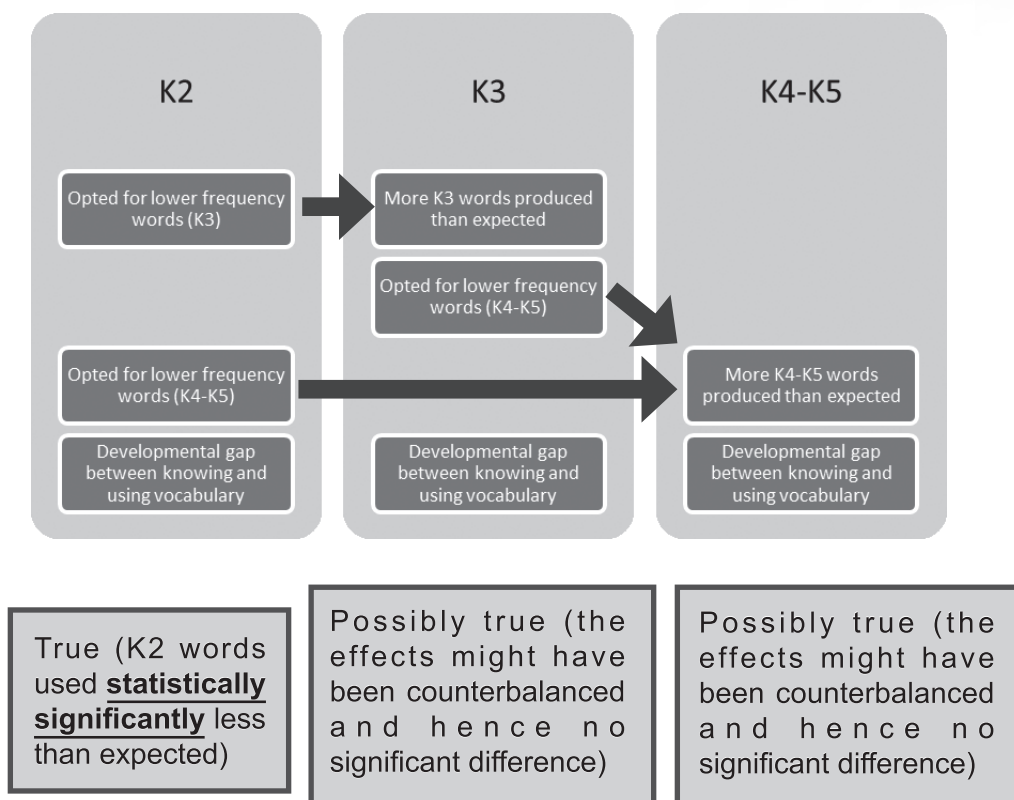
K2	K3	K4-K5
Opted for lower frequency words (K3) → More K3 words produced than expected		
	Opted for lower frequency words (K4-K5) →	More K4-K5 words produced than expected
Opted for lower frequency words (K4-K5) ────────────────→		
Developmental gap between knowing and using vocabulary	Developmental gap between knowing and using vocabulary	Developmental gap between knowing and using vocabulary

| True (K2 words used **statistically significantly** less than expected) | Possibly true (the effects might have been counterbalanced and hence no significant difference) | Possibly true (the effects might have been counterbalanced and hence no significant difference) |

Figure 5: Summary of arguments related to hypothesis 3: both explanations contributed to the results together

So far, the validity of three hypotheses for explaining the t-test results has been discussed. The first one is that students have opted for lower frequency items because they wanted to show off their vocabulary. However, it has to be rejected because K3 and particularly K4-K5 words were not being used more often than expected. Second, the existence of a developmental gap between general productive knowledge and actual use could not be the only explanation either. This hypothesis was rejected because of the non-significant differences between the expected and actual use of K3 and K4-K5 words. Hypothesis 3, that both explanations were playing a role together, appears to be the only logical explanation for the findings.

Although findings have been deliberated and considered through their limits, these potential explanations are merely speculative. Further research is needed if the discrepancies between knowledge and use are to be understood. The use of such methods as interviews and think-aloud protocols might shed some light, for instance, on the

issue about whether writing with more lower frequency words than expected was a conscious choice or not. Meanwhile, one thing is clear, and that is the existence of a discrepancy between expected production as deduced from the PVLT scores and the actual use of vocabulary in free writing. Just as the title of this paper has suggested -- knowing a vocabulary item is different from using it in free writing.

As far as the developmental gap is concerned, there appeared to be multiple levels of productive vocabulary. A student knowing all of Nation's (2001, 2013) aspects of vocabulary knowledge of a word, even up to the aspect of use, may not be able to produce the word freely in their writing. Indeed, as Nation (2013) has indicated, there is usually a big gap of how 'vocabulary shown to be known on tests like the Vocabulary Levels Test is actually being used in meaning-focused performance' (p 562). This identified gap also points to the need to look at the comprehensiveness of Nation's (2001, 2013) aspects of lexical knowledge. The present study is one of the first to identify the discrepancies between knowing and using vocabulary, and it is believed that understanding more about this issue can produce important pedagogical implications for second language learning.

Pedagogical implications

One of the most important implications here is the recognition of the insufficiency for students to possess only general productive knowledge of vocabulary. In other words, that students are able to excel in fill-in-the-blanks exercise and assessment tasks does not automatically guarantee that they will be able to use the relevant vocabulary items in an unguided context. Therefore, one key aim for these learners is to be able to use the words appropriately in writing, rather than simply knowing the spelling and grammatical features of the lexical items. Teachers should not stop pushing students to their limits until the latter demonstrate correct use of the lexical items in writing and speaking.

With this goal in mind, there could be a couple of strategies that teachers may consider using. It must be acknowledged, however, that the effectiveness of the proposed teaching strategies may still be subject to further empirical research.

First, teachers should consider assigning more writing tasks with relatively less guidance, such as free writing tasks. For weak learners, the scaffolding may be crucial assistance for them to complete a

writing task. However, especially with the more proficient learners, guidance, or even the provision of a particular context, could promote the use of certain vocabulary items and at the same time possibly posing constraint to the use of others. This constraint could deprive students of the opportunities to formulate and test their hypotheses regarding the use of vocabulary in a trial-and-error manner. In a similar vein, teachers should encourage students to use newly learnt vocabulary items in their writing, again, allowing them to formulate and test hypotheses regarding actual use. Teachers, for example, could ask students to highlight the items that they would attempt to use so that the teacher could pay special attention to these when marking. These attempts may deserve more feedback and encouragement because they are evidence of students' putting efforts into actually using the words that they have recently learnt.

Second, teachers could teach vocabulary in semantically-related sets. For example, 'vital', 'crucial', and 'significant' may be taught together with 'important'. Presenting items in this fashion could help students assimilate new knowledge to their existing store and enhance their lexical richness through opting for another word, which is exactly what has been observed in the present study and should be further encouraged. For example, students could replace 'important' with 'vital' in writing and thereby enhancing their lexical richness. However, it is also worth noting that, in a strict sense, no two words are absolute synonyms, meaning that no two words are totally interchangeable across all contexts. Therefore, a simple substitution may not always work. At the same time, to a certain extent, trying to use the new lexical items albeit possibly making mistakes is an important, if not inevitable, step in language learning. Teachers should not discourage the use of items during classroom exercise simply because of the mistakes that might be made. On the contrary, if teachers are able to identify potential confusion, they could provide even more information about the words to make the case clearer for students. Indeed, the confusion arising from the use of semantically-related sets has been reported in and supported by some studies (e.g., Papathanasiou, 2009). However, we note that Papathanasiou (2009) used vocabulary recall (i.e., asking students to recall the target items when given their meanings) as her learning outcome measure. Recall involved students' general productive knowledge of the vocabulary, while the focus of our study is at the level of free productive use. Importantly, more recent studies (e.g., Ishii, 2015) questioned whether the source of confusion was in fact the semantically-relatedness, or the visual features of the experimental materials. Until more evidence emerges, teaching semantically-related sets is still worth trying.

Another key, but perhaps indirect, aspect of pedagogical implication of this study is the demonstration of potential use of research tools by in-service teachers. While language teachers may still rely heavily on such assessment forms as dictation and fill-in-the-blanks exercise, teachers can make the best of some of the tools used in this study. These tools are useful and reliable as they are already commonly used in research (e.g., Lo & Murphy, 2010). The PVLT is useful for testing the size of one's productive vocabulary. The Vocabulary Profiler could not only be used by teachers to analyse students' vocabulary range in actual production. It could also be introduced to students who may use it as a self-assessment tool. It is unfortunate that these useful tools are yet to be fully utilised in the daily process of teaching and learning by teachers. It is hoped that the present study could inspire readers to give it a go.

Conclusion

This study has identified the discrepancy between knowing and using vocabulary in free writing. This discrepancy was attributed to a hypothetical developmental gap and students opting for lower frequency words in order to show off their lexical range. If we agree that one major goal of vocabulary learning is to produce a range of vocabulary learnt in free writing, then we as education practitioners should put in more effort in teaching vocabulary beyond the level of general productive knowledge. We suggested two examples of what we could do to bridge the gap of vocabulary knowledge and use, although the effectiveness of these suggestions still has to be tested by further empirical research. At this point, we would also like to call for more studies about the use of vocabulary in free writing. After all, to know is not to use.

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Using Written Corrective Feedback to Improve Writing Accuracy of Junior Secondary Students

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Abstract

Written corrective feedback (WCF) has long been considered effective in improving students' writing accuracy. However, it is still uncommon in writing classes in secondary schools in Hong Kong (Lee, 2011, 2013). In this study, a Planning, Experimentation and Reflection (PER) model of change was adopted to investigate the individual responses to the focused feedback and the peer feedback as well as the individual factors affecting their responses. Findings of the study show that the numbers of mistakes students had made reduced while the numbers of errors corrected increased. More able students were also able to mark their peers' writing. It was found that language abilities might be a factor affecting students' uptake of WCF.

Introduction

Two types of WCF namely selective marking and peer feedback, have long been promoted in the Curriculum Guide since 1999 (CDC, 1999) and believed to be effective in improving students' writing accuracy. However, they are still uncommon in writing classes in secondary schools in Hong Kong (Lee, 2011, 2013). Teachers usually have to mark all aspects of students' writing and students sometimes find it uneasy to make improvements in all these aspects. In fact, a lot of research has revealed that selective marking and peer feedback are more effective than their traditional counterparts (which are unfocused marking and teacher feedback) in improving students' accuracy as well as their long-term language development in the western contexts

and even the local context (Ferris, 1999, 2006; Lee, 2005, 2013). Focused marking may help learners pay attention to fewer types of error so that they can understand the errors more (Ellis et al., 2008). Peer feedback can let students understand more about their strengths and weaknesses (CDC, 2002). Overall, it is worth trying out these WCF in the secondary writing class. This study aims at helping students improve their writing accuracy through the use of these WCF. In this study, a Planning, Experimentation and Reflection (PER) model of change was adopted to investigate the individual responses to the focused feedback and the peer feedback as well as the individual factors affecting their responses.

Literature Review
Theoretical Perspectives of Written Corrective Feedback

Written Corrective Feedback (WCF), which is also called error correction or grammar correction, refers to the "correction of grammatical errors for the purpose of improving a student's ability to write accurately" (Truscott, 1996, p. 329). WCF has been regarded as a normal way of improving students' writing accuracy and a necessary part of the writing curriculum (Hendrickson, 1978, 1980; Truscott, 1996). It originated from the field of second language acquisition (SLA). Before 1960, language experts who believe in the Contrastive Analysis Hypothesis claim that learners make errors in the second language because they are affected by their first language. In other words, their errors can be avoided if they realize the differences between the two languages. Error correction is needed for this reason (Hendrickson, 1978; Selinker, 1969). Also, the audiolingual approach in 1960s encourages the teaching of a second language by memorizing dialogues, studying all the grammatical rules, and avoiding the making of errors (Hendrickson, 1978). In the late 1960s, SLA scholars found that even first language (L1) students would make a lot of errors during their first language acquisition. Therefore, they believed that students' errors were just a natural part of their language learning process. It means that teachers should tolerate some of students' errors so as to help them become more confident in expressing themselves using the second language. Also, errors are just as a signal which shows students' progress in the language learning process (Corder, 1967; Hendrickson, 1978; Lantolf, 1977).

Different learning theories have different views on WCF. For the subscribers to SLA theories, Contrastive Analysis Hypothesis informs them of the importance of comprehensive marking. However,

Krashen's (1985) Monitor Model implies that WCF is ineffective because learning is different from acquisition, which is a subconscious process. In addition, learners acquire the linguistic features of the second language in a predictable order which is not affected by the teaching order. Thus, corrective feedback, which is a conscious process that requires teaching, does not have any role in developing students' acquired knowledge. However, interaction theories by Long (1996) and Swain (1985, 1995) support the positive role of WCF. These theories state that L2 input must be pushed to give modified output in interactions. That is, learners need to pay attention to the form in the input and the output in order to incorporate the explicit linguistic knowledge into their L2 system as L2 intake, and internalise the knowledge into their long-term memory. The internalisation process is affected by mediating factors such as learners' amount of attention, motivation, individual cognition and affection.

Other learning theories tend to advocate the positive role of WCF. The skill acquisition models developed by McLaughlin (1990) in the 1980s claim that language learning is just like the learning of cognitive skills and simple processes that can eventually lead to the development of complex behaviour. The socio-cultural theory by Vygotsky's (1987) states that cognitive development is a result of social interactions between people. Learning happens when a less knowledgeable person interacts with someone more knowledgeable. Lantolf and Thorne (2007) think that if scaffolding occurs in the zone of proximal development in the learner, it can successfully help him or her develop his L2 abilities and become more 'self-regulated'. As WCF is a way of interaction that is based on students' levels, it can foster the mastery of the second language.

