111年師資培育之大學外語領域教學研究中心(小學組)師培社群讀書會記錄:第三場

共同閱讀圖書: Beyond CLIL: Pluriliteracies Teaching for Deeper Learning

作者: Coyle, D., & Meyer, O. (2021)

出版社: Cambridge, UK: Cambridge University Press

閱讀章節: 第三章: Moving towards Pluriliteracies

第三章導讀者:丁玟瑛教授 靜宜大學

讀書會成員:

北: 臺北教育大學簡雅臻教授、臺北市立大學鄭錦桂教授、清華大學周秋惠教

授、簡靜雯教授、

中: 臺中教育大學王雅茵教授、洪月女教授、胡文綺教授、楊志堅教授、靜宜大

學陳怡伶教授、丁玟瑛教授、

文心國小高千惠老師、健行國小馬梓育老師、

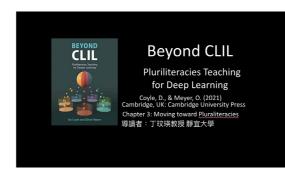
南: 南臺科技大學蘇雅珍教授、文藻外語大學周宜佳教授、

東: 東華大學嚴愛群教授

讀書會記錄:(計畫工讀助理)臺中教育大學碩士生陳奕均

讀書會摘要:

在第三章的導讀,丁玟瑛教授首先透過自己對深度學習(deep learning)的見解及自身經驗進行講述。丁教授提到深度學習除了書中所提到的「超越」(beyond)概念之外,同時也應該要向下深入(go deep down)扎根。



Defining Deep Learning: Beyond and "under"

- Deep learning is a subset of machine learning, which is essentially a neural network with three or more layers. These neural networks attempt to simulate the behavior of the human brain—albeit far from matching its ability—allowing it to "learn" from large amounts of data.
- Now, pluriliterarcies is using this concept to construct learning which goes beyond CLIL.





圖示:樹能長得高且茂密必須扎根夠深

重點在於,要能夠達到真正超越深度學習(go beyond deep learning),同時就不能忽視 向下深入(go deep down)的扎根過程。當學習能夠掌握中心的概念時,自然就能夠往 外去延伸,如此一來深度學習才能夠變得可能。

And this: All roads lead to Rome.



Where the roots are:

Tracing back to philosophy

如何能夠讓學生從小就做到向下扎根,就必須透過視覺化,讓學生得以理解抽象概念。此外,學生也應該培養反推的能力,能夠回推去看到原本抽象的概念,如此才能做到舉一反三。

The Forms

- The visible (the concrete)
- The intelligible (the abstract)
- The intelligible world is comprised of the Forms—abstract, changeless absolutes such as Goodness, Beauty, Redness, and Sweetness that exist in permanent relation to the visible realm and make it possible.

參考

• The theory of Forms or theory of Idea is a philosophical theory , concept, or world-view, attributed to Plato, that the physical world is not as real or true as timeless, absolute, unchangeable ideas. According to this theory, ideas in this sense, often capitalized and translated as "Ideas" or "Forms" are the non-physical essence of all things, of which objects and matter in the physical world are merely imitations.

當學生掌握到深度學習的中心脈絡之後,就能夠向外發展,進而學得較深較廣。

An analogy of deep learning—the forms

•Only those whose minds are trained to grasp the forms—the philosophers—can know anything at all.

Circle (O)

- Nothing exists without *a center* around which it evolves.
- ullet O is the parent of all shapes.
- O is mirrored; all numbers are created.

