

Self-initiated transfer of creative learning – An amazing journey of students

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Date: 28 May 2014 (Wed)

Time: 2:30 pm - 3:30 pm

Venue: B4-LP-06



Self-initiated transfer of learning is the ultimate aim of teaching. How does it take place in reality? What are the facilitating factors? Can learning in creativity courses transferrable to daily-life? To answer these questions, a longitudinal study was launched to understand students' self-initiated transfer of learning in two creativity courses in our GE curriculum. The results revealed that, through near/far transfer, generalization, internalization and reconstruction of what are learnt in the courses, the learning impacts can sustain for a long time in some students. Hearing their unique amazing stories, you would see how many unpredictable ways students can transform/integrate the course elements with their individual life experiences.

Registration and Enquiries: Contact Miss Wing Li (2948 8096 / Ifli@ied.edu.hk) or access http://www.ied.edu.hk/lttc/pd Organized by







Self-initiated transfer of Creative learning

TDG seminar

Cheng Mo Yin, Vivian 28 May 2014

What is a good teaching?

- · Both teachers and students enjoy the lessons?
 - High SET scores
 - Fulfilling the learning objectives
 - OR.....
 - It changes students' life.
 - How?

Introduction

- Learning transfer is a kind of generalization
- Forced vs self-initiated transfer
- Transfer of learning is the ultimate aim of teaching (Macaulay, 2000).

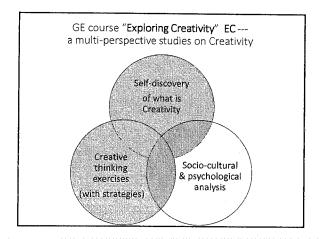
(Haskell, 2011, p.29)

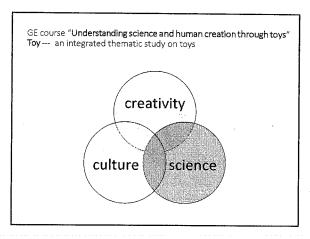
Level 1: Nonspecific transfer	– any new learning
Level 2: Application transfer	– applying what one has learnt to a specific situation
Level 3: Context transfer	- applying what one has learnt to a slight different situation
Level 4: Near transfer	previous knowledge is transferred to new situations that are closely similar but not identical to previous situation
Level 5: Far transfer	applying learning to situations that are quite dissimilar to the original fearning (required analogical reasoning).
Level 6: Creative transfer	transferring learning in a way that through interaction of the newly discovered similarity between the old and the new, a new concept is created.

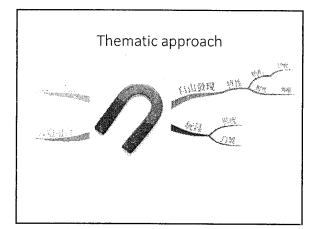
Introduction

- \bullet Creativity and Creativity training are both domain-specific.
- This implies creativity training cannot be transferred to other domains/tasks. (Baer, 2012; Kaufman and Baer, 2005)
- Creativity is considered as a "generic skill" in HK school curriculum

What kind of curriculum can facilitate Self-initiated transfer of creative learning to daily-life and professional domains for all our students?

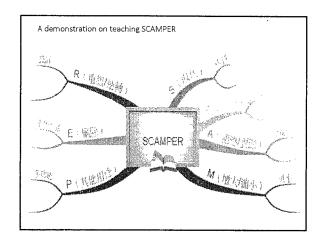


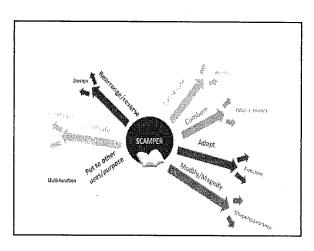


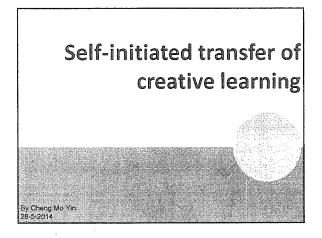


Supporting Activities

- Many hands-on explorations
- Thinking exercises around daily-life items (improvisation)
- Metacognitive discussion
- $\hbox{$\bullet$ Visit flower market/toy museum/creative exhibitions}$
- Guest talk/workshop LEGO / creative professionals
- Student project near transfer to selected topics
- Reflection & self-initiated transfer report







method

1. Interview students

Immediate interviews: 1-3 months after Delayed interviews: 1-3 years after the course

Sample: 40 students

(randomly selected from good result group i.e. B or above in final grade; voluntary participation)

Data Analyses: wrote the transcripts; analyzed by coding and categorization

2. Analyze student reflection & transfer reports

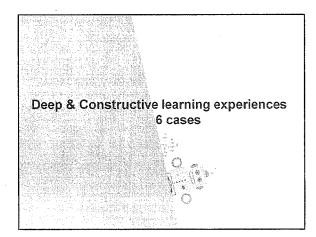
12 cases are selected in this presentation

For every case...

- Background
- Teaching
- Learning
- Transfer
- Reconstruction
- Life experiences
- 1st interview and 2nd interview

Questions for to you think

- · What are being transferred by them?
- Where are they transferred?
- · How transfers took place?
- What are the elements supporting or hindering his/her transfer?
- What are the common and unique characteristics of his/her development?

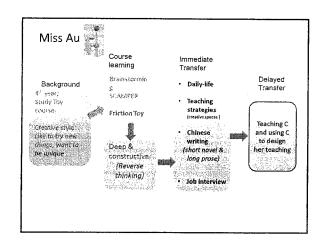


Same C/ learning style →
Assimilation / Reinforcing →
Transfer
(generalization/internalization)

3 cases







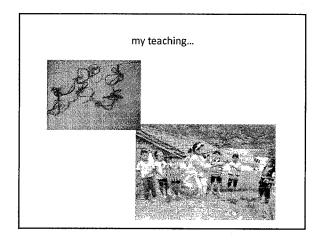
Miss Au

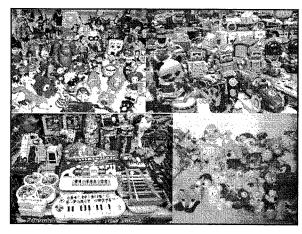
Background: Immediate interview, major Chinese(Yr 4), studied similar thinking skills

Integrated learning style:

我是一個背款新 14物。不怕解決困難的人,所以我**育賞試把我所學的東西活學** 活用,想想可<mark>否用在其他方面而不想浪費它</mark>(所學的東西)

Creative style: 我為人比較大膽,還有我有少少追求卓越,尤其是我有興趣及喜歡的範疇上,就希望自己做得比其他人不同,所以我會加入一些新及特別的束迺,希望與別不同,突出少少。





Miss Au

Constructive deep learning:

第一件事我就曾想到堂上玩了很多不同的玩具、當中有很多玩具已經不能質問的了。

- 那我會第一時間想想我自己有沒有這件玩具呢?自己都曾經有過董年....
- 如果我都有這些玩具,我就會想想當時我玩道個玩具的時候,究竟我是怎樣 去玩這件玩具的呢?
- 究竟為什麼我會覺得這件玩具好玩的呢?
- 我也會想到,其實玩具是很簡單....
- 但對比現時所出產的玩具(小朋友很喜歡的一些玩具),我就會想...
- 實是現在的玩具較好玩、還是從前的比較好呢?
- 可能玩具是不是好玩,可能不是玩具的設計本身,而是可能玩具只不過是一個與人溝通的媒介,有時候玩具好不好玩可能是因為玩玩具時的那種群性決

Constructive learning process (Reverse thinking):

例如有些玩具是**有摩擦力**才可以玩,有些則**完全沒有摩擦力** 才可以玩,即是當中和反的概念,在玩玩具的過程能體驗 得到,從而影響到我學習等其他事情上都用得到。



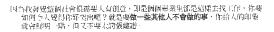




Transfer to personal writing: 就好像上文學創作課的時候要求 要寫小說,字數限制三千字,其他同學都會構想好長且內容很豐富的小說,而我**則調轉**,我會想可否寫一篇**最短的小說**,結果寫了八百字左右,而我的數文竟然寫了二千多字。即是我認為小說不一定要長,可以短。可能這個課堂 /單元則強化了我的逆向思維,運用逆思維的信心。

(far and creative transfer)

Transfer to job hunting:



....例如最近地行工作面試、由於我接近讀了。個短期的**視藝調程**,所以便加入台 三可在教的科目常中、於是校長鉄要表取給予。 數作品作參考、但由於是近 明不讓所以沒有基麼作品,於是台已數會想想能,仍把以前的作品而來作展示 呢,結果我们「以前的作品而不是現在的作品供吃人参考。

即是調轉去思考,我認為適可以是一種逆向思維。即使思考上育從多方向出資。 思考每僅方向的可行性。如果換成是以前的我一定會很慌張並具會提供出幾 張國書,而不會想到用以前的作品。

Transfer by generalization:

最短期當然是學識了甚麼是SCAMPER、創意解難策略

而長遠的...我...即是原本好像一般人這樣,在日常生活及學習上都沒有甚麼創意的,學懂這些策略後就...因為它是一套有系統的策略,令我很容易記得,或是很影響我的生活、數學...令我在日常生活中很容易應用進來,而最明顯的影響就是我的教學方式

... 影響到我去思考一個問題的時候,不一定是用一個理所當 然的角度去思考,可以是一個較少人想到的角度去思考, 可能會比較特別。

Transfer to teaching:

用為我作為一個平老師。之後亦打算教書、即是我的生活與教學有很多 關連、其至連我的基職也與教學有關、所以多會嘗試想。些較好或有趣 的方法上解決問題。加上我學這一科是在一個課堂內學的。所以第一時 問我會聯起到去教學。

教持TSA口試班……我就教他們以一個腦圖的方法,去想一想如果要介紹 某一件物件的時候,你會介紹什麼呢……即會brainstorm學生去想不同的 事物。

Follow up



- · Miss Au has become a Chinese and GS teacher for two years.
- She says her school emphasize creativity and high order thinking a lot.
- this may be one of the reason why the school employ her.
- she needs to teach student creativity and she herself still use creativity to design teaching tasks and lesson plan.
- she seems quite successful in her teaching because...