Types of Written Corrective Feedback

WCF can be categorised into three types. The first type is about who should give feedback, i.e. teacher feedback or peer feedback. The second type is related to how to give feedback, i.e. indirect feedback or direct feedback. The third type is about the extent to which feedback is given, i.e. focused feedback or unfocused feedback as well as treatable or untreatable errors. Teacher feedback means that teachers are responsible for providing WCF to students in L2 writing classes while peer feedback refers to the comments provided by learners' peers. Direct WCF is defined as that "provides some form of explicit correction of linguistic form or structure above or near the linguistic error. It may consist of the crossing out of an unnecessary

word/phase/morpheme, the insertion of a missing word/phrase/morpheme, and the provision of the correct form or structure". Indirect WCF refers to that "indicates that in some way an error has been made but it does not provide a correction" (Bitchener & Knoch, 2010, p. 209). According to Ellis et al. (2008), focused WCF refers to "(the selection of) specific errors to be corrected and ignores other errors" (p. 356). The extent to which it is focused is dependent upon the number of errors selected. Unfocused WCF refers to the extensive correction of all the errors in students' written work. It responds to multiple errors and is believed to be a common practice in foreign language writing classrooms (Furneaux et al., 2007). For treatable and untreatable errors, Ferris (1999) explained that errors occur in a patterned and rule-governed way. Students can use a grammar book or set of rules to handle the error. Untreatable errors are the problems with missing words, unnecessary words and word order. They are idiosyncratic and so students need to use their acquired knowledge of the language to correct the error. Thus, according to Ferris (2006), indirect feedback could be given to treatable errors while direct feedback can handle untreatable errors.

Empirical Evidence on Written Corrective Feedback

A lot of research has been conducted in Western contexts to show the efficacy of WCF. For the role of WCF, Truscott (1996) argued that error correction did not have a role in writing courses, as proved by his study and the SLA insights. However, Ferris (1999) found that the empirical evidence presented in Truscott's study was limited and the methodologies of the previous studies were problematic. Short-term studies revealed that WCF helped students improve their accuracy in their text revision. Also, students believed it is useful. Her belief is that effective grammar correction is selective, prioritized and clear. Regarding different types of WCF, Bitchener and Knoch (2010) found that indirect WCF succeeded in engaging L2 learners in guided learning and problem-solving. It allowed students to reflect on the existing knowledge and foster long-term written accuracy and acquisition. Ellis et al. (2008) claimed that focused CF was theoretically more effective because students could pay attention to a limited number of types of errors and they might understand the nature of errors and the correction more. Empirical studies showed that focused WCF was more effective than unfocused WCF for improving accuracy in text revision as well as immediate and delayed post-tests (Bitchener & Knoach, 2009, 2010; Ellis et al., 2008; Sheen, 2007; van Beuningan et al., 2012).

In terms of the Asian context, Lee (2005, 2011) investigated

the current feedback practices in the L2 writing classrooms in Hong Kong secondary schools using case studies approach. The results revealed that the majority of teachers used unfocused, direct and comprehensive WCF which was extremely time-consuming and ineffective. However, it was perceived to be useful and it was the panel policy. Another study (Lee, 2008) pointed out that more proficient students preferred more WCF strategies while less proficient students benefited more from the focused WCF. For peer feedback, research by different scholars found that trained peer's responses could enhance the quality of students' revision (Berge, 1999; Harmer, 2004). Hedgcock and Lefkowitz (1992) observed that students appreciated the peer WCF because they could understand how teachers think and have a new conception of what writing involved.

Empirical Evidence on Individual Factors

Bitchener (2012) stated that individual and contextual factors were the mediating factors affecting the extent to which students engage with WCF. They resulted in learning in terms of uptake, internalization and consolidation. Sheen (2007) found that two individual factors might affect students' retention and uptake from WCF, which were analytic ability and learners' attitudes. She reported that direct CF was more effective for students with higher analytic ability with or without the meta-linguistic explanation. Also, high-aptitude students benefit more from meta-linguistic explanation (Sheen, 2007). Storch and Wigglesworth (2010) found that three affective factors mediated the process of WCF uptake, which were beliefs, goals and attitudes. Findings of research on how learners' attitudes affect peer responses vary (Hu, 2005; Srichanyachon, 2012).

Methodology
Background of the Study

As mentioned above, this study used the PER design to examine how students respond to the focused WCF and peer feedback as well as the possible factors affecting this. The participants were an average-ability class of Form One students in a Band Two CMI (Chinese as the medium of instruction) school in the New Territories. Most of them did not live in an English-rich environment because they were from the less well-off districts and they studied nearly all the subjects in Chinese. They usually could not write error-free sentences in English. About one-third of them joined tutorial classes after school.

It was a normal practice for teachers to use unfocused and direct feedback in marking students' writings.

All the 21 students in this class completed the study. Most of them were weak at writing, especially in the areas of idea elaboration and grammatical accuracy. For the sake of in-depth case study, six of them were selected according to their results of the Usage Paper and the Writing Paper in English Language examinations in the first term as well as their motivation to learn English. Two of them were of higher ability. Two of them were of average ability while the remaining two were of weaker ability. Their motivation to learn English, as observed by the main researcher, varied. The Usage Paper, the full mark of which was 50, involved eight marks for explicit tense questions and 24 marks for implicit tense questions (e.g. forming questions, cloze passages). The Writing Paper was based on a descriptive passage in the past tense. The backgrounds of the students were as follows (Table 1),

Table 1   The examination results and background of the participants

Name	Usage	Writing	Total	Background
	50 marks	70 marks	300 marks	
Mary	27	50	201.5	motivated to learn English but not good at writing accuracy
Ann	32	*33*	180.8	not very motivated but the English foundation is fairly good
Peter	*17.5*	46	162.3	motivated to learn English, but especially weak at writing accuracy
Lucy	*22.5*	28	151.0	motivated to learn English, good at subject-verb agreement but not good at sentence structures
Paul	*21*	22	*137.5*	not very motivated but willing to try when being encouraged
Kate	*6.5*	13	*61.6*	lower IQ, unable to write accurate sentences, but motivated to learn

The numbers in italics mean that they are below the passing marks.

This study covered four writing cycles. In each writing cycle, students were first taught the target grammar item and asked to use it to write a text of about 150 words. The teacher then marked their texts using the focused WCF and students were asked to do the corrections. For peer feedback, it was the students who marked their peers' texts instead of the teacher. The writing cycles were conducted by the main researcher, who was the subject teacher of the class. The co-researcher supervised the implementation of the study, analysed the data and evaluated the whole project.

Research Questions

The study aims to investigate the following questions,
1. How do Form 1 students respond to focused marking and peer feedback and how do the two types of WCF affect students' writing accuracy?
2. What are the individual factors affecting students' responses of these feedback?

Research Design

The three-stage PER model of change was adopted in this study (Taylor et al., 2005). During the planning stage, the aim was to identify goals and design strategies for improving students' writing accuracy. Students were expected to use the target grammar items to write personal letters and descriptive texts. The experimentation stage consisted of implementation, observation and evaluation. The use of WCF strategies and target grammar items was emphasized during the pre-writing lessons while students were asked to finish their work during the writing lesson. They were required to revise their texts within the class time during the post-writing lesson. The reflection stage was about reviewing the actions and planning for future actions by asking students to respond to a questionnaire and conducting semi-structural interviews with them. According to Law et al. (2010), there were advantages of using the PER model in action research. By using a problem-solving and critical approach in learning and teaching, changes in pedagogy, which become an open venture, can be located and shared. It is expected that focused WCF and/or peer WCF can become part of the regular curriculum in our junior form English Language classes after this study.

Planning

Data were collected with two tense tests, four texts with focused marking and revisions, bilingual student questionnaires as well as semi-structural interviews. A pre-tense test and a post-tense test were used to see if there was any improvement in the acquisition of the target linguistic items (see Appendix 1). The four writing cycles were all videotaped and conducted in timed settings. Two writing cycles focused on the present tense (pre-present tense assessment and post-present tense assessment) while the other two focused on the past tense (pre-past tense assessment and post-past tense assessment). Four writing topics with which students were familiar were used as prompts for students to write up to the word limit (150 words). As the simple present tense and the simple past tense are the key grammar items in the Form one English Language Curriculum and the major verb forms used in different text types, they would be set as the target grammar items in all the writing cycles. Indirect feedback was given since tenses were the linguistic items that occurred in a systemic way and students were able to use the set of rules to handle their tense errors. Only the errors relating to the main verb would be marked as students were used to making grammatical mistakes relating to sentence structures and other grammatical rules which made their writing difficult to understand. In addition, the main researcher would use direct WCF to correct a few of their major errors to make their writing comprehensible.

Each cycle consisted of three steps. The first step was to explain the target grammar items explicitly. Students were given a focused marking sample and the main researcher explained what focused marking was and how they could correct the underlined errors (Appendix 2). They were asked to write the topic in about 30 minutes (Appendix 3) with relevant key words given as an aid. The researcher then underlined their errors selectively. The second step was to ask students to revise their texts within 20 minutes. They had to correct the underlined errors by themselves. The third step was to ask them to fill out a questionnaire to express how far they could understand the focus of the tasks, the type of teacher feedback they preferred and their views on the focused WCF (see Appendix 4). The third writing cycle, which was about peer assessment, had a different second step. The main researcher allocated copies of students' writings to their classmates and asked them to underline the errors regarding

the past tense in the main verbs. Students then corrected their errors based on their peers' marking and their own judgment. Later on, the main researcher marked the photocopies of the writing and asked students to correct their own work once more. The two sets of text plus revisions were compared. Students had to fill out a questionnaire about how far they could understand the focus of the tasks, what they could learn from their peer assessment, and what they could learn from assessing their peers' writing (see Appendix 5). At the end of the four writing cycles, six students participated in the semi-structural interviews (Appendix 6) about how far they had understood focused WCF and peer feedback when compared with the normal marking practice of the teacher and how they felt about these. A post-tense test was administered after the study to investigate their performances of using the present tense and past tense (Appendix 7).

Experimentation

A pre-tense test was given to students before the start of the project to assess their ability to use the correct verb forms. The results showed that students' performance in using the simple present tense was more stable while that in using the simple past tense varied. Also, their pre-tense test results generally aligned with their First Term English Language Examination results, except for Peter and Lucy (see Table 2).

Table 2 Students' results of the pre-tense test

Name	Present Tense	Past Tense
	% of correct items	% of correct items
Mary	75%	76.9%
Ann	75%	92.3%
Peter	25%	0.0%
Lucy	75%	84.6%
Paul	75%	46.1%
Kate	25%	15.4%

The first writing cycle is about writing a 150-word description of a friend using the simple present tense. The uses of the present tense and the forms of 'be' and other verbs were taught explicitly. Results showed that only Peter was able to write about the word limit while others wrote about 100 words, except Kate who had difficulties in writing. The number of mistakes they made in the use of present tense ranged from four to seven. Students who made more mistakes were more able to correct their errors. Paul and Peter, who was not good at English and not very motivated, corrected nearly all of the errors. Kate, who had a lower IQ, was also able to correct 71% of the errors. Lucy, who was an average student, was willing to try to correct her errors, although she could not use the correct verb forms (see Table 3).

Table 3   Students' results in the first writing cycle (Pre-present tense assessment)

Name	No. of words	No. of mistakes	No. of errors corrected	% corrected
Mary	99	4	2	50%
Ann	104	4	1	25%
Peter	146	6	5	83%
Lucy	94	4	0	0%
Paul	113	6	6	100%
Kate	53	7	5	71%

Data from the first questionnaire revealed that all students except Kate realised the focus of the task was on present tense. The majority of them wanted the English teacher to highlight some of their errors. Only Lucy preferred comprehensive marking. All of them believed that selective marking was useful because they knew their errors about the present tense.

The second writing cycle focused on the simple past tense the task required asking students to write a descriptive text of a trip to Ocean Park in 150 words. After delivering the past tense lesson, students were given some key words about the park to prompt them to write more (e.g. names of the places). Three of them could reach the word limit. The number of mistakes regarding the past tense ranged from one to six. Mary and Ann, who were more able students,

corrected nearly all the past tense errors and realized that they needed to use the past tense. However, Mary made mistakes in the verb forms (i.e. spelling) whereas Ann failed to locate the main verbs. Kate was willing to do the corrections but could not correct most of her errors (see Table 4).

Table 4   Students' results in the second writing cycle (Pre-past tense
          assessment)

Name	No. of words	No. of mistakes	No. of errors corrected	% corrected
Mary	152	6	5	83%
Ann	130	5	5	100%
Peter	143	2	1	50%
Lucy	75	5	1	20%
Paul	97	1	1	100%
Kate	65	6	1	17%

Results from the second questionnaire were similar to those from the first. Kate still misunderstood the focus of the task. This time, it was Peter who preferred comprehensive marking. Again, all of them showed their positive attitude towards focused marking. Lucy said it helped her memorize the verb forms better. Mary thought that it could give her more practices on tenses. Paul expressed that it focused on the tenses and so he could correct them by checking the tense table.

The third writing cycle was about peer assessment (the past tense). Students were asked to write a personal letter about teenage problems using. The main researcher then distributed their writings and to their peers based on their abilities. Two pieces of writing were marked by more able students. Two were marked by average students while the other two were marked by less able students. As the topic was something new, none of them were able to write up to 150 words. Results indicated that average and more able peers tended to identify and correct more corrected mistakes while the less able students failed to locate them. Also, the percentages of the number of errors corrected based on teacher assessment were higher than those based on peer assessment. From the perspective of post-past tense assessment, the percentages of errors corrected were obviously higher than that in pre-past tense assessment, especially for the weaker ones namely Peter, Lucy and Kate (Table 5).