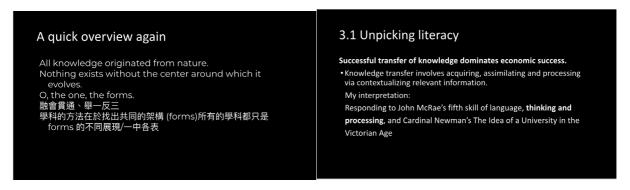
在各學科其實都有一個固定的框架,從這個框架就可以進一步去做連結,進而將學科與學科之間串連在一起,也就是「beyond CLIL」的概念。



第三章的一開始針對「識讀」(literacies)做了解讀。「Literacies」首先是一個解讀文字的能力,有了這個能力後,就進一步儲備了能夠反思、評判、同理(reflect, critique, empathize)的能力,而最後就能夠達到自我效能(self-efficacy)。也因此,具備解讀literacies的能力其實就是在儲備經濟能力,讓學習者能夠解讀資訊並且把握先機。



「Unpicking literacy」就是希望能夠做到將知識解讀並轉換進而達到經濟力的儲備。



對下一個世代所有學習者的挑戰就會是「全球數位化經濟」(globalized and digitalized economy),而隨之而來的也就會是將知識領域複雜化。因此,本書作者也就提及了應該要有一個針對此議題的提案—他認為教師應該要將多樣化(diversity)融入教育中。而丁教授也引用了《The Idea of a University (1852)》中節錄的內容,來強調學生要如何培養向外探索延伸(reach out)的能力,以建構自己的理解,而非一味且單面向的接收知識。

A challenge all learners are facing

 Globalized and digitized economy is complicating the fields of knowledge

A proposal to address this issue:

 Diversity should be factored into education approaches as means of disrupting thinking and enriching what happens in the classroom. from The idea of a university (1852)

•We know, not by a direct and simple vision, not at a glance, but, as it were, by piecemeal and accumulation, by a mental process, by going round an object, by the comparison, the combination, the mutual correction, the continual adaptation, of many partial notions, by the employment, concentration, and joint action of many faculties and exercises of mind.

因此像是批判思考(critical thinking)以及價值判斷(value judgment)等都必須要透過「pluriliteracies」的嫁接。而在現在的「beyond CLIL」概念裡,它的中心就會是「數位化」(digitalization)。

Critical thinking and value judgment

- Reading online demands a greater ability to evaluate information critically within the context of a seemingly infinite universe of available options.
- There is an increasing need for the ability to extract and use knowledge from an eyer-growing number of online resources.
- Ex. Understanding NFT takes pluriliteracies.
- PS. Critical thinking and good judgment would have to be based on philosophical thinking.

What are we looking at?

- •What is the center around which the <u>pluriliteracies</u> are evolving?
- •Digitization: Digitzation is changing the nature of literacy

在定義「pluriliteracy」的釋義裡,大多數的關鍵字都和「多、跨」有關,透過這個概念就可以知道學習英語都不單只是學習語言這件事。

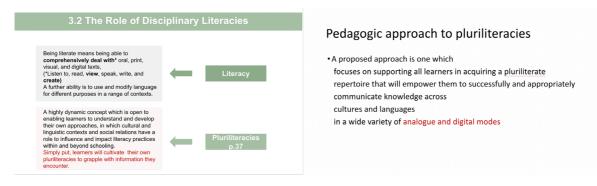
A solution proposed

- A need for education system to develop pedagogies which equip citizens to construct, critically analyse and communicate knowledge adequately and successfully across cultures, langauges and disciplines.
- An urgent need: To build on diversity and hybridity by creating inclusive learning environment relevant for all learners the multilingual and inclusive dimensions of literacy.
- ullet Key words, key concepts: multi, plural
- 多語、跨育

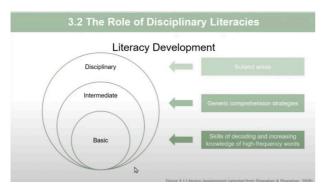
Defining pluriliteracy (Coyle et al., 2018)

 This term seeks to represent an ecological conceptualization of dynamic, complex yet sustainable literacies across subjects, languages, values, culture, and this digitized world.