Miss Wong Outcomes & Transfer Year 3, 1st reconstruction of C concept Creative Creative teaching Course teaching method High confident in GS Transfer to other studies and teaching Teaching 6staduation Teaching GS & seathing say of seat statements, still creatively and for thinking Creativity Talwan.

Miss Wong

Background: 1yr delayed interview; major GS; studied other creative course before

efore Creative background → studied other creative courses before study EC course 內容权之前曾就讀Ca.1 的創意課程,任她是首章教授有關爭認方面的,因其是科學對前收 報會較多。正正是因為上了這個課程,可以mmind與領別有關數。內容投資在「實際工學 期間公開海程度、自發集上與關電影響程度,所以工學是上海。網頭時候,有質集的會學層 有關和意的知識,提倡我和意可以是解決問題的美生一個方法。

Continuity of Creativity studies

My teaching: visit to ...



美貨火程停行兩個課程元素是很有麵的。第一是field trip是去灣明上河圖 第二眾是 Vivian自己本身的。

(前週为長基原生?我完成課程後會覺得是「創新」及「有用」的 正如我你却課也自提及 以前的會覺得創意只包含「新」、同意成課程後了解創造力有不同的方面、例如社會、 環保差業等吸求「有用」、オ可以與「創新」配合、這才可稱為創意、近課程令我會思考 更添減的意義。



A:是的,兩個科都有field trip這元素,都是有利學習的....

投管所述他探究式的學習方法,其實都有利致自己實習的時候去教學的,但有變移到投行 數學院式中。內等我們當的時候,所究於的課題推集很抽象的,也譬如是保證。空氣、經 確等指於了任何時中完全做不到的課程。第一致使將常識科與創意的共通點,就是大家都要 expore,即是要不斷地尋找,這樣的才報》才一會能得到。我正正就在實際都所除。任明 年報的課程中,由小學即年級,我這些……都會先將他們去於去。經境不開他們。究竟空氣 集份學來的? 」又或者差一經確定是一學呢?是不是有火就是物德吧? 且是這樣的 數學學成式,其實都會有影響到的

Taking risk in learning & surprise:

於情意、愿望方面、我的特質是「大騰」丁及塩重拾「曹陵心」 因為以前做功課的時候 會構向機守數。會想總哪些題目更能超合差額的要求的「自然語途能說好時,我也想下到 三章以達與上河圖為繼一、是是 於時也上可到的提取力是使期齡。對我也然是一麼出 大騰山岸岭。區野、這每戶部間沒有下方性。對我其他科目功課的選題都有一定的信心。

Q:1. 是在程程學習時由具體的事物開始,看為塑密的變移? A: 部界市,作型**越受到那一刻的震撼**, 才會去塑擇强起題目去最巧調前

Transfer to education: constraint and success



Constrain (teaching schedule/ curriculum is tight)-> not much creative element added in

等後最等。他們子,與自己終相高了。輕明問,我意思是上定了Vivian的機樣。至何,輕明問,我可以們們的,其代學們的是在學問。 因,其代學們的過去的實質。但是即何是使們的時候,因們們何可學提及一想描。……其 供給做我發極質質明問,能夠與明如且可。 可以用創意的問題,而是他與實施。概要指常緊迫,我認可了關係是,如想到了各個學 學法,都在了一段時間,所以創意便應之而減少加入到我的教學當中。這方面的也對自己 經知在每年。

Successful trial-> arouse students' attention to discuss the social issue

行達我覺得如果沒有那大膽、那個觸覺。其實「聽騰」這週題可以平無直被更指出管話目 技的沒面就是有機會觸及侵騰等行為。是可以平衡直接地認出來的。 任是我或選擇了,我 古己認等有少幹創意。或是利用那「惡篤」的相片作為一個論觸材,引起學生的注意。 以及去包想先從。如不行正又兩方的,可以兩方面都可能

Conceptualization of C dev

所以整定题怪,可能是使我的生態科有關,其影響我也變的对素很多。Miss (C&I) 的 學法,Vivian的思考模式,去到了暑候的遊學團應用出來。(《其他的例子的們時想不到

並不是因為一個特別的數學電略影響我想起它的可行性

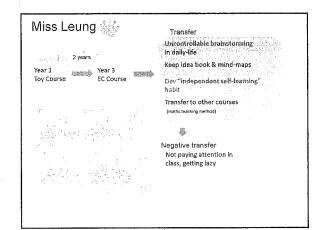
- A: 會的,真的會忘記的,有時候你沒有再回顧已學的知識,真的是會忘記的
- Q:你覺得要keep生上創意的課程...
- A:其實不一定要上課的,我**覺得是要去keep住接觸,就會有遷移了**。

(internalization & keeping contact)

follow up:



- · Miss Wong worked as GS teaching in primary school and then become teaching officer for SEN students in a special education organization.
- She says teaching SEN students are greatly in need of creativity for designing special activities for them and to find ways to help them learning. and she also teach some thinking skills too.
- She says without her experiences in HKIEd, she now may act differently.
- she seems quite happy with her present job and would carry on working in the institute and planning for further study.



Miss Leung

Background: take both Toy and EC courses, immediate and delayed interviews; major Maths



My teaching: Free thinking spaces

O: III r. 徐祖郭丽1.2

A: 有框機會俾我不停去論d野出黎,有個目的去說d野出黎

非净物度。(4)定溴他科部体准? A: 净等型付施准架。我每可量程进度

有要去社名印配指示的财讯 「探啊!

和交流に立ち即に有3-69%の1 14%。 A: 你可,每3年配刊**好多活動呀。唔徐净徐坐低聽嘛。** 些起意說對你了再長時呀?同了中意說?我他们會好位想試下中巴?

A: 可需我會睇下個老師比唔比囉。因為有時d工作紙做得咁亂唔係個個老師都中意架嘛。

Deep learning:

Q: 即像以前有點指簿呢樣野、部中意drop恁d评?唔你先生叫既?

G. 高的高级的复数语句的高级。由"C. 高中的态度",《由于工工中心》, 在中的部子,"一直种态度" C. 拉索 "C. 自然被读者自由有意识? A. 自己**应缓感。咱乡**notes 一个高科·佐加州野州 因為沒得老用滿足野香都有樂廳,往 平如中荷香品的哲子。從江州斯內湖等

Internal driven in doing assignment

A:我電音整理字計商查供廠去。其內思价功課係代第一份由與6號,就能都除。part part 打容勢 O: PURPLY

(4. 中国市场)。 4. 中国市场公主制造车外 参针性、我一路**验好晒之後一次遗离** (主主前4功課項…… Q: 中福里也在分类者計劃可以一次過計3

G. 可能可能再示。G. 1 烈力 17、 "人想 17) A: 你可一 我等告我寫完個刻好舒服,成個腦圖寫左出黎 Q:上除色影作的石具只提野可拿吧啦!形除的對劃意既心路歷程多d

Q:1. 徐話你吃份功課條為先滿起[i]

A: 共產長也總結番對創意到學左d咩對 對而京有d中國法 雖然我寫出望條好多他視時 在論教可以這些過程出望

Peer interaction

Q: 寂寞意思徐如县哽气间반,你上堂神奇愿查编楼神吧?如君你也好走前前事情告 复寒物呀?

A: 會呀,得自己一個未必會咁多野鯰到出黎曜 [A] : 我趁有人係旁邊附和

Q: 自和應所任民附和所證野屬。仲附和进作吃種學習屬式屬?除的影響 先進屬? A: 大家一帶號

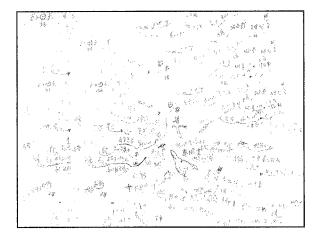
Q: 医除作地部除消费人案既,自我直是但地限于4場。但地認實的保守過你立立,你要唔 每?