Table 5   Students' results in the third writing cycle (Past tense/peer Assessment)

Name	No. of words	No. of corrected mistakes marked by peers	No. of mistakes marked by teacher	Marked by student who was	No. of errors corrected based on peers	No. of errors corrected based on Teacher	% corrected based on peers	% corrected based on Teacher
Mary	98	1	1	less able	1	1	100%	100%
Ann	102	4	6	average	3	6	75%	100%
Peter	116	1	5	less able	0	4	0%	80%
Lucy	120	7	10	average	4	8	57.1%	80%
Paul	84	2	2	more able	1	2	50%	100%
Kate	91	5	6	more able	0	3	0%	50%

The results of the third questionnaire survey indicated that less able students tended to misunderstand the focus of the task. They, except Paul, believed they could learn from marking their peers' writing. Mary stated in the interview that she could learn from marking her peers' writing. Paul and Lucy did not think they could learn from their peer's feedback.

The fourth writing cycle served as a post-present tense assessment. Students were asked to describe a member in their families in the present tense. As the cycle was conducted right after the second term test, students were not very motivated and they, except Mary, wrote only about 100 words. The percentages of error corrected were also higher than those in the pre-present tense assessment. Lucy was the only one who did not show any improvement (see Table 6).

Table 6   Students' results in the fourth writing cycle (Post-present tense assessment)

Name	No. of words	No. of mistakes	No. of errors corrected	% corrected
Mary	141	5	4	80%
Ann	103	2	2	100%
Peter	81	4	4	100%
Lucy	85	6	0	0%
Paul	60	2	2	100%
Kate	70	6	4	67%

A test on tenses was administered after the writing cycles. Results revealed that students generally showed improvements in their use of the present tense. However, they performed worse with regard to the past tense. The weaker ones even got no marks in past tense items (Table7).

Table 7 Students' results in the final test

Name	Present Tense	Past Tense
	% of corrected items	% of corrected items
Mary	50%	20%
Ann	88%	20%
Peter	88%	40%
Lucy	88%	0%
Paul	88%	0%
Kate	25%	0%

Semi-structural interviews were conducted after the post-tense test. The results showed that all students found focused WCF useful because they could focus on a few errors only. However, as the focused WCF was indirect, Paul and Kate expressed that they preferred "direct answers from the teacher". Lucy found indirect WCF difficult but she still liked it.

All of the writing cycles were observed by the two researchers. During the WCF lessons, students were found to be more focused when they revised the texts when compared with their regular writing lessons. They were more aware of the importance of subject-verb agreement, as proven by the fact that they asked the teacher what verb forms they should use after different subjects. Also they were more willing to correct the errors by themselves.

Reflections

Despite the growth of WCF research studies showing its effectiveness, the adoption of WCF strategies in Hong Kong is still under-investigated. The present study provides empirical evidence on how students responded to the focused and peer feedback and how WCF strategies affected their writing accuracy. The majority of students responded to focused WCF on the present tense positively. They understood the focus of the task and claimed that they liked focused marking. When the pre-present tense assessment was compared with the post-present tense assessment, students showed improvements in reducing the numbers of mistakes made and also increasing the numbers of errors corrected. Students,except Kate and Lucy, performed obviously better in the post-tense test than the pre-tense test. Kate was a very weak student and tended to misunderstand the focus of the task. Lucy, who was weak in writing, failed to benefit from focused WCF in terms of accuracy. She still made a lot of present tense mistakes in her writing and could not correct them. However, she had shown some improvements in tense tests.

Students believed that focused WCF on the past tense was useful and commented very positively about it despite making quite a lot of mistakes in the post-past tense assessment. They said that it helped them memorise the verb forms better. Paul, who was weak and not motivated to learn, even pointed out that focused and indirect WCF helped him focus on the verb forms in the main verbs and so he could correct them by checking the tense table on his own. As conended by Ellis et al. (2008), focused WCF might help learners pay attention to fewer types of error so they understand the errors more. Also, the increase in the percentages of error corrected in the post-past tense assessment was obvious, especially in the cases of weaker students. These conformed to previous studies that less proficient students could correct treatable errors by themselves and benefit from focused and indirect feedback (Ferris, 2006, Lee, 2008). Students did not perform well in the post-tense test probably because it was more difficult than the pre-tense test.

The results of the peer assessment depicted that more able students were able to mark their peers' writing. Mary even expressed that she could learn from the process. The possible reason was that peer feedback let students understand more about their strengths and weaknesses (CDC, 2002). The weaker ones, however, did not believe in their peers' assessment, as shown by the lower percentages of the number of errors corrected. Lucy, Paul and Peter were concerned

that their peers might not be able to mark their errors. Their worry was in line with Harmer' findings (2004) that peers had to be trained in order to provide useful feedback. Nevertheless, most of the students claimed that peer assessment was useful because it could help them check their writing one more time.

With respect to individual factors, learners' language abilities might have an effect on students' uptake of WCF. Mary and Ann, who are more able students, showed improvements in the percentages of numbers of errors corrected in post assessments. They might have better metalinguistic knowledge and so could use grammar rules to handle focused and "treatable" errors. For the weaker students, the main researcher observed that the focused WCF successfully helped them focus on the errors, but they failed to correct them because they did not know the correct verb forms, as proven by the fact that they kept asking the researcher the spelling of the verb forms. The second possible factor was students' beliefs. The weaker ones did not believe in their peer's judgement on their writing and so they did not respond to their WCF even though some of them were correct. After all, the effect of learners' attitudes was not very obvious as less motivated students were still able to benefit from the WCF.

There are some limitations in the present study. All the writing tasks in this study were low-stakes. Students knew that these were for research purpose only so they became less and less motivated towards the end of the study. They were not very willing to respond to the indirect WCF because it required problem-solving and was different from their feedback they received in regular lessons. In terms of research design, the levels of difficulty of the two tense tests were different and so it might slightly affect the reliability of the study. Due to time-frame limitations, peer assessment and the post-past tense assessment needed to be done in one writing cycle. Training can be provided to students on how to use selective mark before the study.

In terms of future actions, the writing cycles could become part of the regular curriculum or even daily assessment in order to encourage students' active use of the language. Also, indirect feedback should be used in some of the writing lessons to familiarise them with feedback. Further research could be conducted with more than one class of students in quasi-experimental settings to determine the efficacy of WCF in between-subject groups. Contextual factors such as social relationships between teachers and learners as well as learners' educational background can also be investigated.

Conclusion

This study has adopted a PER model of change to examine students' responses to the focused and peer WCF and the individual factors affecting the responses. Students found focused WCF useful in helping them acquiring the present and past tenses. The weaker ones had also benefitted from focused and indirect feedback as they could focus on a few errors and use the grammar rules to handle errors. The more able students could mark their peers' writing selectively, but the weaker students did not believe in their peers' feedback. Learners' language abilities and students' beliefs might be the factors affecting the uptake of WCF. It is obvious that students overall responded to the focused WCF and peer assessment positively.

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Appendix 1   Pre-Tense test

Fill in the blanks with the correct tense of verbs.

One day Leonado da Vinci <u>came</u> (come) to an old man. He 1. _____(want) the old man to 2. _____ (teach) him to draw. The old man 3. _____ (welcome) him, then 4. _____ (give) him an egg and 5. _____ (tell) him to draw it. Leonado 6. _____ (work) quickly and 7. _____ (show) his drawing to the old man.

"8. _____ (draw) it again!" 9. _____ (say) the old man. Soon after, Leondao 10. _____ (draw) another egg. His picture 11. _____(look) good but the old man 12. _____(make) him do it again and again. Then Leonado 13. _____ (become) angry. He 14. _____ (say), 'I can 15. _____ (draw) an egg in two minutes. Why 16. _____ you _____ (keep) me waiting? Please 17. _____ (teach) me how to draw now."

The old man 18. _____(smile) and said, 'Yes, you 19. _____(be) right. You can draw an egg quickly, but it 20. _____(take) you many years to draw on very well.'

(Items 2 and 16 are excluded)

Appendix 2   Focused Marking Sample to Students

Sandy is my classmate<u>s</u>. She is 12 years old. She <u>wear</u> a long ponytail. She <u>was</u> energetic and intelligent.

She <u>like</u> sports and she always <u>get</u> good marks in exam. She likes tell jokes. We think she is always funny.

She is sporty. She hobby <u>are</u> dancing. She ~~in many place~~ <u>join</u> dance club. She joins many competitions and <u>was won</u> many prizes. She <u>teach</u> me how to dance.

play (   )
She <u>have</u> other hobby. She <u>like</u> play guitar. Every Sunday, I <u>shows</u> the guitar with her.

I very like her! She is my best friend!

Appendix 3   Topics of the Writing Tasks

Writing Cycle	Topic	Focus of the Cycle
1	Describing a friend	Pre-present tense assessment
2	A trip to Ocean Park	Pre-past tense assessment
3	A personal letter	Post-past tense assessment Peer assessment
4	Describing a family member	Post-present tense assessment

Appendix 4   Questionnaire for the First and Second Writing Cycles

Form 1 English Language
WCF Study Questionnaire

This study aims to find out your views about the use of selective marking and peer feedback. Circle the answer that suits you most. All your answers will be treated confidentially.
此研究的目的是找出你對選擇性修改文章及學生互評的意見。請選擇最適合你的答案。所有答案均會保密。

1. What is the target grammar item in this writing practice?
   是次寫作練習是著重於哪一種文法？
   A.   Present tense
   B.   Past tense
   C.   Future tense
   D.   Prepositions

2. Which of the following do you like best?
   以下哪一種你最喜歡？

   A.   My English teacher highlights all of my errors.
        我的英文老師指出我的作文中的所有錯誤。
   B.   My English teacher highlights some of my errors.
        我的英文老師指出我的作文的某些錯誤。
   C.   My English teacher does not highlight any of my errors.
        我的英文老師沒有指出我的作文中的任何錯誤。

3. Do you think selective marking (e.g. only marking the tense in your compositions) can help you learn tense better? Why or why not?
   你認為選擇性改修改文章（例如只修改文章中的時態）能幫你學習時態學得更好嗎？為什麼？

   _____

   _____

   _____

   _____

   _____

Appendix 5   Questionnaire for the Third Writing Cycle

This study aims to find out your views about the use of selective marking and peer feedback. Circle the answer that suits you most. All your answers will be treated confidentially.
此研究的目的是找出你對選擇性修改文章及學生互評的意見。請選擇最適合你的答案。所有答案均會保密。

1. What is the target grammar item in this writing practice?
    是次寫作練習是著重於哪一種文法？
    A.   Present tense
    B.   Past tense
    C.   Future tense
    D.   Prepositions

2. Do you think you can learn tense better through peer assessment (e.g. helping your classmates mark their writing) Why or why not?
    透過學生互評 (例如幫助同學改文)，你認為你能從中學習時態學得更好嗎？為什麼？

    _____

    _____

    _____

    _____

3. Do you think you can learn tense better from your classmates' feedback (e.g. letting your classmates mark your writing) Why or why not?
    你認為你是否能從同學的反饋中 (例如讓同學改你的文章) 能幫你學習時態學得更好嗎？為什麼？

    _____

    _____

    _____

    _____

Appendix 6　Semi-structural Interview Questions

1. 你知道選擇性修改文章和綜合性修改文章 (即平時老師的改文方式) 的分別嗎？
2. 就第一篇作文而言，這是一篇個人檔案，要形容一個人，你知道要用什麼時態嗎？
3. 你知道為什麼要把某些字劃下橫線嗎？
4. 你認為這種方法能提點你用正確的時態嗎？
5. 就第二篇作文而言，這是一篇記叙文，你知道要用什麼時態嗎？
6. 就第三篇作文而言，你認為如果同學先幫你修改文章，你能更容易發現自己的錯誤嗎？

Appendix 7   Post Tense Test

Complete each blank using the correct form of the given verb. The first
one has been done for you as an example.

Sasha's Blog

First Day   1 September 2013

I (e.g.) __am__ (be) really nervous about the more difficult work for this
year. I (1)_____(not do) very well last year, but I
(2)_____(hope) I can (3)_____
(do) better this year.

In addition, I (4)_____(be) a Form 1 student this
year, so the school (5)_____(be) new to me. I
(6)_____(try) to cope with the new environment.
I'm afraid I am not at the same level as my classmates. I am so glad
Michelle and I are in the same class.

My class teacher (7)_____(be) Miss Ho, and she
(8)_____(seem) to be a very nice teacher. This
morning she (9)_____(talk) to us patiently about
the school, and the things we (10)_____(do) in the
next two months. I (11)_____(feel) so happy when she
(12)_____(tell) us she would also be our English
teacher.

I (13)_____(hope) I can do well this year, and I
(14)_____(want) to make as many new friends as
possible.

How (15)_____(be) your first day at school, Janet?

Posted: 1 Sep 9.45 p.m.