在下表 3.2 所指出的學科識讀 (disciplinary literacies) 就是在區分單單「literacy」和「pluriliteracies」的不同。而 pluriliteracies 的概念在這裡就是再一次的強調了要培育學生如何向外探索發展 (reach out) 的能力;也因此給學生更多的親身實作 (hands-on)的活動,讓他們得以被領進跨域的概念這件事也就愈發重要。學生必須培養靈活的思考,才能不斷用類比及推論的方式去解讀並得以持續的向外探索 (reach out),讓神經元一直增長。



在 3.2 圖表所提及的「literacy development」,我們也必須清楚知道「What are we working on?」以及「How are we going to reach out?」。當然不可否認的是在基礎 (basic) 階段時必須要扎根扎穩,如此一來在向上發展時才能穩定,並且當發展到學 科領域 (disciplinary) 時,才能對跨足各領域的學科知識有更深的理解能力。若是在基礎 (basic) 階段時沒有足夠的耕耘,那麼在之後的往上發展都只會是空談。



What exactly is disciplinary literacy • It involves the use of reading, reasoning, investigating, speaking and writing required to learn and form complex content knowledge appropriate to a particular discipline (McConachie, 2009). • It aims to nurture students to be literate in the discipline they are pursuing. • The main idea of disciplinary literacy pedagogy is to have students as apprentice disciplinarians and practice what disciplinarians do (2016) • P.39

所有的理論最終都會回歸到位在中心點的動機,因此當我們把「pluriliteracy」的概念 也一起放在中心時,老師也能夠更清楚知道如何帶領學生和世界接軌以培育學生應付 未知的世界。而在「pluriliteracy」的核心就會是深度學習(deep learning)。

The ultimate aim of education

is to equip learners with furthering understanding and skills:

- Namely, the ability to --communicate and
- --negotiate knowledge

world issues.

- --apply knowledge and skills, in different subject contexts and the real
- 學以致用,知識與真實世界得以接軌;還必須培育應付未知的世界

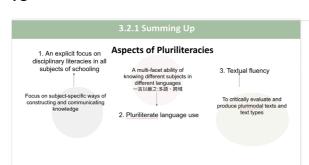
,亦即,解決未來可能發生的問題

The center of pluriliteracy

The keyword, the core value: Deep learning

This move will take us beyond CLIL and into the mainstream of education because the principles of deeper learning apply to the teaching and learning of any subject in any language

在這個章節這麼多的概念裡,其實最重要的核心關鍵字就是多語以及跨域。若要讓樹 能夠往上生長,往下扎根就至關重要;而用這個概念回推到對深度學習的了解亦是如 此。



An expression of Deep Learning in botony

Large trees have an even more significant substructure: primary roots that are perennial and secondary roots that grow in waves as the canopy is expanding.



簡雅臻教授分享:看到剛才丁老師的分享,就想到我們的基本讀寫(basic literacy)是 不是需要更多。因為我目前接觸的都是高年級自然,大部分都是口說語言(oral language), 感覺需要更多的讀寫能力(literacy skills)才能有辦法向下扎根,可能要從 低年級就開始進行,而不是像現在低年級英文的進度,這樣可能是有點太慢了。

王雅茵教授回應:這部份其實一直都有很多老師在嘗試,而往下扎根的意思確實不只 是單指教字母,而是應該要盡可能要讓學生有很多口說語言去建立他們的基礎,這也 是值得我們去思考的部分。

洪月女教授分享:我們現在說的雙語是包含了外語,所以確實學生的基礎是較弱了一 些沒錯。如果是在母語(L1)的話,通常會是語言老師會去負責支撐這個基礎。在這 本書中是用一個同心圓來呈現,可是在原本的文獻中是以一個三角形去呈現,而最下 面的基礎那一塊的面積是最大的。而這個學者提出這個三角形概念的意思其實是當老 師在教基本能力(basics)時,能夠同時有一些讀寫能力(literacy skills)、或是學科讀 寫能力 (disciplinary literacy skills) 融入進最下面的基礎那一塊裡。

丁玟瑛教授分享:我們在進行基礎讀寫(basic literacy)的時候,其實可以順便帶學生

去看一些比較有趣的,像是多元智能(multiple intelligences)的那些領域,就可以帶學生進入簡單的像是自然、科學,甚至是哲學、或是文學的領域,再去看這些能夠觸碰到學生的,是哪一個多元智能,如此一來就能引發學生的學習動機。也就是說學科(disciplinary)其實不是用教的,而是被引發的。當學生有興趣之後,再加上語言基礎能力,就能夠將他們帶入深度學習。