A: um..... 年多野但會係框心人前職,但係會急好多野哪

A: 可靠除d贴了如何呼,胜者或内格我地脸到d咩話傳你聽可一世起生他與人,可能就會除 sharing好開心囉。大家好似脸到d好好既極咁樣。得到大家認同就會好開心咁樣。

Q: 中吃能經歷有有令你自信多左? A: 都會既 **威覺良好既都**

A: 我是否找過癮的話就會學得好架喝。 用的過瘾我就會投入,用於人形配會學得好碟



Transfer to other learnings

Forming "independent self-learning" habit:

吃能紅藤對你有單影響嗎?區 有年夏素? 患他们曾昭曾想藏 医阳气 " A:可能投會聯下個老師比磨比嘅。因為有聯工作紙做得咁亂赔係個個老絕鄉中意架喺 七.確你而至何更加名價, 由產始對共利東度加了美間婚的共亂者提了

A: 之前可能都未去到習慣既地步,但而家會診到咩就寫咩嚷。即係我一診到就寫,唔會留 低個位等你讚囉。

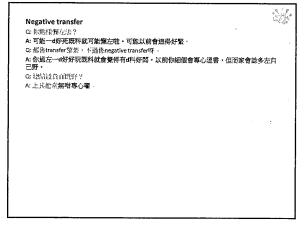
A: 徐妃、可能我抄过二二中意思打造者得到一二誌出第世訂音字句 O: 正常話即提供第七点一個 其里原理者即位一等。 **你就哪會等老師教,就會自己做應d 習作。自己提供学就做样,想寫咩就寫咩,**用出意理解下言。這就抵押。此即使節用一事 目錄如此而提出與場。

A: 到你開估既時候就睇下自己岩唔岩。即係你一定會去到個個位...

Q: 仁徐如果有新斯就會抄番低。同二二一樣就唔洗掉廳

Q:成功暨開發係兩門到底?

A: 我學得更成功,曾先要你實診先嘛,唔係一坐低就認到野,作要有個方法自己去診囉。刊 說所与法式係將你聽到既搜閱番黎(by integration)



Transfer to daily-life: C: 你發得完可對你既全活行行咩影響或者轉變在? A: 我發得係能習實地 C: 正徐平若懷里? A: 可能mark對或者該對既習慣職,正依強化左聯 C: 未讀我則之科人語我則之科之後,數 自用數據度有有快到嗎? A: 打呀,我觉得除臺理區方面鄉 觀完之後會讓得臺理自己該眾野權 C: 而且寫法都今你有更多點子他。目由孫語你所得你直接用你鄉所數。而徐潛而數化左啦。D 和代理哲介江而和你中多。例如組織也好之更有點配件事呀 A: 徐卿

Reconceptualization of C:

A: 能係之的會學科創意係一句比較藝術性個d。
即像使得你學做手工概時候就需要創意啦。
但而家要得創意係個診頭黎既,做一樣野都可以係一個創意蠟。

Transfer to daily 排應
C: 上定之後,將日常生活有打咩電影你條用得消费?
A: 京祝雙點野或者要診斷饭時時就會該起呢個module。
C: 伊朗尼?

A: 可能能係整手工權、內分和等餘定也觸,智時到與先診呀啊。然定先,何人随前。促展別的時意到對與關

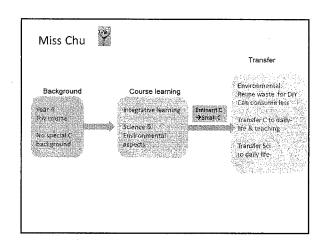
A: 是們們的一個影到對與關

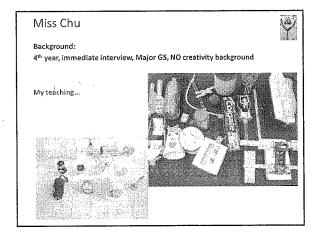
A: 是們們的個類身中學人類與他,不過三前或無別們的個類學是能力法去清上。民思的
可能是伊加的個類身份學與你可能不過的表現。

A: 是們們的個類身學與你可能在人別既有法,內容以前學校。將我可能的形況可可ett與所可能則與關於方法可以應得開始就一一個可能是伊加的個數學樣的不過去看觸

Different C/ learning style →
surprise / non-adapt→
accommodation & reconstruction →
Transfer

(3 cases)





Integrative learning:

此行對我學習此科的啟發是 我在**年宵市場**中看見較少在大玩具店售買的玩具。 我可以把日常生活與此科結合是因為 我們可以**運用一些生活用品、科學知識與玩具结合** 如利用硬紙皮推翻一座城堡,一些棋子/或擺設, 再令硬紙皮穩闊,即可成為一個**自製版的Angry Bird**

Making connection with prior experience 桌上的討論能激發状的思考。使以上菜討論環保玩具為例, 若玩具的性質耐用程度、價錢合邁,設立玩具圖書亦是環保玩具的一環

透明的計畫。我也現我**可參閱過的特殊學校中**,自是以內書館的設立。但學生相關,這至今後已 思**玩具亦擁留了教育、兒童發展的內色**



Miss Chu



Conceptual change: Eminent Creativity → Everyday C

可能具能改生d好細微理所就叫做紅坑具,病法我覺得唔洗諗到咁複雜

Transfer C to teaching, study & daily-life:



二二門自己 身極速上可染內名除流上却屬國際物幹,可來常言書,由自己出市的原理,八名字 化一部行 司和宣行小則《他d、可你但地診既避仲會比我地仲多添,有《江河》的可以非常 定項行此。在你但地說…一定要試下強板,但依而家就有懂!因為你嗎解,你踏知有呼你唔 得呢?

我覺得可以既,但真像要暗錯誤整時間 王 [命字 50] 京納十、請至於私立探究式學習、 11 主任 有確真協但地自己去鑑客業、 11 程 [9] 中央企業的前 [4] 农 。 中。暗器要專門多野佢呢? [4] 印度 三統 1 。我像你一定要活能和更多一定要等至沒年至,正確則生數科書,則生時間。 一定要注 法確定? (4) 五重要都添少數學都是

徐利 平時做功課既結、甚至平時自己無野食、都會用看scamper.... 〇:你都好取付納過一時港直達記過增加成少數? 徐呼!記任多項也數是一上孫東記平時自己兼野食都介記四回機味道,用也都是的年代意應...

Miss CHU



Transfer to environmental aspect

- ():『L. @course符》作多在**题活變通**?
- A:徐呼,长徐可以**唔洗成日買囉,唔需要買咁多** Q。相:徐早期佈更應係以此於學是就Ve性?促意織有事強?
- A 诗唱、有书施 添加工类有满堆保、點解唱試下用環保物料去整呢?

Concept constructed :

Education of environment protection through toys

Miss CHU



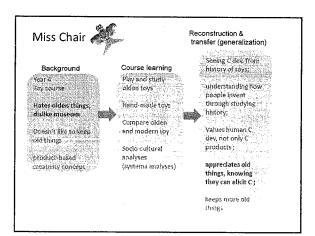
Transfer Science to daily-life:

除了無訊SCAMPER作思考方去,一些科學的知識亦有助日常生活更方便,如我家中會收集兩時刺激简化報源可收, 但随便放在桌子一旁,刺風荷達食下。

但只要找在**简内加一些重物**, 为时形心偏低,

裁可形成平衡安聚、喇叭筒就不會流下地: 另外亦可在基面上矯影用馬面、四層加喇叭筒與東面广閉的四半力

(Creative science application)



Miss Chair
Background: Immediate interview; major Music, no creative background

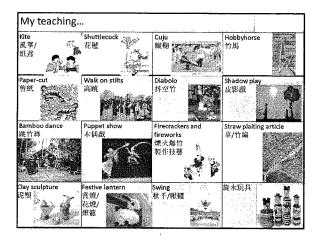
Before the course:

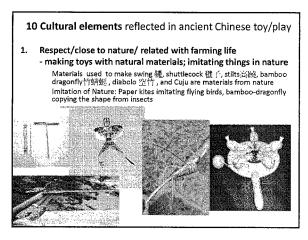
· 特如以前來上course之前是到《傳統既玩意思、我成會閱得好舊呼,有咩興趣

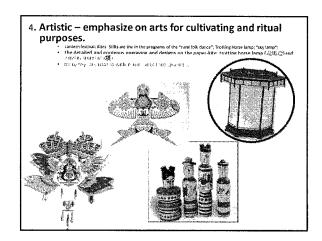
· 對我察請,我之前好多時候們們們哪會KEEP住既 而上我只前你唱練意行博物館但D