(Item 10 is excluded)

透過電子教學平台提升學生辨析修辭手法的能力研究

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摘要

本行動研究旨在探討透過電子教學平台能否有效提升學生辨析修辭手法的能力，研究對象為四班小學六年級學生。研究員運用電子教學平台作為媒介，設計了三節有關明喻、暗喻、排比的電子課堂。研究結果顯示，透過電子教學平台既能有效提升學生辨析修辭手法的能力和興趣，也能提高教學效能。

研究背景

學習修辭手法是小學中國語文科教學其中一個必備環節，學生能正確認識和分辨不同修辭手法，才可以在寫作時應用出來，從而提高表達效果。《小學中國語文建議學習重點，2008》也指出，學生在寫作範疇，要學習「運用合適修辭手法以提高表達效果」（頁 12）。

本校教師在中國語文科課堂，一向都會利用課文，以螺旋式教授修辭手法，因應學生的年級遞升而增加深度，讓學生學得更深入。然而，本學年四位六年級中文科教師發現，隨課文教授修辭手法，學生的課堂表現雖然令人滿意，可是考試表現卻顯示學生辨析修辭手法的能力還有待提升。

香港在世紀之交推動課程改革，「運用資訊科技進行互動學習」是其中一個重要的課程改革項目。江紹祥（2010）引用 Nuutinen、Sutinen、Botha 及 Kommers 等學者的研究成果，指出「電子通訊介入的學習為學生營造一個自主探究、合作學習的環境，能讓學生專心投入課堂學習，從多角度反覆討論學習課題，從而使他們有更多機會深入學習相關課題」。江紹祥（2011）進一步指出，電子學習環境可以為教師節省教學的時間，提高教學效率。即使教師只是應用簡單的電子簡報進行教學，已能夠節省在黑板重複板書的時間。再者，電子教學對學生的認知發展也有不少好處：可以強化學生的認知過程（Coffey, 2005; Ware, 2004）、減少認知負荷（Sweller & Chandler, 1994）、幫助學生理解抽象的概念（Wheeler, Yeomans & Wheeler, 2008）。

為了掌握電子學習的教學效能，我們訪問了曾獲 eClass 港澳區中小學教學設計比賽 2014 個人組別（小學組）冠軍的冼文標老師。冼老師表示，使用電子教學平台（power lesson），可以按校本需要設計課業內容，又可即時評估學生表現，即時知道學生的答對率等。然而，電子教學也有其缺點，例如教師需要更多時間設計課業。而且進行教學時，也可能會出現網絡系統不穩定的情況，影響教學，故此需要技術人員支援。綜合以上研究及教學實踐，電子學習可以發揮以下的作用：

- 加強學生對科目知識的認知；
- 促進教學的評估；
- 貼合校本教學需要；
- 提升教學效果。

過去相關研究實踐已經證實電子學習可以提升學生對科目知識的認知，而運用修辭手法的能力需要提升。故此，是次研究將透過電子教學平台教授辨析修辭手法，從而探究運用電子教學平台在提升學生辨析修辭手法的效能。我們預期是次研究的結果，可以作為面對同樣困難的教育工作者的參考，有利香港語文教育工作的發展。

根據《小學中國語文建議學習重點》（2008），學生需運用合適修辭手法以提高表達效果（頁 12）。無論在寫作、閱讀的學習領域範疇，學生均需要辨析不同的修辭技巧，例如：明喻、暗喻、襯托、對比等。在應用的時候，學生有混淆不清及未能準確判斷的情況。故我們希望藉着是次研究，探討電子教學平台在提升學生辨析修辭手法的效能，強化學生辨析修辭手法的能力，為日後語文學習奠下重要基礎。

研究方法

是次研究的對象是六年級學生，四班合共 120 人。其中一班是尖子學生（6A），另外三班（6B，6C，6D）的學業表現平均。各班學生人數分佈如下：

班別	學生人數
6A	36
6B	28
6C	28
6D	28

表 1：實驗班別的學生人數

　　本研究兼用質性及量性方法探究運用電子教學平台在提升學生辨析修辭手法的效能。研究主要利用「前測──後測」的實驗方式，結合課堂教學活動觀察及學生訪談，收集數據，以作研究之用。研究員先採用一份前測卷（附件一）評估學生辨析寫作修辭手法的能力，以了解學生在相關領域的程度。前測卷分為三個部分：測卷甲部 10 題，要求學生辨別句子運用的修辭手法。10 道題目涵括明喻、暗喻、擬人、排比、誇張等修辭技巧，各佔 2 題，全面而均衡的反映學生辨別修辭手法的能力。測卷乙部共有 2 題，要求學生辨別段落中所使用的修辭手法，用線間出來，並圈出有關句子運用的修辭手法，以反映學生辨析寫作片段運用修辭手法的能力。這部分涵括的修辭手法，跟甲部一致。綜合甲部及乙部數據，可以反映學生辨析句子及段落的修辭手法的能力高下。測試卷丙部收集學生對修辭學習的看法，請學生圈出對一些句子，例如「我喜歡平日的中文科課堂學習」的同意程度。

　　完成前測後，研究員根據學生的前測表現，選取其中三項表現能力較弱的修辭手法 --「明喻」、「暗喻」及「排比」進行課堂教學活動，通過電子教學平台（power lesson）讓學生掌握有關能力。是次研究，運用電子教學平台的方式主要如下：

- 學生從觀察教學簡報、瀏覽影片片段、通過「拖拉遊戲」等途徑找出修辭手法；
- 學生透過電子學習平台展示他們選擇、辨析、分類的成果；
- 研究員利用「即時投票方式」展示學生辨析修辭手法的成果，引發討論，提供回饋；

　　在進行電子教學後，研究員以相應的後測卷（附件二）評估學生的相關能力有否提升。後測卷的題型、題目數目、題目涵括的修辭手法，以及題目的深淺程度，跟前測卷一致。比較前測卷及後測卷有關「明喻」、「暗喻」及「排比」項目的數據，可以反映學生在電子教學嘗試前後的能力變化。後測卷跟前測卷一致，也設置「擬人」、「誇張」兩種修辭手法的題目，以測試學生在沒有電子教學下，相關修辭手法辨析能力變化，以作研究參照。後測卷也有收集學生對修辭學習的看法，還加上「丁項」，邀請學生圈出對老師運用電子學習平台的評價。

　　為了進一步探究學生在是次教學研究的經驗與感受，研究者從前後測結果對比學生的表現，每班選出三位（四班共 12 位）在前後測成績對比「較大」、「一般」、「較小」的學生進行訪談，蒐集學生對是次研究的改善策略的意見（附件三）。結合「前測──後測」的數據，特別是測試卷丙部的意見調查，從學生意見的角度，探究是次研究對學生學習的成效，發揮「三角交叉檢視法」（triangulation）的作用。

研究結果及分析

比較前測卷及後測卷甲部（辨析句子的不同修辭手法）的平均答對人數，發現四班實驗組的學生在進行電子教學（powerlesson）實驗後，除了「誇張」手法，其他 4 類修辭手法（明喻、暗喻、擬人、排比）辨析的答對率均有提升，詳見表 2：

前測/ 後測 （升降 變化）	明喻 (%)	暗喻 (%)	擬人 (%)	排比 (%)	誇張 (%)
6A	94.44/97.22 (+2.78)	77.78/91.67 (+13.89)	100/100 (0)	100/100 (0)	98.61/100 (+1.39)
6B	62.5/82.14 (+19.64)	46.43/69.64 (+23.21)	87.5/89.29 (+1.79)	89.29/94.64 (+5.35)	92.86/83.93 (-8.93)
6C	73.21/87.5 (+14.29)	67.86/69.64 (+1.78)	87.5/96.43 (+8.93)	89.29/98.21 (+8.92)	94.64/85.71 (-8.93)
6D	82.14/89.29 (+7.15)	60.71/76.79 (+16.08)	94.64/94.64 (0)	94.64/94.64 (0)	96.43/87.5 (-8.93)
各班 平均 答對率	78.07/89.04 (+10.97)	63.19/76.94 (+13.75)	92.41/95.09 (+2.68)	93.31/96.87 (+3.56)	95.64/89.29 (-6.35)

表 2：比較前測卷及後測卷（甲部）辨析修辭手法答對率

四班受試學生辨析 5 類修辭手法的答對率的上升幅度，依次為暗喻 (+13.75%)、明喻 (+10.97%) 及排比 (+3.56%)。值得注意的是，上述學生表現最為理想的修辭手法，均與電子課堂內容（明喻、暗喻、排比）有關。相反地，沒有進行電子課堂的擬人、誇張法，情況完全不同：擬人法雖仍見進步 2.68%，而學生在誇張法的表現，出現倒退 (-6.35%)。從學生的實作表現，可以清楚反映電子課堂對學生辨析有關修辭手法的幫助。

　　根據前測卷及後測卷（甲部）辨析修辭手法的表現，四班受試學生的變化幅度明顯不同。在明喻修辭辨析方面，根據前後測資料分析，6B，6C，6D 較 6A 班學生進步得更顯著。（見圖 1）

各班學生甲部分辨析明喻得分
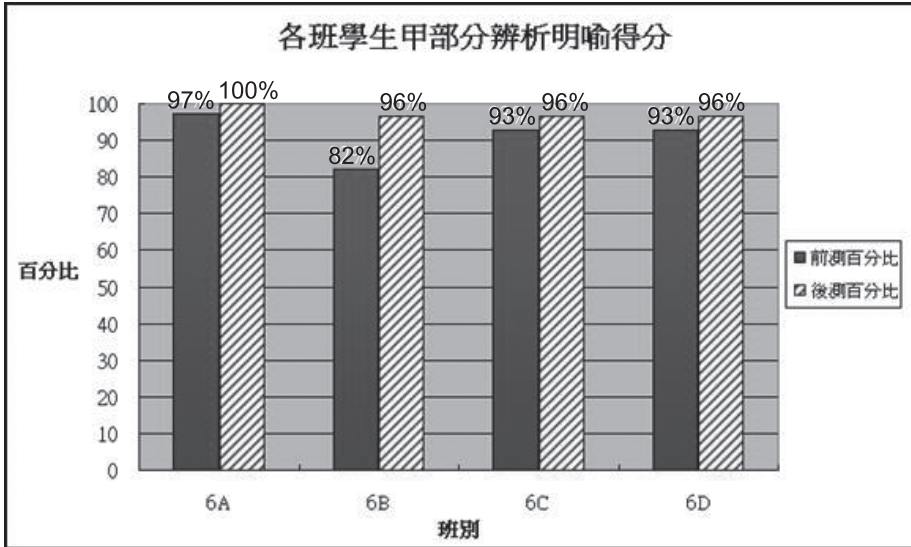
　　在暗喻修辭辨析方面，根據前後測資料分析，6A ，6B 及 6D 班學生較有顯著進步（見圖 2）。

各班學生甲部分辨析暗喻得分
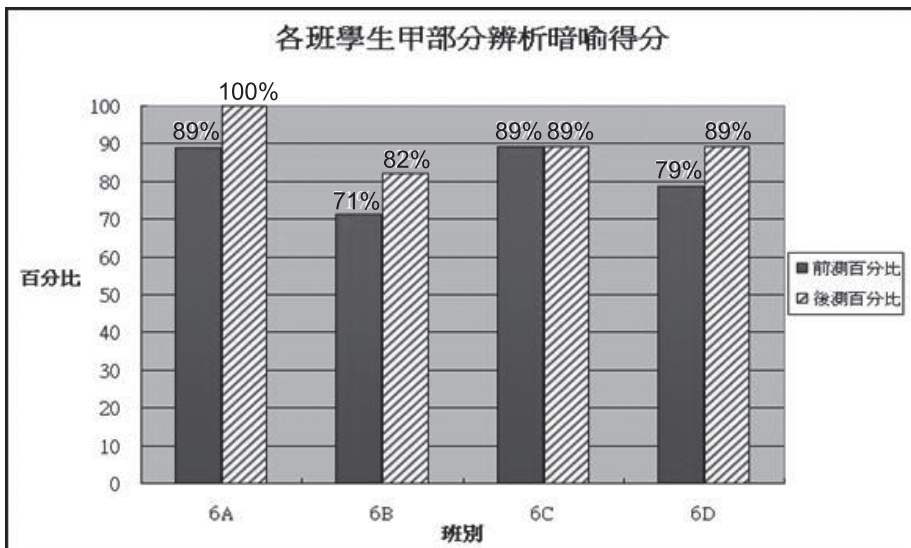
　　在段落中找出修辭手法方面，分析前後測資料，同樣發現學生有顯著進步：四班受試學生在前測兩道題目的平均答對率為 72.03%；到了後測，受試學生在兩道題目的平均答對率為 82.89%，上升了 10.86%。反觀四班受試學生在「乙部（辨析段落中的不同修辭手法）」的表現，也可發現班級的個別表現變化差異：

	6A (%)	6B (%)	6C (%)	6D (%)	受試學生 平均答對率 (%)
前測	91.67	67.86	62.5	62.5	72.03
後測	95.83 (+4.16)	78.58 (+10.72)	78.58 (+16.08)	78.57 (+16.07)	82.89 (+10.86)

表 3：比較前測卷及後測卷乙部（辨析段落中的不同修辭手法）答對率

　　比較四班受試學生的前後測表現，6A 進步幅度相對較小 (+4.16)，6B，6C 及 6D 三班的增幅較大（大於 10%）。究其原因，本校 6A 班為精英班[1]，學生能力較其他班學生強。其他班學生個別差異較大，部分學生起初未能掌握相關的知識，然而透過電子課堂，學生得以鞏固修辭知識，進步較大。

　　前後測卷丙部關於學生辨析修辭手法興趣的數據改變輕微，前後測卷丙部四個句子的同意率，由增加 2.5% 至減少 1.7%，顯示學生對平日上課形式和電子課堂的觀感沒有因為經歷這一次電子學習而大幅改變。值得注意的是超過七成學生一直喜歡平日的中文課堂（前測 72.5%；後測 75%），感到「平日的中文科課堂學習比較沉悶」的學生低於一半（前測 44.2%；後測 46.7%）。在未進行電子課堂學習前，相信「利用電子教學平台學習修辭手法，較由老師解説更為有趣。」的有 77.5%；進行電子課堂學習後，同意率略降至 75.8%。至於「我認為老師使用電子教學平台教授修辭手法，使我學習得更好。」這句子，前測同意的有 76.7%，後測同意率輕微減少（75.8%）。上述情況反映學生認為老師使用電子教學平台教授修辭手法，是使他們學習得更好的原因。學生認同通過運用電子教學平台（power lesson）的學習效能之餘，肯定了教師能善用電子課堂學習的重要性（見表 4）。