既

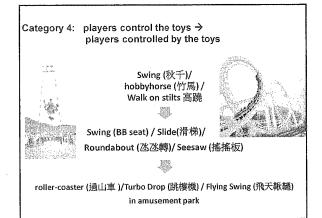
· 特如点玩配D我覺得好的,但得我覺得唔觀電

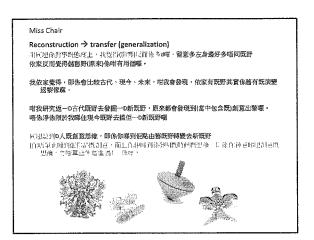


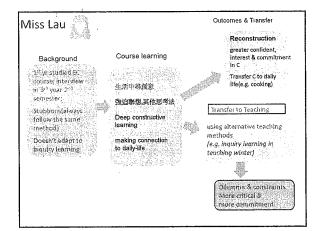


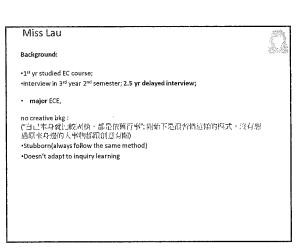


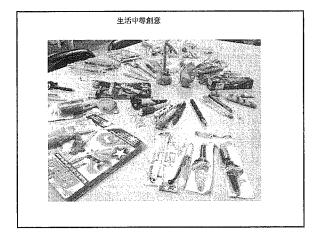


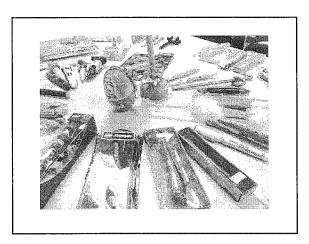












Miss Lau

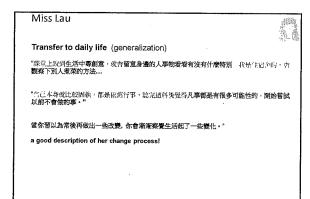
Deep constructive learning, making connection to daily-life
→ reconstruction

"共中有紀述的生活中**尋創意(inquiry learning),**前周身場的自意人,開**始不是很習慣這樣的模式,**沒有思過原來**身場的人事物都跟創意有關,**內如認身天網能著我們的讀告, 後手來起的杯子,那些人都可以聯想到好多東西。

"…強迫聯想,要求把熊貓和其他東西聯合…從這門子我們可以多方面的魔理每一件事, 不一定要依循窗模式把事完成。一下子覺得自己的世界大了很多,看的事也廣闊了。"

"追課會社較生活化,或是你每天。起程一上街都可以接觸到的事物。而且**逐漸覺得動** 造力是與生俱來的,內含 医胆常上所**数**的思考法段平常也會使用到

"可能上了道門讓後,才覺得原來自己也可以有遠方面的能力,給了肯定自己。覺得自己 這麼普通的人也可以有顏澈的思維,亦以茅湖每個人都可以排行這個大賦, 欠的只是你 自己知不知道所做的是創意的事,身邊的人有沒有支持你這麼做等等...

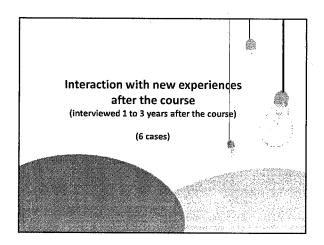


Transfer to education

"設計教系或者準備活動時,會嘗試不同的方法以取代以往慣常的做法。

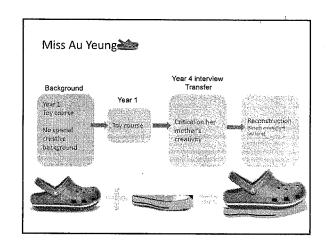
說對主朝教越一化平顯量有關於冬天, 學**校一般的做法**就是有課題的前下沒有課意思先教尊有關冬馬的事物,到後中段才帶學生到臺 外域之冬天的風,周圍樹木,從而深遊課本上學到的東西

而我就反過來,生常學主到至外先應受冬天,學生在外看到什麼,或覺到什麼,我讓他們拍到 對立學。起內論,希望只他們觀察到的告節很,而不是我或者并不上說的 因為豈得親德其境,會吸收得比較好(inquiry-based learning!)



Gaining new inspirations after the course

reconstruct C
(2 cases)



Miss Au Yeung



200

Background: 3-yr delayed interview; major Chinese, no creative bkg.

Transfer to daily-life: more observant

可且可禁個BARCODE信係,個轉裝可等既條緊加輸應D位,好細微既位,你會平時,你會留意多左曬,你會發覺原來可D,即係其實信係運用与:1D類似SCAMPER既……(信係…改少少呀…加加減減呀)……





Miss Au Yeung



Transfer to daily-life: criticizing mother's behaviors

因為有阿時我見到我亞媽,你唔係改就得囉,有陣時我覺得但改完之後唔好, 例如我家姐買對CROCS既鞋......收出夠真係好價當將D目常用品画的WO, 但係值一買番窮.或者未買既時候,已經<mark>該住</mark>改

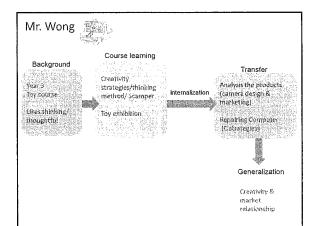
Reconstruction:

我依家覺得,D簡單既野先容易睇到創意......簡單既野先,我覺得最COME囉, 佢COME興既話係有原因囉... 雖意簡單既野... 得意呀..

AY

Transfer to teaching:





Mr. Wong



Conceptual change:

再有性,之**前除既和意依實在吃眠野**家保上等和高級計一点海獺、辣溶用、超年設計印。 计他 确先叫清点。伊德里拉到自中區把念像好在野洋鄉野一仁爺依安曼得到意大津心。 是像电确非 實有理性**。 依來覺得係一啲方法(去解決問題)。**

投管的E.化(course)長重要跌長等俸命方緒生一**塞方法**,巴尼格科快長作用數。我之後可以分析**返我茶一樣野**(「一次常找有一个問題除實施。相戶頭找學到既**思考方法**使市成等。境,計 你認可是問題都所有「一位作明既以等去為終」。即代語配科人文的數。可說或會為起境多的。去 認定起門與工學体 生育所數。E.你是能佈動效數性、日你已能應程是供解我既已就你我應該 要點樣去為更是的問題哪

Mr. Wong



Transfer to daily life (repairing computer)

A:導和任何項。 最近有關增充,中華超越大部級傳統下行等問題。試在之後他mon性等。任 企作機能有優著旗。相談科學于上文(有關兩法下) 就主接着的。(他下海時僅能度現在。很快 知過常區mon領統(daplay) 与關係。相學是使權之分。這上去都會對任,相模類明國於12平 - 而能主他等得實在。用於他唯可決定的提供更近到之來與明確而可認定經濟學。但使其明國於12平 行發數、應該傳述所學明明的發生。當可以完成

Internalization (C strategies) 日命行的好像为化左旋发酵、等如你(Vwian)器感能的方法。如果你在实现找满度、做些配到 比。我可能都可以精得出立立便的行弹關係。日命论的组合方法。任命常的视疗特**登認起活** 我要用邊價方法去做個新

Mr. Wong



Observe camera products & attending investment seminar...

你意思你上堂促酵學既野?好多玩真嘴,例如話一**作玩具贴樣去吸引人**低的曬

に冷語記し。都後記記、**叫點去吸引人地買、**點接好玩、譬如會有明短既組合、行啲又加能逸 採可、有啲或优化的可以已。如加喻或、 甘热性能利亞區 找有過程地方。巴尼格比較差額够。 可以知**道一件產品摄度吸引左人地。**

如果市**場有呢個需要既話,**是能**創意都可以算像失敗個屬**、因為使嬰有目的性引去創意呀嘛 ,引角以現餘南語,處便的完息應降數片出堂質,你推一目的或係收**實得多**,推出**產品有举** 目的呢?壞峽引邊死人呢?

Market and creativity relationship: Creativity serve the market

Analysis Camera marketing and creativity

創意個個方法職、就像點樣由**彩色診到黑白呢一條「橋」喔**、叶其哲都像加減作專

嗯...强星啦好似相撲可以不斷推練出新,因為其時相幾好簡單時顯,都像不斷像咁影,任 你態解值一年可以出學时多部,有有認過吃個問題起其實? Q:任你你跟認理個問題?

Q':但像其實圖我思科有關數? A. 民售係了的關係數一時段。 於一時期後數一時以後都像所足以一樣與一點解生星都可以有新一條在形象既轉變之外啦,功能都徐不斷要認點樣加落去好呀。

常我盼到有一個現象我就會說到。即除譽如話有一部有品牌相機既買得好費,啲人好麵差 但實但像買唔起,叫我假設我你呢協品牌院市場做酱部,我贴掉去製造一碗新可品出宴 可以應多啲錢?耐你明開發啲新遊品價。 吃協品開開办左一款相換,相對問發以中예麼, 信德從買素吧,都係一樣數,實德極心所以與範圍用得返。生係爭係從彩色雙左黑白中陸 野、又平鳴,叫就可以進台到一部予修為認為成人政策數,但係又仍以今自使登得有利賣 又可以買多啲,則吃能傳說條何校切開發到政群或是應、即吃起我又想得電你一個自意呀

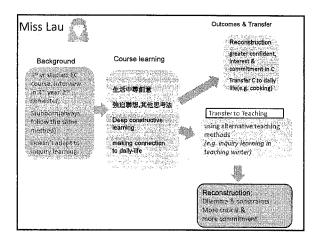
段地普遍吸引燃野就像不**斷时「加」像**壁,但像壓壓[黑白相機]共再除用左一個一**戒**一法 壓轉,但由彩色變左黑白鴉,價錢相減壓。任係但又可以成功吸引到多啲人去買

• A: 其實呢個同市場有關傢。因為近排我有去聽商業講座 ,其實玩具個個呢,有一個vivian你有去講到既或者點樣 、呢個創意係需要市場去帶動,即係唔係話純粹證到一樣 野,譬如我加一樣功能,係遙控車個度加個鏡頭。如果市 場打呢個需要既話,呢個創意都可以算係失敗個喎。因為 但要有目的性咁去創意呀麻,咁所以就係會話,睇倘啲產 品點解要拎出黎貿,你唯一目的就係要資得多。推出產品有咩目的呢?要吸引邊班人呢?

- Q': 我唔明你商業個個talk個度...
- A: 佢令我會諗到做市場部呢個咁既開發新產品既動機姐 ,當我坐係個度(聽talk),就會自己諗一諗。

After the course -> High aspiration in C & strong transfer → Negative experiences -> Seeing constraints in reality -> Different coping strategies > Different reconstructions

> (2 cases on teaching & 2 cases on organizing activities)



2.5 years' after the course:



Transfer to education

"設計教案或者準備活動時,會嘗試不同的方法以取代以往價幣的做法

业也有自己反省自己的做法或者把自己的做法和别人相比一下,看看自己有沒有不好的地方或者優勝的地方,有所得必有所失。

所失的就是自己的教案有時候和學校的課程範圍有些出入,未必可以完全依從。"

Constraints & Dilemma
「师珍信报矛盾」想得到强烈。但同時又想自己的想法别特,但又未必得到别人的認同,就會是 得很接數。可能跟自己的性格有限,更是不想题身在高空的人或是对漫大多數人的主流意见。 是很不一定他們想或是可行的,但已就想得的地想走。肯以几乎经查置持了便强强。可能且正 的理是在那些效率不可,但得不到大家的認同,所以是得不開心。是得现在的人只想依然行手, 不想多做,就不是改進。

Coping strategies: Criticize others, and greater commitment

可能跟自己的性格有關,就是不想繼身在高位的人或是身變大多數人的主流意見, 變得下一定他們想就是可行的,自己就想有期的想法,所以如事願會變得有點無獨 一可能自己的想法有點與眾不同,但得不到大家的認同,所以覺得不開心,**變得現在的人只想依舊行事,不想多做,就不思改進。"**

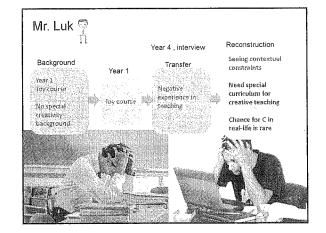
"...這**門課令我覺得更加要去培育創造力**,相對其他科來說

說真的、大家都不是很重視創意、但是我覺得是重要的。

捻完這科後,覺得它對一個人的思考方式是有影響的,例如說你想將商小朋友的思 ·思考方式還是多方面思考方式、而這科就是能放發你多方面思考

"可能上了5.P"課後、才覺得原來自己也可以有這方面的能力,給了肯定自己,覺 得這点感要否面的人也可以有创意的思維,那就是最早個人節可以擁有短個天賦, 欠的只是你自己卻下卻適所做的是创意的事,身邊的人有沒有支持你超數做等等...

希望自己所教的小朋友都可以有獨立的思考,可以把想到的表達出來,這是我最大



Mr. Luk

Background: 3-yr delayed interview; major Chinese, no specific creative bkg

Transfer to daily-life: more observant and analyze creative strategy behind

執係話…原來創意像可以培養…或者通過1D特別既方法去嘗試…其官係…點 接調呀…像生活上面會睇到或者 但係會有呢個意識囉……此如話、贴排會有IPHONE呀IPAD呀咁樣,其實個關

其實會知道但像將1D野合拼,比如話,將電腦,同埋相機同埋電話合拼

Transfer to teaching → coping strategies: reconstruction

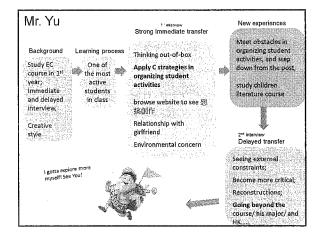


如果爭係中文既可能會少0.但条你會略到因為其實都比較難架。比如紙。學校其實常係咁樣抽即係唔好話學校,即係話除實習到。有教在10詞語晚,咁如果徐來硬將兩個調語來運一齊呢。其當小期及緊端係此軟雜去。就到一句句戶。嗰單時就試過,但係原任老師就回來咁樣端,兩個內試下兩個。兩個人是11抽一個出發,即係好多個十個人面抽兩個。叫你做與時候,其實常係有難限,例以一條你就將0時間擴闊但,一條就以後唔好咁做,單一個 詞句咁去做

策略可能係,即係如果學善我限新,我可能係第二次實習,即係若管嘲文實習 到,可能如果如果我哪种時係老師既新,就會提出嘅,但**係我嗰陣時唔係真 係老師黎加嘛,可能人地有好多野做呀,**或青期樣,如果我提出呢個概念既 時候…可能…可能要有一個時空間或者俾個機會先可以表演,即像打正名號係講創意既,咁就會運用到相關既技巧囉(contextual limitation)

In Daily-life :

其實係...點樣調呀...條生活上面會睇到或者真係會有機會用可個其實唔係 好多....



Mr. Yu

Background:





has creative background in writing, wish to study advertising

Creative style:

其實係咁,我自己成日證理古靈精怪既野, 好想將自己既意念實體化,即像show 俾人地睇; 喜歡突破框框



Mr. Yu

1st interview:

After the course, 自己思想上闊左,沒有假音自己,不要被常規框着自己



Strong Transfer to daily life:

Apply Creative th. strategies to organizing activities 上經證POSTER、活動、作用(思摩拉拉法) 成實者要認新假理主要自治生來會加。沒管我地更宜的時,也更想亦法去了時、吸引人,使 人気得關心,好多事要能,此的時,說要相以前不「指的事、Has used six-thinking hats???

Appreciating C: browse website to see 型摘制化

多左上高於網及主動軟質想攜創作,以前不會剔意去看,以前會覺得受權,現在會認為受權 也有所謂

Respect others' ideas : relationship with girlfriend

創業有好多種,要尊重,接受量定要大一點,例如認設計的女朋友常常問我級計意念/意念, 自這类卻用回自己的意念。當時的我很生氣,因為自己提出了那麼多意見完沒沒有被採用,但 長在即不再介懷,以而覺得這程也很好。

Differential C: Environmental concern

起初覺得創意就徐好啦,但到環保就知道創意看時會損害環保

2nd interview- one year later: still positive to C & the course !



A: 係,係些個跟权先會今我對創意呢個意念放大左,我先會談受到其他野其實係同佢有關連。可能我讀創意之前,我對創意都像展死左,但像讓完會條概念同形式上有改變

Transfer to Chinese writing and child literature study

Q: 咁你覺得創意寫作同course存無關係或影響,就管平時趁起?心態上? A: 定有,學左條一種思考方向和態度,你會知避宜已咁樣診會較好

见道文學: 徐、徐彤旭課程先會今我對創實理閱意念放大左,我先會被空列其他野其實條同任 有關達、可能我類似意之前,我對何意都像觀死左,直接憲定會係概念可形式上有改變。 但其實對於孩子來讓,但地嗎一定要知呢樣野·你可以同個地讓魚條條天上飛



Seeing External Constraints & becoming critical

organizing activities: "好多時,我地會被實際既野束缚住,例如budget、無人做,做唔做到、以前無人做過,得唔得架?有無人肯做? 這些都會令我本身一酱舊雲實體化唔到"

"...見到下莊做野個種規規矩矩既方法模式係令我好憤怒..."

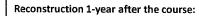
主玄潔鴻旗兒童文學。兒童文學能最大馬行至,因為自直條無限制,條兒童賦世界就係才。 好更命。竟之列略到,兒童本身一出世恒地既創意像100%,但或年人超過十幾年,人地同但 講,應該點行,應該點數,創造力就降低。

"南两,我有**幾憂**自己之後做 皆时。我不身想做老師像想煙學生數樂,活潑既而且噶死板聚數 學一柱像官家於教案,附師兄姐,會見到好多框框。"

A: 依家會從得demo紙 規範左我思考

A: 有呼,我是得是個course 在身叫我地突破框框,但像我是得呢個course本身都像一個框框。 Q: hriff

A: 可能知道有要突破框框,打破傳統,吃起思維殊式係希望學生像呀阿地方都可以用到出來 無確對出行的野,包括准,說書等。



可能找讀完呢料(CREATIVITY)先對創意有**更深既睇法**

practical vs craziness: 我覺得如果你一開始個dea 就好crazy,就算後來實踐後效果)滅左一; 半,都會好一年如果你一開始就較著重現實,無行己起法,你做出來批野一定明會好

Tradition vs Surprise:新撰野,所有新撰野都條創意。校一直都覺得創意) 像要同傳統晤一博 野·山條你 ·見到個idea係要唯一型

Functional vs just new ideas;以前我可能會覺得卻意係要有功用。剛體完假course就覺得創意係要對人類有功用,但宜家就唔覺得(創意)一定要有功用。...我覺得創意只不始第一框意念。

Thinking process vs action/product: A: 明會既,創題力係要做左出來,先會俾人judge到 但我定家就比較著重構思個階段,我是得較重要。(2rd interview)

Strategies vs no strategies: 其實明任可以附請,好似打功力制,呼學下點集出,呼學下點出學,你像明實行行之一怎么法问想法一**到你學議職,就會發現有招不如無招**,(2^{sst} interview)

Looking forward

Q: 我變得你不斷內心部有創意既稱下,不過被美妙係你會發現好似有太多框框。 咁你下一步會當?你直家變得太多框框,似乎就去第二個階段,多些創作。你估你<u>創意既歷程下一步會像點?</u>

A: 我應該 會挑戰以前唔敢做既野。(e.g. film making)

He does not like HK, people all doing the same things. Peking has more cultural elements???