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[1] 本校 6A 精英班為全級成績排名首 36 名的學生，中、英、數科成績必須合格。而其餘學生則按隨機分配編入 6B、6C 及 6D 班，成績相若。

項目 （全級人數：120 人）		同意程度（5分為最高）				上升或 下降百 分比
		前測 （十 分 同 意 及同意）		後測 （十分同意及 同意）		
		人數	百分比	人數	百分比	
1	我喜歡平日的中文科課堂學習。	87	72.5%	90	75%	+2.5%
2	平日的中文科課堂學習比較沉悶。	53	44.2%	56	46.7%	+2.5%
3	利用電子教學平台學習修辭手法，較由老師解説，更為有趣。	93	77.5%	91	75.8%	-1.7%
4	我認為老師使用電子教學平台教授修辭手法，使我學習得更好。	92	76.7%	91	75.8%	-0.9%

表 4：學生對中文科課堂觀感

　　根據後測卷丁部（學習活動）的數據發現，超過七成學生喜歡是次老師使用的教學平台的不同電子教學活動（見表 5）。明顯地，學生喜歡這些活動，提高了學習動機，因此在修辭辨析的能力也有所改善。

項目 （全級人數：120 人）		喜歡程度（4分為最高）	
		後測（十分喜歡及喜歡）	
		人數	百分比
1	播放影片	104	86.7%
2	拖拉遊戲	107	89.2%
3	選擇題	107	89.2%
4	是非題	107	89.2%
5	在排比句下間線	91	75.8%

表 5：學生對不同電子學習活動的態度

回應研究問題，為更深入了解在前後測成績對比較大、一般及較小的學生對於運用電子教學平台學習修辭手法的看法，我們於 2015 年 6 月 19 日分別訪問了六年級四班共 12 位學生。歸納以上三類學生的意見，發現三類學生均表示喜歡運用電子教學平台學習修辭手法，主要原因包括：

- 活動有新意，能吸引同學；
- 互動性強；
- 更專心上課；
- 即時練習、運用、提問、作答及訂正；
- 可隨時翻查題目；
- 多思考、多動腦筋。

受訪學生也指出了電子課堂能幫助他們學習修辭的原因，包括：
- 練習有挑戰性、有成功感；
- 如果答錯，老師會先顯示答案，再逐一提問原因；
- 不用等老師也可完成筆記；
- 電子學習活動的吸引力很大。

受訪學生認同老師運用電子教學平台教授修辭手法，原因包括：
- 有趣、有新意；
- 能吸引平日不專心的同學；
- 不像口述教學，如聽漏不能追，電子學習會一步一步同做，可以專心去學，真正了解學習內容。

綜合以上訪談結果，我們發現學生即使存在學習表現差異，但均認為運用電子學習平台來學習辨析修辭手法較平日課堂更有趣、吸引，能令他們更專心上課。更重要的是，電子課堂讓他們可以即時了解自己的學習表現。學生可按需要自行調校學習的進度，例如：可隨時翻查題目，重看內容。此外，電子教學平台提供即時顯示答案的功能，學生能馬上得到回饋，提升學與教的效能，解釋了是次教學設計能有效強化學生辨析修辭手法能力的原因。

反思及建議

是次研究的實驗，證明了透過電子教學平台教授學生辨析修辭手法的成效，也反映了電子教學的強項與不足之處。是次研究的電子課堂嘗試，引證了電子教學以下的作用：
- 有趣、吸引，能令學生更專心上課；
- 讓學生可以儘快得到回饋，提升學與教的效能；
- 讓學生可以即時了解自己的學習表現，從而按需要自行調校學習進度。

學生在電子課堂的過程中的熱烈反應，投入學習，也可以見諸課堂活動
（圖 3-5）：

圖 3：學生課堂表現（一）

圖 4：學生課堂表現（二）

是次研究，從學生的意見調查，也反映教師才是電子教學平台（power lesson）的主人，何志恆（2013）在一個以香港教育大學中國語文教育榮譽學士課程學員為對象的研究，發現準教師在「電子學習設計較傳統面授教學更能促進學生的學習成果？」的議題上，反應分歧：選擇「非常同意」或「同意」的共有 17 人（54.84%），但是表示「不同意」的也有四成以上（45.16%），可見問題在受訪者眼中極富爭議性。是次研究的對象，雖然是小六學生，但是他們從學習過程也體會到電子課堂成功與否，教師才是主要的關鍵。以是次研究為例，教師能否善用「即時投票方式」展示學生辨析修辭手法的成果，引發討論，提供回饋，是活動能否發揮教學效能的關鍵。

進行教研能提供機會讓老師作專業的交流和分享。經過共同備課及同儕觀課，同事可集思廣益，交流和分享學習心得。還有，本教學設計可保存於電子教學平台資料庫，方便老師日後可取用及按學生的需要作出修訂。此外，可把教學設計承傳下去，讓新老師較易享用前人的成果。從學生訪談得知，部分學生指出活動設計較重複，因而感到沈悶，因此我們建議活動設計可更多元化，避免重複。

圖 5：學生課堂表現（三）

總結

總括而言，我們透過教學實踐，證實電子教學方式在修辭手法教學上能強化學生對修辭手法的認知、有效提升學生辨析修辭手法的能力，還可以提升學生學習語文的興趣。另一方面，這次電子教學嘗試，也可以證實在引導程度一般的學生理解較為抽象的概念起了正面的作用，甚至學習能力強的學生效果更為顯著。透過比較學生辨析不同修辭的表現，更可以確定電子課堂的教學作用，教師日後也可以將有關教學策略應用於其他修辭技巧，或其他語文教育項目，以促進教學的效能。

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（附件一）

2014 ─ 2015 年度
中文科六年級行動研究
前測卷

姓名：＿＿＿＿＿＿＿＿＿（　　）班別：六（　　）　成績：＿＿＿＿＿＿

性別：男 / 女　　　年齡：＿＿＿＿＿＿＿　　日期：＿＿＿＿＿＿

甲、辨別下列句子所用的修辭手法，把代表答案的英文字母填在（　　）
　　內。每題 1 分，選項可重覆使用。

A. 明喻	B. 暗喻	C. 擬人	D. 排比	E. 誇張

1. 年紀小小的弟弟，哭聲比雷聲還要響亮。　　　　　　（　　　　）

2. 鬧鐘又在大吵大嚷了，快點想辦法讓它安靜下來吧！（　　　　）

3. 我喜歡到郊野公園，欣賞蔚藍的天空，腳踏青翠的草
　　地，觸摸碧綠的小溪。　　　　　　　　　　　　　（　　　　）

4. 初生小老虎外形好像小貓一樣。　　　　　　　　　　（　　　　）

5. 近年的天氣越來越熱，夏日的高溫幾乎要把人融掉。（　　　　）

6. 春天是一個魔術師，悄悄給大地換上了新裝。　　　　（　　　　）

7. 大雁在天空飛翔，是多麼的逍遙自在，是多麼的無拘
　　無束，是多麼的輕鬆寫意啊！　　　　　　　　　　（　　　　）

8. 電腦突然罷工，令明天快要交報告的哥哥非常無奈。（　　　　）

9. 木棉花盛開的時候，仿如一團熊熊的火焰，在樹上熾
　　熱地燃燒。　　　　　　　　　　　　　　　　　　（　　　　）

10. 從山頂往下看，厚厚的雲層變成了波濤洶湧的海洋。（　　　　）

乙、辨別下列段落中所使用的修辭手法，用線間出來，並圈出正確答案，提示：每段只有一種修辭手法。

1.
外婆走得突然，留下的就只有幾件物品作紀念，其中有這雙親手為我沖洗乾淨的塑膠拖鞋，一直留在我的身邊，捨不得丟掉。直到現在，每次我接觸到那灰舊的鞋面時，彷彿輕撫着外婆溫暖而多皺的手。
A. 明喻　　　B. 暗喻　　　C. 擬人　　　D. 排比　　　E. 誇張

2.
我把死去的小麻雀埋在老槐樹下。我呆呆地看着牠長眠的地方，自覺對不起牠。我聽見老麻雀在哀鳴，牠們似乎在為牠唱輓歌＊。 ＊輓歌：哀悼死者的歌
A. 明喻　　　B. 暗喻　　　C. 擬人　　　D. 排比　　　E. 誇張

丙、

	請閱畢下列各項後，在最合適的選項下加 ✓。	十分同意	同意	不同意	十分不同意	無意見
1	我喜歡平日的中文科課堂學習。					
2	平日的中文科課堂學習比較沉悶。					
3	利用電子教學平台學習修辭手法，比起由老師解說，更為有趣。					
4	我認為老師使用電子教學平台教授修辭手法，使我學習得更好。					

（附件二）

2014 — 2015 年度
中文科六年級行動研究
後測卷

姓名：＿＿＿＿＿＿＿＿＿（　）　班別：六（　）　成績：＿＿＿＿＿＿

性別：男／女　　　　　年齡：＿＿＿＿＿＿＿　　日期：＿＿＿＿＿＿

甲、辨別下列句子所用的修辭手法，把代表答案的英文字母填在（　）
　　內。每題 1 分，選項可重覆使用。

A. 明喻	B. 暗喻	C. 擬人	D. 排比	E. 誇張

1. 在寧靜的角落裏，沒有吵雜的人聲，沒有擠迫的人　　（　　　　）
　　潮，沒有喧鬧的叫賣聲。

2. 蟋蟀是大自然的演奏家，鳴叫聲響徹草叢每個角落。　（　　　　）

3. 那一串串燦爛的花兒，猶如一串串爆竹，熱烈地燃　　（　　　　）
　　燒。

4. 柏基曬得黑黝黝的，膚色比木炭還要黑。　　　　　　（　　　　）

5. 天空中的太陽好像一個大火球。　　　　　　　　　　（　　　　）

6. 香港雖然不下雪，可是北風還是會令人們冷得全身　　（　　　　）
　　都結冰。

7. 鉛筆乖乖地躺臥在文具盒裏，等候主人的差遣。　　　（　　　　）

8. 從觀景台眺望，宏偉的建築物變成了小小的積木。　　（　　　　）

9. 每當我使用這台電腦時，它總會拒絕聽從我的指令。　（　　　　）

10. 公園裏的植物，紅的火紅，白的雪白，青的靛青，　（　　　　）
　　綠的碧綠。

乙、辨別下列段落中所使用的修辭手法，用線間出來，並圈出正確答案，提示：每段只有一種修辭手法。

1.
有人説，十歲的孩子崇拜父親，二十歲的青年人鄙視父親，四十歲的中年人憐憫父親。然而，對我來説，父親是值得我一輩子崇拜的人。我們的作業父親每天都要一道道地檢查，詳細地寫上家長意見，他被老師稱為「最稱職的家長」。
A. 明喻　　　B. 暗喻　　　C. 擬人　　　D. 排比　　　E. 誇張

2.
這一天，牠又蜷縮在角落裏。忽然，窗外的老麻雀又叫了起來，牠立刻眼睛睜得大大的，張開翅膀騰空而起。牠在屋裏盤旋了一圈，就衝向玻璃窗。只聽「嘭」的一聲，撞在玻璃上，牠像一塊石頭似的墜落在地上。我衝過去，雙手托起小麻雀，無數次地呼喚牠，但牠再也沒有醒來。
A. 明喻　　　B. 暗喻　　　C. 擬人　　　D. 排比　　　E. 誇張

丙、

	請閱畢下列各項後，在最合適的選項下加 ✓。	十分同意	同意	不同意	十分不同意	無意見
1	我喜歡平日的中文科課堂學習。					
2	平日的中文科課堂學習比較沉悶。					
3	利用電子教學平台學習修辭手法，比起由老師解説，更為有趣。					
4	我認為老師使用電子教學平台教授修辭手法，使我學習得更好。					

丁、試選出你對老師使用電子學習平台教授「修辭」的喜歡程度：
（在適當的 ❏ 內加 ✓）

方法	喜歡程度			
	☺ 十分喜歡	☺ 喜歡	😐 不喜歡	☹ 十分不喜歡
播放影片				
拖拉遊戲				
選擇題				
是非題				
在排比句下間線				

（附件三）

2014 — 2015 年度
中文科六年級行動研究
修辭辨析：訪談

姓名：＿＿＿＿＿＿＿＿（　　）　班別：六（　　）　日期：＿＿＿＿＿＿

1. 在過去上中文課，你學過修辭嗎？老師用甚麼方法教修辭？
　 你喜歡嗎？為甚麼？

2a. 你們喜歡運用電子教學平台學習修辭手法嗎？為甚麼？
2b. 你認為最大的得著是甚麼？（試舉一個例子）

3. 電子教學方式，能幫助你學習修辭手法嗎？為甚麼？

4a. 學習修辭辨析後，對你的寫作有幫助嗎？
4b. 承上題，有甚麼幫助？（如 4a 答沒有，請跳到第 5 題。）

5. 你對於這次老師運用電子教學平台進行修辭有甚麼看法？

三至四歲幼兒在積木主題建構活動中對空間概念的認知與迷思

張曄（主要研究員）
黎培莉、關珊（其他研究員）
香港教育大學滙豐幼兒發展中心

摘要

在幼兒教育階段的學習過程中，教具或實物的應用有助幼兒更好地理解及建立數學概念，而在眾多用於教學的教具或實物中，積木有著無法取代的地位。建構積木有助於促進幼兒於不同範疇的能力發展，其開放性和可再造性的特徵尤其能為幼兒建構數學概念及經驗提供充裕的發展空間和機會。就此，本研究透過讓三至四歲幼兒進行積木主題建構活動，探討其在空間概念發展過程中所顯現出的認知表現與迷思，並為教師瞭解幼兒在積木建構活動中的行為表現提供參考。研究結果顯示，在積木主題建構活動之後，幼兒對二維和三維空間的認知水準有所提升，在積木建構過程中，幼兒會對空間關係和空間利用方式這兩個方面產生迷思。