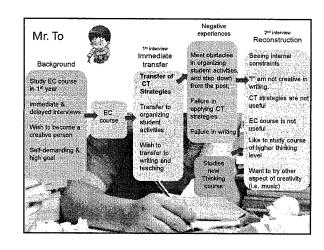
A: 我覺得**香港係一個好無創意既城市**,其實我好明鍾意香港,如果有機會我會想

Q: 點解呀?

A: 香港好似每人都行繁同一條路,好似好多路,但最後都只像搵錢。 我好 appreciate 北京,因為仍既能保留原有文化又可以按納外界既事物。將但mix左並 推向更高層次,而將係收左。

Going beyond the course...Chinese writing...and Hong Kong....





Mr. To

Background:

- Study EC course in 1st year
- immediate and 1 yr delayed interviews,
- ·major Chinese,
- ·likes Chinese writing (got a lot of unpublished pieces)

Creative style:

不喜歡做別人已做過的事,要做都會做一些突出的事。希望自己是一個創意人

Mr. To

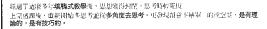
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1st interview:

Transfer of thinking strategies



開始會嘗試利用vivian堂上所教的思維模式、創意的難的技巧。(自己在思考上變得有創意

ドロア・レーション 可以他們學習外下間的創意思考方法・作品激進、創意解離、scamper・就可以透過這些方 法循序漸進・對個人創意發揮會有一定的解助・

你會否通用制意數學在你將來數學和对數多享方面? 南、我特本上都決定將來會以創意教學來幫助我教學各方面

2nd interview:

- Failure in applying creative strategies in organizing activities
- ():你是能多元生代轉變,居你上午起能ですeative course有計關除呢? A:可能都打性。因為上左個でourse之後都有嘗試用既。之前上莊,咁開會既時候 有D樽頭位,都有嘗試聯下用唔用到,但個時失敗既。
- Q : 監修実販売? A: 月3曜用暗到呀嘛,想首試用個D方法黎啟發,但最終都像只識用mind map 咁嘅(但不是太潔得手)

- Q:陈徐上咩排呀?
- ▼・1998年1月8日 子 A:高沙 申 直角分化質・一直共列十一月個陣先落莊・他時先智書行頭先講框 0 苦傷 り間が出り音。 Q:用 三落印之面空虚? A:海呼 好空虚。

2nd interview:

- Q:有架,已經有產品架廠
- A:全部都像未完成。一個完成既作品都有,內為為到某個位既時候,我覺得又有制新呼
- (): 塘粉好?

- A:日海及程序好的资格中的...... Q:用你才完成既你是有有一起呀?可能吃口每呀 A:六、七個呀。(Many unfinished/ unpublished writings)
- (): ([[[] 平對自己的要求好高曬...
- A:我都覺得係既
- Q: 条架?作真体射架? A: 徐呵·我都是首係...海以視**寫書既時候...寫到某個位既時候就寫唔落去**
- Q:作明單具要求為:但對自己創意既要求都高場.....你有覺得上常吃個course:後令自己自信心大左既?我覺得低左呀...

Present experiences ;

- A:朋友令我...都...都會有架
- A:內為對比番其他期友...其他係大學個啲... 斯**條佢地會比較... 精彩哟**非

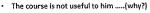
- -Got lost in direction A:間住我又覺得、哦,突然之間好似有嗎...有咽定位咁
- A:因為其實除...我覺得...我覺得係自己係呢做方向,與條**創作呢個方向.....**

Learning create negative impacts - more constraints & lower esteem

可能像以前門, 有計多野診呀, 日除呢...... 可能有學咁多野呀, 咁就反而有咁多限制

仁 上到第三次,而求覺得自己個啲創作可能其實都係好普通

Comments on the course changed!





· No continuity in course learning

Q:秦畔盧鳴即用岩綠称岩岩人大學聲鳴峽...我覺得你越信心像恁絕你去人大學之前...分明 增、徐朝登事前

以、原外配所可引行時期(7年)。 関、條創意方面 A:嗯・可能因為**勝既野多左**。

A:電: 中北京 (海州東) 2年。 「 1 日前京大阪東東南庭 (京美) 2時。 「 1 日前京大阪東東南庭 (京美) 2時2 (南川京) 「 1 日前京大阪東海町南心・吳峰の三版で 10 日 1 日前北。可能因為係上堂做個D野・平時我都有做。

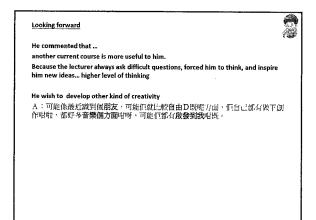
A:反而你平時極我地做配D問題、平時我鳴會做呀唷、冲起可能多D放發,<mark>但像一過左</mark>個course之**後,我唔會咁有心,自己...**



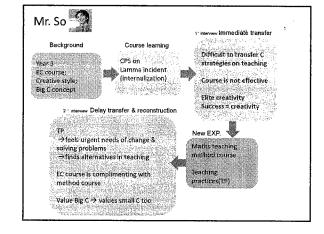


- A:每今呀,我到卖中能力思料,就直像得留那事故老师屋料,像會专我提得特别。 (都係或目會叫你能對) Q:和准係你提得被人間好多對,當定好多對係並深刻?會所會係你母上留樣任何樣 解之會明傳發得如果以後上說時限的說好,時個你說對,你會提得好失來呢?會明會 對你以後便上說當價或湖空有影響呢?
- 日本の支配工業合同法別等自200m年: A: 投資電料可提換式投資性接收損害報。中3:係配差額購、投騰計 Q: 衛係由配明開始、売、直都係事期望? A: 可維維賣・及為上你室所係計。 Q: 相1:添期望高左?

- A:都有铷等。 Q:可即係有望自負而既影響?
- Q:用用格介世紀《印度的政治》 本語的時,結局相應。如果有關內實,可能會關心的。 Q:我雙門你對問問題,完好應該你。起題你稱益地。可如果老師行叫你認斷寫斷,其 所言。這時時有步支軍用第二品誌三点數? A、訂一個可能會自己與一下,明有對紙等用黎寫。 Actually not much talking about his course.



immediately after the course > weak transfer Later felt external needs -> strong C development



Mr. So

Background:

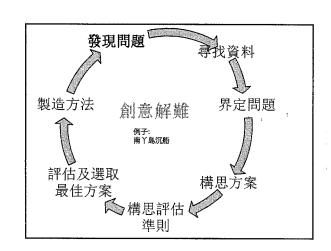
- Year 3 study EC course; immediate and 1yr delayed interviews;

major Maths, minor GS

Creative style→ likes to brainstorm/thinking, creativity happens when cheating others

Enerating Others。 "中學時,則平常計應我就從得在交談中,玩學中,甚至是故懷事中,尤其是在做壞事中 更加可以突出你的創意。因為你观觀到一些和普遍人做的不一樣的事,你才會有成功處, 當然然能以功威宋心是好事。。但如此即等得究同學,玩弄同學,**選光一門,有時見到一** 樣集西就會有很得意的說法,目有時用是到過餐東西昨天未必可以有得意的結果。"

"我能人来說的喜歡想束想西的,比較小的事我也會去想,又會想有什麼方法可以令一樣東西比較得麼,可以做得比較好,我是一個比較容就思考的人,上完這一种時,可能在平時已經不知下覺應用出來了。"





Learning process (internalization)

"...**潛移歐化了**,例如我說思考方面,角度。走不可以少,一定要多角度。瓊要從不同 層面 出身。如果東沒有上越翻意遠葉,可能要會比較武斷、直接,可能想到什麼就做什麼..."

等於可能於系列的以基內給一些日常生活的例子,然後用不同的思考方式想出來。例如有 京居拉丁開於兩丫島沉絕的海洋,突後叫我們去思古下京自有這種的不來發生。可且有什 東京共產配色地工作,本者配色這位至今至此是?然來以蔣和學面的思考方法是他則由來 京這起或今我在以後面對一些問題、讓題的時候,潛移歌化地用了那些思考方法去想

Transfer process: "對,她就給我們看到原來日常生活中也可以用課堂上學過的思考方法去 應用的,上後還到問題時,上高就不絕不覺想起原來有這些辦法補數、解決。"

Transfer to education :

1st interview:

* nucleosess. "有創意地數數學?非常難,因為對於中心與此時都得得有數數的人來說,成功數例一級以 經費得是,生有率,但你就是她的目標,希望時下數例他們課本的知識之餘,還也吸稱時 到他們具地方面對如的意的數便。那麼更加於了一個新說的方法主義是,如此單以如關來 說,可能又未完全學生學例更多一個為實質的最高的更為數學人不經歷一個數學是於學 一定便好就,一定使用等就來作為什么學的事一場準,如果你用創意的方法教書,沒錯。 學生可能會比較投入,參與度高了。但不代表分數會高了。"

276 (htterview: 在接方面使量,你親身去實置。這方面影響成大。因為學生內結。但直接的 12應。你這些學院方法行不行,不用地的。你。去教、學生數會給反應的。你把心即的 去教、那整堂歸就先新沉沉、學生也不會專心。也就是親身殿受到的。我要去作出改變。 原第二方面就是上鄉。 对為即告被從沒有去實管之而有。 科蒂班敦 · 也數學法。 原次 上海, 原次 上海, 以上於 阿尔里曼克兰曼, 我不分规数学科而看用《利度可以上》的。而 不是早的活面清, 或是用 埃爾默亞斯爾里。

Reconstruction : Big C→ small C



...天生的資質自然比其他人更有創意、學不來的..."

"....你还如果要组套在的的领域中看用,我觉得**除非你很能幹**,如果你的不是很能弊,可能就會 扯到你接现,挺碰到你餐饭..."



Reconstruction



Comment on the course:

The course is not so useful, want to have great C



投裝得不同方面,創意這科好像是打好了根基。今我讓中有這些概念。如果我沒有上遊印 意這科,就算是上教學法也不會想到的。 馬洛德氏系列前底 (BASE),數學法那科就是導火 線,一上完那科獻立馬聯想起以前上過創意道科,究竟兩者是不是能夠相輪相承呢?我覺

芒介思 (京) · **這就是教我們捉魚的方法,其他科就是給魚你吃** · 這目就是教我們提<mark>須</mark>的方方 法,你你自己去据象

Transfer to daily life (internalization)



·去丁旅行、那就在设計行程上、則反會覺得「你這樣也想到? 我沒有想顯清釋出 行 · 『除近方面· 我不覺得是特別級課堂有關,但思考方面我已經用了腦內的知識,腦內的知識當然是由很多方面學回來的· 其實一方面就是創意違科了......

我靠這下司普通人的思考方向。我會刻意去想有什麼是別人思不到。或者是意思下到的 或者是賴曆去想。商結單為特值思起、原思去數可能會報詢應,得讓應。其中一個方法就 **逆向思維** 正而思定之後自禪曆去想,得出來的兩個結果可以互相參考。"

Miss Wai immediate transfer Background Course learning Year 1 EC course; Multiple perspectives Weak Transfer Field trip; to dally-life More observation Used to follow teachers' instruction, Life Crisis (break up & Australia trip) 2™ interview Delay transfer Reconstruction: No need to compare C→ everyone have C **Quan** Internalization Meet difficulties Emotion affects creativity →independent → More critical Re-define good C. Teach C =/= Teach CT strategies



Miss Wai

Background:

- Year 1 study EC course;
- immediate and 1yr delayed interviews;
- major Chinese.
- no creative background

- Non creative style: likes to follow teacher/rules, doesn't think herself is creative "上段管件」或中心的基準的,其他人也會想到一段會管門基準即上於華多人,(在上午後人,這一級說到了一個別人會覺得很有創意,別人沒有做過的事情)。但我覺得在世上的某一個角落的人也會作同樣的事情。"
- 的人也實作回來的學習。" "還有我覺得自己沒什麼創意,看看語常之後會不會有些創意。" "... 內"好以前是老師教什麼我就考試就算了..."
- "... 告眄會帶領著同學,鼓勵我們去遷移,老師鼓勵遷移你就會更有動力去做。"

Miss Wan





more appreciation and observant, but not much action taken (DIY)

"投現社會欣賞不同的事物,以前不會欣賞。即是以前只會祝得「挺好的」、挺好的一、什麼能 挺好的一、現在就會欣賞這些事物有什麼特點,每一樣身邊的事物。"



2nd interview:

Transfer to other studies and daily-life

(observation skills and multiple perspectives)

如果是上菜的話,我又不覺得有一我覺得其不過是想去有用到,上VIVIAN這一科,我以前 想東西是一條直線的,現在是多方面的,多方面即是我的觀察力多了,多了就是說多角度

我在其他堂,我都會多角度去思考,**這個觀察力就有遷移到別的科目**

投資貨幣上完這一科後,是會多用度去思考,上其他紫都會不停的想與四,看着可不可以 選擇 ,不可以的話「形釋」可以嗎?雖然我想不到例子,但起碼上堂不會再直線思考 ,而會是老師說的方法我想一想,身邊的同學的方法我又想一想,自己的方法又去想一想 ,所以我覺得多角度思考是有遷移的。

上丁近一种的方别就是:我會想多了不同方面的東西·以前就是單向一個發展的。我以前 思考是一個方向的,直上。但近一個數個的基本與用一個的發點,而且用多個出發點,你 看你更再或许多了,是現在正是是代徵時行沒有網鏈送一样,我也是近樣也與兩的,只不 感,有這一样沒更會越多整本同的也發點

如果你認SCAMPER的結果有用,SCAMPER中不能叫著代。我在澳洲的時候我沒有中式湯, 我用內式湯,這也算是一個替代,例如他們不必能點心能喝茶,他們用消代於了茶,這也 算是一種替代,其實你問我有沒有遷移,我只有湯飯那個例子有。

少少一定有,对為我也有說我的觀察力多了。例如程現在看到一盒飲品, 個水緣......如果 我現在沒有間尺,但是要畫直線。所沒肯先一定要象、些硬的東西,程現在內留意身邊有 什麼事物,你才去決定用哪個才能改善、幫到自己、

Breaking up in relation & wondering in Australia for 1 month

→ independent, widen perspectives & learnt not tot give up

"…2013年的六月…去了悉尼流浪一個月一因為我是自己去的,我就很家人说,家人不是很赞成。"自是已經實了內學,沒有學址不去。所我就自己一個去一部與經歷的事故上認識我改變了。"學如以前在香港會租保餐家人,以是會有後必樂樂團。何來吃說嗎?」,但是在激涛以有自己一個。以而我會常為後與自己獨立了,還有笑多了。一笑多了是受待,以前我會常為你與人,例如依賴我前雙,從得有他在自己生命中就會視鄰心。但是其實自己一個世可以很相心。

"商多丁报纳,我不**會拒絕,我會覺得世界上什麼都有可能,無奇不有,當然你第一次見時會** 很**愕然,但是下一秒已經會接受**,如果是一些無傷人雅的事我就會接受得了。"

後小到大的概念都是獨一無二的才是創意・是要從「沒有」到「有」才是創意,到現在 養婦,就算有那樣東西存在著,你把它演變了,加了一些新的元素、新的意思就已經是創 意了。

思」。 運有,創意是不用和別人比較的,我思得每個人都有不同的創意。共时我提得每個人都存 在老前說。只是他肯不肯說。而且创意有多,任少,有數人是看起來沒有什麼的意。已結 其實證是會有創意的,只是是不能說的表露出來。不一定是吸對明,些很像大的東西不 和說,我的想法改變了,即屬不確認的表露出來。報此 沒有,到,有一不是相意

们我现在的想法是少少项内不同了,有些新fRESH)的顺覺,就已經是創意。我不用以前保守的方法,我用開心的、不同的方法,這已經是創意。

权役背壓力、悲傷、不謂心、負面的情緒都會影響一個人的創意,或者影響一個人順不朝 影地都的類點說用來,其前成多或心境會影響這世界的胡昂的印起。「即我會想,當一 個人有創意的想法念題,不是就他發明了什麼,而是有些異於照人的想法想說出來,但 是有機會是因為他自己的個人因素,或者是不開心的事就會壓抑了。

我的話,觀察力真的是遷移到的,因為觀察力不會受老師影響,是用眼衍青、用趣思的自是你說是實際上應用在功課,可引討論、實際生活,我就是實際上應用在功課,可引討論、實際生活,我就是計程雖一有時有些東西不到你不戰役,其中報境因素。老師、上課、來放生活、社會等等因素影響下,亦是真的遷移不了。還有我提出傳輸和的會影響到一個人的思考,我開你、如果你在是你能夠思學嗎?不可以思明此,你得心的時候可不可以思明能在仍事?可以呀,我們你就是是不是一個很正前的字話?創意是很正面的、給到人一個開心的職費,如果你傷心的時候,一定不可能會有創意。







Self-initiated transfer of creative learning in two creativity courses

Significance of this study

- · understanding student development patterns
- Evaluating and finding ways to improve creativity courses
- · Highlight the value of self-initiated transfer
- Highlight the need of its delayed evaluations, delayed feedback loop

Strong evidence was found to support that creative learning can be transferred.