研究背景與問題

在幼兒教育階段，積木是幼兒不可或缺的遊戲，建構積木有助促進幼兒各方面能力的發展。但由於積木所佔的空間較大，且需保證充足的建構時間，故教師往往只在教室中設置一個區域讓幼兒自由建構，（在教學過程中則較少用到），在積木區中常常會出現以下狀況：（1）積木擺放混亂，閒置於狹小的角落中；（2）積木區環境佈置單一，未能為幼兒的建構行為，提供適切的環境刺激；（3）積木遊戲被視為「自由活動」，教師未有產生重視此建構活動，並較少將幼兒的積木建構行為作為評估幼兒學習的憑證；（4）成人認為木質積木具有一定危險性，因此限制幼兒操作的機會（馬祖琳等，2009）。就此，若能在日常教學中引入積木作為教具，並對其運作過程和結果進行分析，則能有效提高積木的使用率及學習效能。

在早期數學方面，建構主義學習理論中有關數學教學，強調在遊戲中學習，以實物操作的學習方式為主（魏美惠，2005）。有研究指出，在幼兒教育的數學教學中，教材教具的使用，應配合幼兒的心智發展，使幼兒對數學更加容易理解 （劉秋木，1996）。還有多個研究表明，在數學教學中教具或實物的應用，有助於幼兒建立數學概念（劉蘊如，1993；黎佳欣，2007；張麗芬，2009）。由此可見，在幼兒階段的數學教學及學習過程中，利用教具或實物有助於幼兒數學概念的形成與發展，而由不同立體幾何圖形構成的積木則十分適合扮演這一角色。此外，以往的文獻中較少涉及教具或實物的應用對幼兒數學概念中空間概念的影響。在幼兒空間概念學習的相關研究中，也甚少針對三至四歲幼兒的發展與表現。因此，本研究可為前人的研究作出補充及擴展。

本研究旨在透過讓三至四歲幼兒進行積木建構活動，探討在教學中協助幼兒利用積木進行探索學習的方法，分析幼兒在二維平面空間轉換為三維立體空間過程中對空間概念的認知與迷思。主要研究問題有：

1. 積木建構活動的形式與內容
2. 三至四歲幼兒在積木建構活動中對空間概念的認知與迷思

文獻探討

在幼兒教育階段，積木被公認為有助幼兒發展的玩具或教具，其種類繁多，且具開放性，能滿足不同年齡階段及幼兒不同範疇的發展需求，積木建構活動對幼兒數學概念的學習和認知功用更是顯而易見。
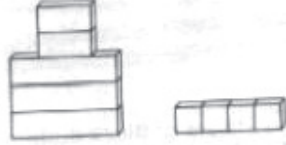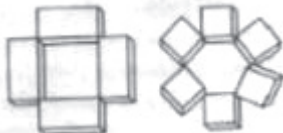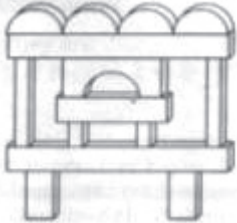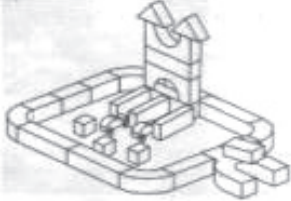
幼兒在積木遊戲中可發展比較、測量、加減法、型式對稱、部分與整體及等積關係等數學概念（Adams & Nesmith, 1996； Casey, Bobb, Sarama & Clements, 2003；Leeb-Lundberg, 1996；吳雅玲 & 許慧欣，2008）。同時，積木遊戲還有助於發展位置和方向的空間關係（Andrews, 1999）。其中在數學範疇的發展概念有：形狀、大小、配對、測量、體積、面積、深、寬、高、長、排列、數字、分數、分類、比較、空間等。

在積木建構活動中，幼兒積木建構表現與作品的複雜程度、年齡及幼兒發展相關。Johnson（1996）在對幼兒建構單位積木進行研究之後，認為幼兒積木建構水準的發展主要有：

階段一　對積木之間的空間關係的理解和操作。
階段二　對各建築模型之間的空間組合的理解和構成。
階段三　在主題和情節背景下對建築物之間關係的再現和表達。

在此基礎上，幼兒積木遊戲的發展及表現特徵可闡述為以下七個階段
（表一）：

表一　Johnson（1996）之積木建構發展階段

階段	建構範例	表現特徵	
第一階段 攜帶		抱著或拿著積木到處走， 或在地上隨意擺放	
第二階段 堆疊		水準並排	
		垂直造塔	寬邊造塔
		長邊造塔	
第三階段 架橋		簡單架橋	
		多重式架橋	
第四階段 圍牆		簡單圍牆	
		連接式多元表現圍牆	
第五階段 型式與對稱		部分對稱	
		整體對稱	
第六階段 早期表徵		部分命名	
		整體命名	
第七階段 晚期表徵		先命名再建構	

資料來源：修改自 Wellhousen & Kieff（2001）；吳雅玲（2007）

　　首先，建構主義學習觀認為，幼兒的學習動機來自對新知識的衝突，個體會相應提出質疑及問題，從現有的知識體系為當前的衝突找出適當的概念知識作連繫，試圖想出可行的假設去學習，並透過實際行動進行探索，把新的事物建構成新的概念知識，形成概念的改變，重整為個體的知識體系，在此建構學習觀點基礎上帶出的學習循環，便成為實踐「問題 -- 探索 -- 經驗」自主建構學習模式的理論依據（鄭美蓮、陳聲珮，2013）。而本研究基於建構主義學習理論的積木主題建構活動，正是以「問題 - 探索 - 經驗」自主建構學習模式為框架，教師與幼兒共同商議感興趣的建構主題，再在操作中發現問題，憑藉幼兒的已有經驗探索解決問題的方法，最終透過討論、建構、互動等過程獲得符合個人發展層次和需求的經驗。

　　其次，建構主義認為知識具有適應性，並會作為概念系統存儲在個人的知識體系中，知識的學習是一個自主和主動的過程，透過自我調節及抽象思考，原有的知識概念系統會作出改變，從而建立或重整新的知識體系（陳聲珮、鄭美蓮，2006）。在此基礎上所產生的「問題 -- 探索 -- 經驗」自主建構學習模式可應用於不同範疇的活動中，過程中幼兒在已有經驗感興趣的問題引導下，透過親自操作和探索而獲得第一身經驗。本研究中的積木建構活動以「問題」、「探索」、「經驗」為活動設計及實施元素，並透過操作積木來探索建構建築的奧秘，是以建構主義為導向的教學活動。而與傳統教學相比，以建構主義為導向的教學活動有許多不同之處 (表二)（朱湘吉，1992）：

表二　傳統教學與建構主義教學設計的比較

比較項目	傳統教學設計	建構主義教學設計
哲學基礎	• 客觀論 • 知識本身有恆真價值	• 建構論 • 意義是經由社會協調而來
學習內容	• 適合學習動作技能、語文資訊及具體概念 • 簡化現實世界	• 適合學習解決問題及認知策略等進階知識 • 呈現現實世界的真實面貌
學習者	• 可在教學過程中調整個別差異 • 重視學習者的起點行為 • 被動接受知識	• 學習者的先前知識影響學習結果 • 強調學習者有自我管理的能力 • 主動參與學習
學習情境	• 正式教學	• 情境學習
學習項目	• 人造的	• 真實的
成果評量	• 重視教學與成效 • 以學習目標為評量標準	• 重視學習的過程本身 • 目標中立（goal-free）導向

再次，在建構主義教學方面，社會建構論認為，學校是幼兒汲取知識及形成概念的一個重要場所，教師在幼兒學習的過程中扮演著重要的角色。周淑惠（1999）提出，尤其是三至五歲幼兒在遊戲建構中，應比其他年齡層幼兒需要更多的鷹架支援與引導。因此，教師身為鷹架者，藉由各種活動和時間的調配，輔以不同的教學方式，達到顧及到每一位幼兒的需求，可透過團體討論促進幼兒思維，透過小組教學讓幼兒與小組成員有更密切的互動機會（陳惠敏，2007）。

另外，一個適性發展的教學方案，應當以幼兒為中心，教師鷹架，協助幼兒探索學習，在課程設計上採用跨多個領域，統整課程，而幼兒的空間概念教學，應可採用方式來協助他們獲得空間概念（周淑惠，2000）。就此，本研究中進行的積木主題建構活動是以建構主義學習理論為框架，把幼兒提出的問題作為出發點，在教師的鷹架之下，讓他們透過不同階段和程度的探索來確立符合其學習興趣和發展能力的主題，從而在建構積木的過程中，循序漸進地獲得相應的概念和經驗，形成有主題的探索式積木建構活動。

空間概念是個體最早發展的物理知識之一，亦是後續高階科數概念發展的基礎（洪文東、楊志強、張琪，2009）。幼兒空間概念的學習對其相關概念發展會產生重要影響，在許多有關幼兒空間概念的研究中，不同研究者對幼兒空間概念之定義亦作出了探討 (表三)。

表三　幼兒空間概念之定義

研究員	研究年份	空間概念的定義
吳貞祥	1978	累積各項的空間經驗，發展成空間知覺後，經過思考與協調，方能慢慢形成抽象的概念，稱為空間概念
NCTM	1989	空間概念包括空間關係——位置、方向、距離以及利用空間的方式——組織佔用空間和空間形狀與空間建造等子概念。
周啟、洪木利	1993	空間概念主要包括為：方向、大小、形狀、長度、面積、體積等六個基本概念。
NCTM	2000	在兒童認知發展中，能運用上下、左右、前後、內外等方位語詞描述兩物的相對位置。
陳埩淑	2005	空間概念包含空間關係含有位置 (在上、在下、在前、在後、在裡、在外…)、方向 (朝上、朝下、往前、往後、往旁、往右)、距離 (靠近、遠離) 及空間定位概念（在一定空間中安排、組織、或建構周圍的物體）。
Poole, Miller & Church	2006	藉由空間知覺發展出有關方向、距離和位置概念之理解，建立在位置、距離、與位移的空間概念知覺的發展基礎上。
邱淑亞	2006	空間概念包括瞭解位置、方向、距離等空間關係和相關語言，以及空間運用的活動。

　　由上述定義可見，空間概念主要體現於對位置、方向、距離這三個方面的知覺，以及對空間利用關係的理解。因此，結合本研究中所進行的積木主題建構活動，研究中所提及的空間概念，則以上述空間概念之定義為基礎，具體講空間概念闡述為在積木主題建構活動中幼兒對空間關係（位置、方向、距離）以及空間利用方式的理解及表現。

　　傳統幼兒數學活動對空間感應學習的描述並不多，然而空間能力是決定人在科學進展的關鍵，也是用來輔助思考，獲取資料、設計問題或解決問題的手段。科學的進步跟空間智能的發展有緊密的關係（Gardner, 1983）。學齡前階段的幼兒，正處於視覺空間發展的「空間期」，對於周遭環境事物的認知與學習會愈來愈敏銳，是幼童學習空間概念最恰當的時間（洪文東，2011）。（空間具體來說是指物質本身的廣延性，表現為物質的位置、規模和體積，與此相關的研究主要通過幼兒對物質空間方位關係及數形關係的認識，來揭示幼兒空間概念發展規律（趙新華，1993）。）

　　幼兒空間概念指在幼兒認知發展中，能運用上下、左右、前後、內在等方位詞語描述兩物的相對位置（NCTM, 2000）。空間概念包含空間關係含有位置（在上、在下、在前、在後、在裡、在外、在中間、在旁邊）、方向（朝上、朝下、往前、往後、往旁、往右）、距離（靠近、遠離）及空間定位概念（在一定空間中安排、組織、或建構周圍的物體）（陳埩淑，2005）。若以幼兒空間概念發展階段作為劃分依據，進一步細化空間概念發展階段與幼兒年齡及發展特徵之間的關係，有研究者綜合文獻資料，將 Piaget 的幼兒空間概念發展依據年齡階段分為拓撲階段、投影空間和歐氏幾何空間，並綜合為「Piaget 幼兒空間概念發展表」（表四）(陳奕翰，2013）：

表四　Piaget 幼兒空間概念發展表

	年齡	階段	特徵	特徵說明
1	約 3-4 歲	前運思期 (Preoperational period)	自我中心傾向 不可逆性 符號代表實物 知覺集中傾向	幼兒已發展出有關接近、分離、次序、包圍、連續的概念。
2	約 4-8 歲	前運思期至具體運思期之間 (Preoperational period to period of concrete operations)	自我中心傾向 不可逆性 符號代表實物 知覺集中傾向 序列化 去集中化 守恆 類包含	幼兒逐漸理解物體位置與物體間的相對關係，並漸漸形成二維和三維空間轉換已有幾何學的概念，但這種概念仍然無法擺脫視覺影像。
3	約 9 歲以上	形式運思期 (Period of formal operations)	假設演繹推理 命題推理 組合推理	幼兒之空間理解已成熟，他們能從視覺迷惑中找到解決方案，將所有物體間的空間關係統整為個體所具有的概念。

資料來源：整理自 (陳奕翰，2013)

　　空間概念是學習幾何之前的必備階段，幼兒教育時期是幼兒學習空間概念最恰當的時間，如果幼兒錯失空間概念的學習，則其進階幾何學習的效果會受到影響（Clements, Sarama, & DiBiase, 2002）。由此可見，在幼兒教育階段，對幼兒空間概念進行培養與發展則顯得十分必要。依據幼兒空間概念發展特徵，幼兒由四歲開始，便逐漸形成二維和三維空間轉換的幾何學概念，而積木有不同形狀的，有助幼兒建構三維空間，因此，若在積木建構活動中，以二維和三維空間轉換為線索，探討幼兒對空間概念的認知和迷思則十分有意義。

研究方法

　　在香港教育學院滙豐幼兒發展中心隨機抽取全日幼兒班進行研究，班級總人數為15人，其中男生7人，女生8人，平均年齡為3歲11個月。

　　積木建構區是幼稚園課室中必備的學習區之一。為了讓幼兒熟悉積木，使他們對積木建構活動產生興趣，並配合課題的探索進程，在開展「小小藝術家」的主題教學之前，便在課室內創設了積木建構區，並透過多次現場觀察幼兒的遊戲情況之後，依據幼兒的需求持續完善積木建構區的設計。積木區在設置時主要依循以下原則（馬祖琳等，2009）：

一 · 空間：避開動線

二 · 積木櫃：每一層格儘量置放一種形狀的積木，將不同形狀分開放置，
方便幼兒拿取。教師將每一種形狀的積木按尺寸在紙上描
畫下來，再剪貼在每一層格前，方便幼兒自行收拾。

三 · 預留取放積木之走道。

四 · 牆面：可適當在牆上張貼展示、記錄，以作引導。

五 · 配件：視乎幼兒遊戲需要，適時加入。

　　研究採用「問題 -- 探索 -- 經驗」自主建構學習模式來設計積木建
構活動的教學內容。「問題 -- 探索 -- 經驗」學習是以建構學習理論為
依據，主要透過問題、探索、經驗三個學習階段，刺激幼兒在學習新事
物時，把原來的概念作出適當的轉換，建構新的概念，培養良好的學習
能力（陳聲珮、鄭美蓮，2013）。

　　學校每學年均開展七大課題。本研究利用幼兒在每年三月至四月中
旬進行「小小藝術家」課題，於全日幼兒班（三至四歲）加入積木建構
活動，讓幼兒有充足的時間利用積木進行探索。在此課題探索焦點問題
訂立過程中，幼兒延續上一個課題「快樂的中國人」中的探索興趣，
繼續對「戲曲藝術」展開探索。期間由於幼兒對「戲曲表演場地」這一
問題產生濃厚興趣，教師便與幼兒共同確立新階段探索焦點 --「搭建戲
院」，同時利用積木作教具與幼兒共同展開以「搭建戲院」為主題的活
動。

　　透過「問題 - 探索 - 經驗」自主建構學習模式來進行建構活動，教
師將搭建鷹架引導幼兒以「搭建戲院」為探索焦點，利用積木將二維
空間（平面設計圖）轉換三維空間（利用積木建構平面設計圖所表的內
容），並從空間概念中的空間關係（位置、方向、距離）以及空間利用
方式這兩個方面出發，獲得幼兒空間概念表現的證據。在此基礎上，研
究在「小小藝術家」課題探索期間，進行為期三週的積木主題建構活動，
每週進行四次，每次持續 40 分鐘，共計十二次教學活動，藉此瞭解過
程中，幼兒對空間概念的認知與產生的迷思。
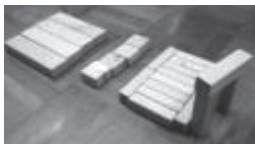
　　有關概念的研究或評測工具往往不是讓幼兒回答對或不對的情況，
研究員需要深入瞭解幼兒回答的理由（楊志強，2011）。由於幼兒表達
能力有限，部分概念表達技巧對其學習可能有難度，因此一般幼兒概念
的評測多以現象觀察、動作實作方式及簡單的紙筆測驗輔以口頭或實體
詢問方式來進行（洪文東，2011）。本研究所採用的研究工具分為幼
兒在積木建構活動中的表現與迷思，以及空間概念的評量與分析兩個部
分。

在分析幼兒積木主題建構活動的表現與迷思方面，使用研究者編制的「積木主題建構活動記錄表」記錄每次活動的內容，從空間關係（位置、方向、距離）以及空間利用方式兩方面分析幼兒於每次活動中空間概念的迷思。在幼兒空間概念的評量與分析方面，主要使用「幼兒園教育質量評價手冊 -- 工具七 -- 幼兒發展評測 - 測查圖卡」，在研究開展前期及後期，分別對幼兒空間概念的認知發展狀況進行測評，透過比較結果獲知幼兒在積木主題建構活動前後空間概念認知差異。該評量工具主要對幼兒空間認知中三維空間和二維空間的認知發展狀況進行比較和分析，各測查項目均涉及空間概念中空間關係（位置、方向、距離）以及空間利用方式兩方面內容。

研究結果及分析

「積木主題建構活動記錄表」重點記錄在「問題 -- 探索 -- 經驗」自主建構學習模式下，幼兒於積木主題建構活動中的探索建構過程，以及產生的空間概念迷思 (表五)。
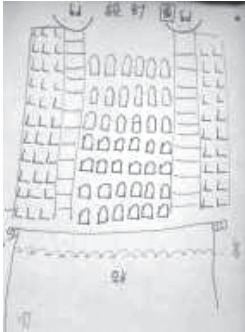
表五　積木主題建構活動記錄表

活動	活動表現			迷思
	問題產生	探索過程	經驗表現（空間概念的認知）	
活動一	1. 在什麼地方看戲？ 2. 戲院有什麼功能？ 3. 戲院裡有什麼？	1. 初建舞臺 2. 門的位置（1） 3. 門的位置（2） 4. 門的位置（3） 	1. 幼兒用平面建構的方式表示戲院內部的樓梯。 2. 幼兒選用條形積木組合成長方形舞臺。 3. 幼兒選用方形積木排列為座椅。 4. 幼兒選用條形積木，調整積木間距離，縱向建構為門。	1. 空間關係 幼兒對戲院門的位置和方向產生分歧及討論，主要有以下建議： a. 舞臺後面 b. 座椅與樓梯之間 c. 樓梯旁邊

活動	活動表現			迷思
	問題產生	探索過程	經驗表現 （空間概念的認知）	
活動二	1. 戲院的門在哪裡？ 2. 如何從門進入戲院？ 3. 戲台有什麼特點？ 4. 戲院的座椅有什麼特點？	1. 再建舞臺 2. 確定門的位置 3. 搭建幕布，示範如何進入戲院 4. 加高舞臺 5. 增加椅背 	1. 幼兒合理編排舞臺、座椅、樓梯和門的位置，各部分保持有一定空間距離。 2. 幼兒利用「玩具公仔」示範進入積木搭建的戲院空間的順序。 3. 幼兒選用長條形積木表示幕布。 4. 幼兒以座椅為參照物，產生並實踐加高舞臺的概念。 5. 幼兒表現對座椅結構的認識，包括椅面和椅背。	1. 空間關係 幼兒對幕布的位置及形態產生分歧，主要有以下建議： a. 直放 b. 橫放 2. 空間利用方式 a. 幼兒對如何安排及建構幕布產生疑問

活動	活動表現			迷思
	問題產生	探索過程	經驗表現 （空間概念的認知）	
活動三	1. 戲院的幕布是怎樣的？ 2. 真實的戲院是怎樣的？	1. 觀察樓梯及座椅 2. 以身高為參照量度舞臺高度 3. 觀察幕布 4. 觀察舞臺 	1. 發現樓梯和座椅的層級空間分佈特點。 2. 從高處觀察並用形狀詞彙描述舞臺形狀。 3. 參照自身身高，描述舞臺的高度。 4. 從向上的角度觀察舞臺特色。 5. 舞臺左右兩邊各有樓梯。 6. 知道幕布有橫向開合的特點。	1. 空間關係 a. 戲院各設施的位置 b. 舞臺與地面的距離 c. 門、座椅、樓梯、舞臺的方向 2. 空間利用方式 a. 戲院中各個設施的組織安排方式
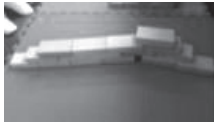
活動	活動表現			迷思
	問題產生	探索過程	經驗表現 (空間概念的認知)	
活動四	1. 正式搭建戲院有何預備工作？ 2. 什麼是設計圖？ 3. 如何畫設計圖？	1. 商討畫設計圖的方法 2. 幼兒用不同形狀代表戲院不同部分 3. 戲院設計圖完稿 	1. 用大長方形代表舞臺。 2. 用正方形代表座椅。 3. 用小長方形代表樓梯。 4. 分辨前後位置。 5. 於畫紙的不同位置畫舞臺、座椅、樓梯、門。 6. 戲院不同部分的空間分佈。	1. 空間關係 a. 戲院各設施的位置 b. 舞臺與地面的距離 c. 門、座椅、樓梯、舞臺的方向 2. 空間利用方式 a. 在二維平面圖紙上組織戲院中各個設施的方式 b. 戲院各部分的陳列方法和建構先後次序

活動	活動表現		經驗表現 （空間概念的認知）	迷思
	問題產生	探索過程		
活動五	1. 在哪裡搭建全日幼兒班的戲院？ 2. 如何搭建戲院的舞臺？ 3. 如何搭建舞臺左右兩邊的樓梯？ 4. 如何搭建戲院的座椅？	1. 幼兒商討搭建戲院的位置 2. 確定在積木區搭建戲院 3. 搭建舞臺及舞臺旁樓梯 4. 搭建座椅 	1. 預測搭建戲院的空間大小。 2. 以身體為參照物，「感知」舞臺大小。 3. 在舞臺左右兩邊縱向搭建樓梯。 4. 在與舞臺相隔一段距離內縱向排列座椅。 5. 以直角的形式搭建座椅。	1. 空間關係 a. 門的方向、位置、以及與其他設施的距離 b. 座椅的方向（前面、後面） c. 座椅的位置和方向，座椅之間的距離 2. 空間利用方式 a. 選擇並安排建構戲院的空間 b. 舞臺、舞臺旁樓梯和座椅的空間分佈 c. 舞臺、舞臺旁樓梯和座椅的建構方法

活動	活動表現			經驗表現（空間概念的認知）	迷思
	問題產生	探索過程			
活動六	1. 門的位置在哪裡？ 2. 從門的位置可以看到什麼？ 3. 如何搭建門？	1. 參照設計圖，選用適切形狀和數量的積木搭建門，有幼兒認為門的位置在座椅後面 2. 有幼兒認為門應該設於座椅旁邊的位置 3. 有幼兒認為門的位置在座椅和舞臺之間 4. 再次參看設計圖及觀察真實座椅後，幼兒指出從門的位置可以看到椅背 5. 幼兒決定將門設於座椅後面 		1. 前面、後面、旁邊的空間概念。 2. 二維平面圖轉換為三維立體積木建築。 3. 從門的角度看戲院內部的空間結構。	1. 空間關係 a. 舞臺的位置 b. 舞臺旁樓梯的方向，舞臺旁樓梯與舞臺的距離 c. 座椅的位置和方向，座椅之間的距離 2. 空間利用方式 a. 門的建構方法，調適門柱間距的方法 b. 組織、安排門與戲院其他部分的位置

活動	活動表現		經驗表現（空間概念的認知）	迷思
	問題產生	探索過程		
活動七	1. 真實戲院門的位置在哪裡？ 2. 真實戲院的樓梯是如何分佈的？	1. 從門的位置觀察座椅和樓梯。 2. 從門的位置觀察舞臺。 3. 嘗試觀察和行走不同位置的樓梯。 4. 從座椅之間穿行。	1. 空間概念：門前面、座椅後面（椅背）、座椅旁邊、舞臺旁邊、舞臺前面、座椅之間。 2. 幼兒觀察到從門的位置可以看到座椅的椅背，同時有條樓梯直通舞臺。 3. 從門的位置至舞臺之間有條樓梯。座椅兩旁各有一條樓梯。 4. 樓梯有一級比一級高的特點。 5. 舞臺兩旁各有一條樓梯，每條樓梯都有四級階梯。 6. 座椅之間有空間可以穿行。	1. 空間關係 a. 從門的角度看座椅、舞臺、樓梯的方向及位置 b. 戲院各部分之間的距離 2. 空間利用方式 a. 戲院不同部分的組織、安排方式

活動	活動表現			迷思
	問題產生	探索過程	經驗表現 (空間概念的認知)	
活動八	1. 在參觀戲院之後，如何用積木搭建出更符合真實戲院的模型？ 2. 舞臺兩邊的樓梯是怎樣的？	1. 第一種樓梯搭建方案 2. 第二種樓梯搭建方案 	1. 透過加高基底來縱向加高積木模型。 2. 橫向擴展積木模型，形成左右對稱。	1. 空間關係 a. 舞臺旁樓梯的方向 2. 空間利用方式 a. 舞臺旁樓梯的組織、建構方法（方形或長條形）
活動九	1. 舞臺的高度是怎樣的？ 2. 舞臺的形狀是怎樣的？ 3. 如何將舞臺調整為長方形？ 4. 如何將舞臺與樓梯拼接？	1. 加高舞臺，平衡舞臺和樓梯的高度 2. 幼兒調整積木形狀和位置，使舞臺成為一個長方形 3. 將兩種不同形態的樓梯與舞臺拼接 	1. 增加舞臺積木層數，縱向提升舞臺的高度。 2. 舞臺的形狀為長方形，且左右對稱。 3. 樓梯的高度與舞臺的高度一樣，舞臺兩邊的樓梯等高。	1. 空間關係 a. 舞臺的方向，以及與地面的距離 b. 舞臺旁樓梯的位置和方向，以及與舞臺的距離 2. 空間利用方式 a. 組織安排樓梯與舞臺之間的位置關係