- However, the transfer of creativity-related attitudes, confidence, conceptions, appreciation, thinking strategies and habits were found to be more likely than transfer of abilities in completing creative acts.
- For the factors, the simple, interesting, daily-life, hands-on and creative characteristics of toys were most frequently mentioned.
- Apart from this, curriculum with surprise, experiential and improvisational learning, and personal constructive and self-directed learning habits were found to be conducive to transfer.
- On the other hand, the most frequently reported hindering factors, especially for long-term transfer, were environmental constraints and fading out of memory or impression.
- Finally, the strengths and weakness of this kind of curriculum in developing generic creativity of tertiary students were discussed.

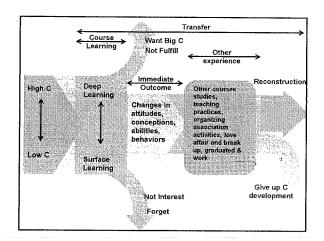
- How does your proposal fit the conference theme(s)?
- This presentation fits into the sub-theme "Preparing graduates for a globalized world". Creativity is one of the most important attributes necessarily for university graduates. Universities may not lack of creative learning courses. However, there is always no evidence that the learning outcomes can sustain and transfer from the studied domain to other daily-life or professional domains. This study was designed to fill up this knowledge gap. It tried to found evidence on creative learning transfer and evaluate what kinds of learning elements and personal factors can facilitate this transfer.

Summary of

- 1. Student transfer/development pattern and characteristics
- 2. Factors/conditions/causes of continuous self-initiated transfer (from case analyses & their direct verbal report)
- 3. Implications on my course teaching demonstrate a delayed feedback loop
- 4. Implications on GE curriculum design-fading out vs continuous development
- Suggestions of teaching & assessment for self-initiated transfer

- 1. Student development pattern and characteristics
 - Student developments have
 - commonalities and diversities
 - · What are they?

· commonalities



1. Types of transfer

- · Near transfer
- · Far transfer
- · Creative transfer
- · Transfer by generalization
- · Transfer by internalization
- · Transfer through/after reconstruction
- · All are self-initiated transfer

• More transfer results in previous presentation

Transfer by internalization

- · Miss Lau: 當你習以為常後再做出一些改變,你會漸漸察覺生活起了一些變化。"
- Mr. Wong: 上途自哨行停內化在既技能,特别你(Vivian)表验能明月法。如果你依靠即找締禁、政治能對比。我可能能可以締結出一个理解。主意他明前得另法。工商書時就有特登総起話我要用邊個方法去做創新。
- Miss Walt 前具很下面 到達就。重要用戶整個的五次之上的走海。可能很快來可用了 也下切过,例如我去獲貨,可能我用一把拿去勾住我的袋子。那我就不用背著,這些 結合了就可以減輕負擔。可能我买买中用了也不知道,但是我不會強迫自己去用這些 策略。

Transfer by generalization

Transfer → reconstruction

Reconstruction → Transfer

1. Expected vs unexpected outcomes

Immediate outcomes : more commonalities e.g.

Delayed outcomes: more unexpected diverse elements

e.g.:....

1. Unpredictability

Last 4 cases:

Immediate outcomes/feedbacks on the course =/= delayed outcomes/feedbacks

OBL - immediate evaluation is valid?

2. Causes of unpredictability & diversity

- · Diff backgrounds (thinking and learning styles)
- Diff learning process (improvisation)
- Diff immediate transfers
- · Diff life experiences
- Diff environment
- · Diff reconstruction
- Continuous interactions of all these factors

Story lines

- Most stories get their LINEs of development.
- Though their final outcomes seem so unexpected and unpredictable, however, they are not totally without reasons.
- We can always find traces of evidence in their original backgrounds, thinking and learning style, expectations, experiences.



Au – want to be unique → get a strategy-reverse thinking

Wong-Chinese culture + functional C ???

Leung - always want independent learning, any evidence?

Chu – GS background-> strong in making connections, environmental and science concern, why big C -> small C? due to hands-on experiences in the courses? any evidence?

Chair - exceptionally dislike old things

Lau- specially non-adapt to inquiry learning → course → apply it to ECE teaching Au yeung — like to observe SCAMPER; mothers' case → simple is good → apply C in verbal expression only

Wong -???

Yung — want to jump out-of-the box and realize his creative ideas → always struggling in these two aspects & they are his criteria of success → seeing external constraints → changing domain for escaping from external constraints? & wish to change environment....

Tong- want to be big C person & self-demanding → disappointed by internal constraints → wish to try other domains because of better potential in that domain?

Wan—becoming more observant on C and wider perspectives → Australia trip → strengthening her conceptions and commitment on C

2. Causes of changes

- Leverage effects of the course vs
- Restoring-back effects of other experiences & time

New experiences create ... positive or negative loops

- -> reconstruction for further development
- → giving up

2. Conditions for continuous C development:

- · (before course) original creative style OR/and
- (during course) constructive deep integrative learning

(after course)

- C demands or/and C space in environment
- · reinforcing life experiences or/and reconstruction
- · Continuous learning in C

Other learning factors

Deep learning & memory:

- · Clear structure and contents/points
- Peer interaction

Impressive/surprise & memory

surprise → impressive → memory & positive view → transfer

Experiential learning

 hands on/concrete toy (play and make) or has experienced before

Making connections....

Other curriculum factors Toy characteristics

- -fun, interesting, playful, relax
- -Simple, concrete, daily life
- -Cultural-rich, science-rich, creativity-rich
- -support hands-on exploration, inquiry experiential learning, self-made practical works
- -Require no difficult pre-requisite knowledge
- -everybody has experienced (love) them before!

Other daily-life topics.....

3. Implications on the C courses

The delayed transfer feedbacks inform teachers/ course designers:
• No application to daily-life and follow-ups, need to facilitate transfers

- Deep learning in less topics -- no need to teach so many CT strategies- they only transfer a few of them
- There may be gender-bias. Too feminine and too much small C. More boys expect great C. they wish to have more challenges. Should I try to strike a balance between big C and small C?
- Our curriculum need to give students chance of actualization in real-life before they understand/appreciate the use of CT (e.g. TP, method course, life crisis)
- Our curriculum need to help students to cope with the external and internal
 constraints in real-life (& teaching), and how to deal with the emotional stress (i.e.
 dilemmas and loneness) of a creative person.
- The course need to give students a real picture, not too idealistic, not just a myth
 of creativity. Not just playfulness in the course though it would gain high SET.
- Need a better link with other courses, better scaffolding, OR should be in a "buffet" style of curriculum-make clear dishes provided, the students then linked up learning themselves. But for creativity, difficult to explain to students beforehand.
- Students have their own life/learning styles, would restore back, how this course

3. Value of a delayed feedback loop

The delayed transfer feedbacks inform teachers/ course designers:

- What elements are valuable to teach more because they can be effectively transferred by many students
- what elements in the courses are lacking because results revealed that students are in need of them in their continuous development
- what elements need not to be taught or its teachings need to improve because they can rarely be effectively transferred.
- Immediate outcomes/feedbacks are NOT the same as the delayed ones. Most of
 the above cannot be clearly known at the end of the course or immediately after
 the course. The course effects take time to emerge, and therefore it needs delayed
 evaluations, at least one year after the study. (any evidence???)

suggestions

- What is a good teaching?
- Strong immediate and delayed self-initiated transfer and reconstruction
- Strong continuous development after the course – blue arrow

Problems of exiting OBL model

Teaching, learning and assessment is confined to the objectives

assignments only revealed forced near transfer

Produce no continuous feedback loop on teaching & learning

SET revealed the immediate & localized learning outcomes.

How about the delayed, self-initiated & transferred outcomes of individual students ?

Curriculum suggestions:

 encourages and provides free creative spaces for the development of self-initiated personal transfer throughout and after the course

Teaching suggestions:

- Goal setting: Setting "self-initiated transfer" as course objective;
- Improvisation: encourage unexpected and unplanned learning to emerge in classroom
- · Deep learning in less topics
- Making connections
- · Metacognitive development
- · Student sharing...

Assessment

- Assessing forced transfer lecturers set clearly defined transfer tasks
- Assessing self-initiated transfer student define and illustrate their own transfer outcomes which are not requested explicitly in the assessment guidelines. students are also allowed to declare their personal learning outcomes which emerged at the end.
- Expect the unexpected!



After-course follow-up

Encourage transfer-

students are requested to keep a personal development journal on their self-initiated transfers.

They would share the journal at the mid-, immediately after, 6 months and one year after the course study.

Focus-group discussion

- $\mbox{\it create}$ a $\mbox{\it continuous}$ $\mbox{\it feedback}$ $\mbox{\it loop}$ for both teaching and learning

Selected case studies

Limitation of the research

- Prime effect:
- Being interviewed would increase students incentive to transfer and help them to remember the course elements.