活動	活動表現		經驗表現（空間概念的認知）	迷思
	問題產生	探索過程		
活動十	1. 舞臺兩邊的樓梯是一樣的嗎？ 2. 如何將兩邊樓梯變得一樣？ 3. 舞臺前面的座椅如何排列？ 4. 舞臺前面有多少排座椅？	1. 選擇一種樓梯搭建方案，重新搭建拆除的一邊樓梯。 2. 搭建舞臺前方的座椅部分 	1. 樓梯的高度和大小須配合舞臺的高度和大小。 2. 座椅以「一排排」的形式排列。 3. 座椅位於舞臺前方。	1. 空間關係 a. 舞臺旁樓梯的位置和方向，以及與地面的距離 b. 座椅的位置、方向，以及與舞臺的距離 2. 空間利用方式 a. 建構舞臺旁樓梯 b. 安排座椅的數量 c. 組織並建構座椅的位置
活動十一	1. 座椅之間有空間嗎？ 2. 如何排列座椅？ 3. 樓梯的位置在哪裡？	1. 調整座椅之間的空間。 2. 調整座椅位置，使之分為兩個區域 3. 於兩個座椅區域之間搭建樓梯 	1. 座椅之間有可供穿行的空間。 2. 座椅之間有樓梯穿過。 3. 樓梯呈長條形排列。	1. 空間關係 a. 座椅之間的距離 b. 座椅與地面之間的距離 c. 座椅間樓梯的方向和位置 d. 座椅間樓梯與座椅和地面的距離 e. 座椅間樓梯頂部與地面的距離 2. 空間利用方式 a. 組織安排座椅的分佈形式 b. 安排不同區域座椅之間的距離 c. 建構座椅間樓梯的方法 d. 座椅間樓梯的頂部位置出現懸崖式結構，如何建構才能使「觀眾」順利進場？

| 活動	活動表現			迷思
	問題產生	探索過程	經驗表現 （空間概念的認知）	
活動十二	1. 座椅應該建多高？ 2. 如何調整進入戲院的樓梯？	1. 增加座椅高度。 2. 調整樓梯外形。 3. 利用公仔模擬進入戲院看戲。 	1. 座椅間樓梯的不同梯級對應不同行的座椅。 2. 從底部向上搭建樓梯。 3. 模擬看戲過程中，依據公仔的寬度和高度，調整門的寬度和高度。 	1. 空間關係 a. 座椅間樓梯各梯級與座椅的距離 b. 門的位置 c. 門的橫向距離與縱向距離 d. 座椅間樓梯頂部與地面的距離 2. 空間利用方式 a. 組織建構座椅間樓梯 b. 安排座椅間樓梯的數量 c. 組織建構門的高度和寬度

　　在空間概念的評量與分析方面，主要使用「幼兒園教育質量評價手冊 - 工具七 - 幼兒發展評測 - 測查圖卡」來瞭解幼兒二維及三維空間概念的認知狀況。其中，對二維空間的認知測查是透過讓幼兒通過指認圖片來回答有關空間概念的 17 道問題，對三維空間的認知測查是讓幼兒透過身體動作來做出有關空間概念的回答，共 11 道問題（劉佔蘭等，2011）。在計分方法上，幼兒回答正確得 1 分，回答錯誤得 0 分，二維空間的認知總分為 17 分，三維空間的認知總分為 11 分。最後，再依據幼兒的最終得分，統計分析幼兒空間概念的認知水準、幼兒空間概念認知的性別差異、幼兒空間概念認知的年齡差異。具體結果及分析如下：
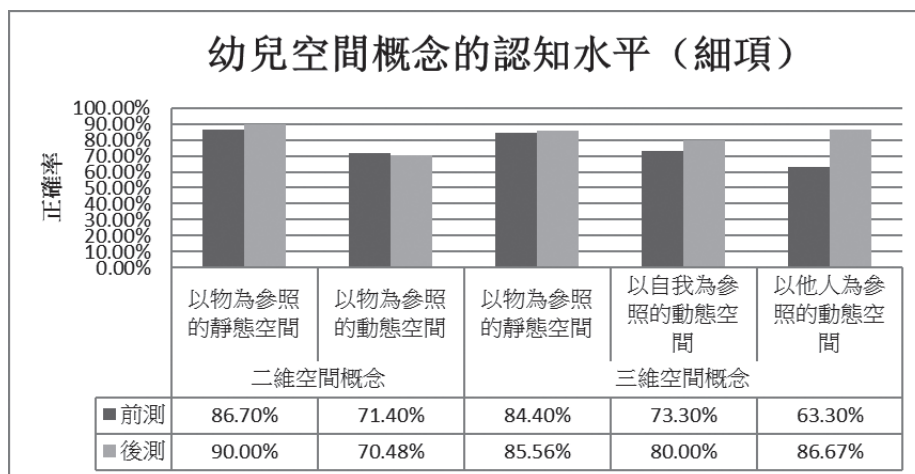
1. 幼兒空間概念認知水準

由圖一可見，在積木主題建構活動開展前後，幼兒對二維空間概念的認知正確率由 80.78% 提升至 81.96%，對三維空間概念的認知正確率由 77.57% 提升至 84.24%。對三維空間概念的認知正確率提升程度略大於對二維空間概念的認知正確率提升程度。

圖一　幼兒空間概念的認知水準

幼兒空間概念的認知水平	二維空間概念	三維空間概念
■前測	80.78%	77.57%
■後測	81.96%	84.24%
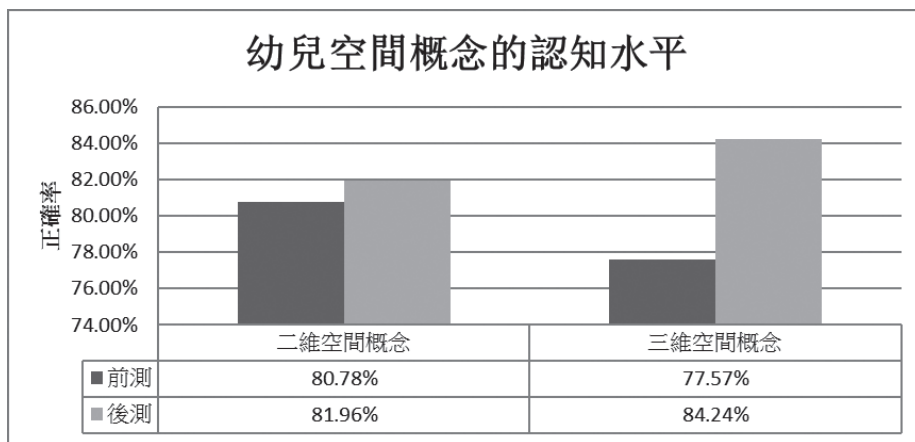
由圖二可見，透過積木主題建構活動，幼兒對二維空間中以物為參照的靜態空間之認知水準由 86.7% 提升至 90%，對三維空間中以物為參照的靜態空間之認知水準由 84.4% 提升至 85.56%，對以自我為參照的動態空間由 73.3% 提升至 80%，對以他人為參照的動態空間之認知水準由 63.3% 提升至 86.67%。

圖二　幼兒空間概念的認知水準（細項）

| 幼兒空間概念的認知水平（細項）	以物為參照的靜態空間	以物為參照的動態空間	以物為參照的靜態空間	以自我為參照的動態空間	以他人為參照的動態空間
	二維空間概念		三維空間概念		
■前測	86.70%	71.40%	84.40%	73.30%	63.30%
■後測	90.00%	70.48%	85.56%	80.00%	86.67%

2. 幼兒空間概念認知的性別差異

　　由圖三可見，在積木主題建構活動開展之前，男生和女生對二維空間概念的認知水準並無明顯差異，男生對三維空間概念的認知水準為77.3%，女生對三維空間概念的認知水準為76.1%，男生對三維空間概念的認知水準略高於女生。在積木主題建構活動開展之後，男生對二維空間概念的認知水準為82.35%，女生對三維空間概念的認知水準為81.61%，男生對二維空間概念的認知水準略高於女生，而男生和女生對三維空間概念的認知水準並無明顯差異。
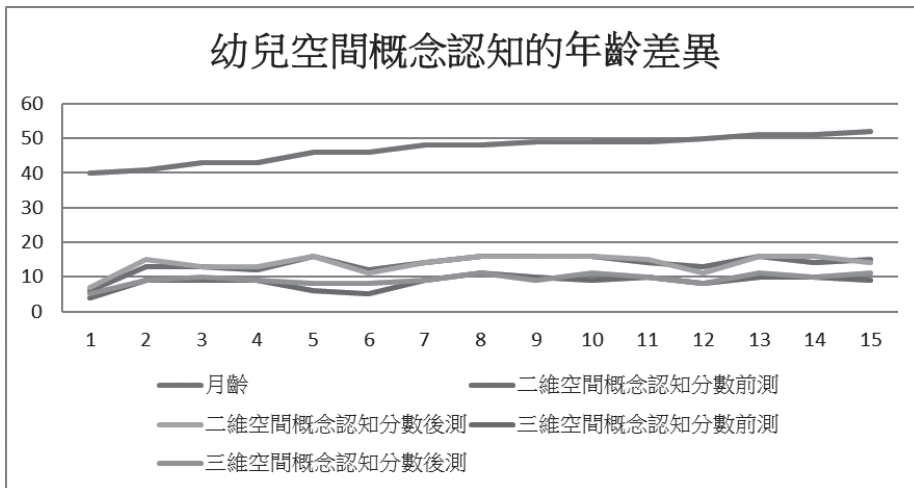
圖三　幼兒空間概念認知的性別差異

幼兒空間概念認知的性別差異

	二維空間概念認知正確率		三維空間概念認知正確率	
	男	女	男	女
前測	80.70%	80.80%	77.30%	76.10%
後測	82.35%	81.61%	84.42%	84.09%
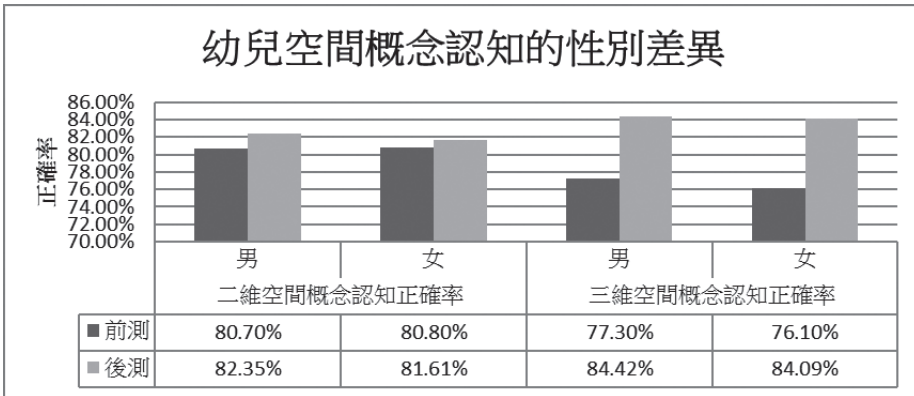
3. 幼兒空間概念認知的年齡差異

　　由圖四可見，積木主題建構活動開展之前及之後，幼兒空間概念認知水準隨月齡的增長基本呈上升趨勢。

圖四　幼兒空間概念認知的年齡差異

幼兒空間概念認知的年齡差異

月齡　　二維空間概念認知分數前測　　二維空間概念認知分數後測　　三維空間概念認知分數前測　　三維空間概念認知分數後測

結論與建議

綜合上述，本研究結果表明教師能在教學中利用積木作為教具，並因應幼兒的學習興趣與幼兒共同訂定建構主題，透過「問題 -- 探索 -- 經驗」自主建構學習模式進行主題建構活動。在鷹架教學下，積木主題建構活動的進行有助於提升幼兒在二維空間和三維空間認知上的表現，且男生和女生對二維及三維空間概念的認知水準並無明顯差異，幼兒空間概念認知水準隨年齡的增長基本呈上升趨勢。於本研究過程中，幼兒對空間概念主要產生以下迷思：1. 空間內物體的位置；2. 空間內物體的方向；3. 空間內物體之間的距離；4. 利用空間安排、組織或建構物體位置、方向或距離的方式。就此結果，可供教師在同類型教學和評估中作參考資料，藉以提升教學質素。

有部分因素會對研究結果產生影響，若再進行深入探究，可將以下建議作為借鑒。其中，由於本研究僅取用一個班級（15 人）作為樣本，因此建議在多個班級或不同幼稚園開展研究。一方面可擴大樣本，減少因不足所造成的差異性影響，另一方面可獲得更多數據，繼而對研究結果的差異性再進行深入分析。另外，由於本研究課室空間和地理位置限制，在教學過程中幼兒僅能圍坐一邊，造成部分幼兒視線阻礙，因此建議將幼兒分坐兩邊，並於中間開展建構活動，以讓所有幼兒更清楚積木建構進展。

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教育研究獎勵計劃

　　香港教師中心教育研究小組於 2001 年開始推行教育研究獎勵計劃（獎勵計劃），目的在於鼓勵和支持前線教師進行教學行動研究及教育研究，加強自我反思能力和創造力。獎勵計劃既鼓勵中、小學教師積極研究外，更希望幼兒教育的教師主動參與，推動幼兒教育。

　　為鼓勵更多教師進行行動研究，獎勵計劃鼓勵教師自定研究主題，成功申請並在指定時間內完成的研究計劃，經教育研究小組審批研究報告，可獲獎勵金以資鼓勵。此外，獲教育研究小組選為優秀的作品，將輯錄於《教育研究報告匯編》，作為教育界同工的交流與分享之用。

　　有關研究獎勵計劃的詳情，教師可參閱香港教師中心網頁（http://www.edb.gov.hk/hktc），或致電 3698 3698 向本中心職員查詢。

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