

Final Report of Project

Project No. : 2012 /0208

Part A

Project Title: **Discover Student's Learning Path through Experiential Independent Enquiry Studies Games**

從體驗式獨立專題探究遊戲發現學生學習軌跡

Name of Organization/School : **Elegantia College (Sponsored by Education Convergence)**

Project Period: From 1/10/2013 (month/year) to 31/1/2015 (month/year)

Part B

Name of Project Leader: _____

Name of Grantee*: _____

Signature: _____

Signature: _____

Date: 28/4/2015

Date: 28/4/2015

1. Attainment of objectives

Objective 1:	To speed up the IES learning process by making students aware of their own learning paths
Objective 2:	To create a quick and deep impact on students about the entire learning process of IES at the beginning of the school year.
Objective 3:	To increase student's confidence to do IES
Activities:	A two-day experiential learning IES program, aligned with LS curriculum, was developed under this objective. The program allows students to go through the 3 stages of IES. Form 5 students from 4 participating schools went through the 2-day programs. During the program, students work on their potential IES topics from literature review till writing IES report.



	<p>The outline of the program, consists of 11 game tasks, is as follows:</p>
<p>Degree of Attainment:</p>	<p>100%</p>
<p>Evidence:</p>	<p>All program activities designed were referenced to the IES requirements. LS Teachers provided valuable feedbacks during the design stage to ensure that the activities are well in-line with the syllabus. Below are feedbacks of students who went through the program:</p> <ul style="list-style-type: none"> • 成效十分大，互動性高 • IES GAME 能讓我實地嘗試 IES 報告的做法 • 已完成了 IES 40% • 這課程使我日後做 IES 時有充足的經驗 • 起初我對 IES 任何做事完全不了解，通過 IES GAME 使我懂得以後怎完成自己的 IES 報告 • IES game 始終是一個模擬真正 IES 的 game，從中可以知道要做好一份 IES 所需的步驟，對 IES 有初步的了解 • 可以令我們知道自己的不足，加上可以訓練我們的思維



	<ul style="list-style-type: none"> 我從未試過做那麼難的專題報告
Reasons for not attaining objective:	NIL

Objective 4:	To reduce the IES facilitation workload of LS teachers								
Objective 5:	To improve the overall quality of IES								
Activities:	During the 2-day game, students were involved in the IES tasks competition facilitated by teachers and other facilitators. Each facilitator facilitated 1 group of 5 students to understand and complete the IES tasks. These facilitations during the game will reduce the workload of teachers in the coming year to facilitate students doing their own IES. Some of the topics or work done during the game could be carried on to their actual IES project. Skills of doing IES were acquired by students at various degrees.								
Degree of Attainment:	100%								
Evidence:	<p>Feedbacks from students are:</p> <ul style="list-style-type: none"> 因為做了一遍 IES，可更清楚做法 能清晰 IES 當中的步驟並加強對 IES 真實的內容，從而日後能更容易去完成 對 IES 認識加深，令我對 IES 報告改觀，除了對香港的時事有更深刻的認識 有指示如何寫報告內容，加上有豐富獎品，令我們更有興趣 來了一定今年 IES 好過上年，易 do 過上年！ 知道了 IES 的模式，從前是沒有的，令學生迷茫 做分析題及數據分析，用文獻找出 IES 的論點 拿到許多 IES 的技巧並能於日後運用在 IES 當中 組導師十分出色，不單能帶動氣氛，更能把每一步驟仔細地教導我們 在設立問卷問題時，要考慮到問題是否成立 在做 IES 的時候可以回憶起所學的的技巧，以及我會保留‘學生手冊’以便以後再看和參考 <div style="text-align: center;"> <table border="1"> <caption>Feedback Data</caption> <thead> <tr> <th>Feedback Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>非常同意/同意</td> <td>84%</td> </tr> <tr> <td>一般</td> <td>15%</td> </tr> <tr> <td>非常不同意/不同意</td> <td>1%</td> </tr> </tbody> </table> </div>	Feedback Category	Percentage	非常同意/同意	84%	一般	15%	非常不同意/不同意	1%
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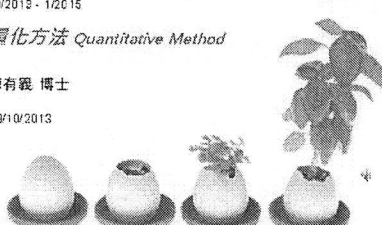
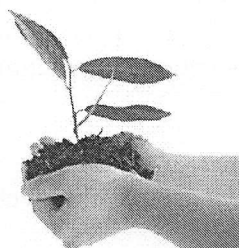
	About 84% of the students agreed/strongly agreed that they have acquired important IES skills during the game. This demonstrated the success of the program that will reduce teacher's workload.
Reasons for not attaining objective:	NIL

Objective 6:	To establish innovative learning model for IES
Activities:	<p>Students were organized in group to complete in the 11 IES tasks. Topics were selected by students prior the game. A large scoreboard was used to display the progress or achievement of each group.</p> <div style="text-align: center;"> <h3>IES 遊戲得分表</h3> <p>任務 1: 如期完成: 10分 2: 如期完成: 10分</p> <p>任務 1: 如期完成: 10分 2: 未如期完成: 5分</p> </div> <p>Prizes were awarded to outstanding groups at the end of each phase of IES. So far, this is the first time HK schools transformed IES into game for LS teaching and learning. The success of this model could be used to more HK schools.</p>
Degree of Attainment:	100%
Evidence:	<p>Feedbacks from students are:</p> <ul style="list-style-type: none"> ● 遊戲有趣，令我們更加投入 ● 以 Game 去令學生學習是一個好的方法！good！ ● 能夠帶動全場氣氛，使我更投入享受及參與 IES GAME DAY! ● 非常滿意，司儀很會帶動氣氛，導師也非常遷就我們 ● IES 也可快樂 ● 完美！能從遊戲中學習是每位學生能想有的。啊心老師教導有方，我們



	<p>非常感激她。</p> <ul style="list-style-type: none">● 導師說話有趣！禮物十分豐富● 有趣，很有競爭性● 樂在其中，能給予實用意見及反思內容
Reasons for not attaining objective:	NIL
Objective 7	To establish 4 schools in a network connection to use this approach
Activities:	Teachers from the 4 schools were met regularly to co-develop the program. During execution, teachers from 4 schools were together to observe and provide feedback to enhance the program. This school network had helped to create the entire program from conception till execution.
Degree of Attainment:	100%
Evidence:	A sample of the IES content co-developed by teachers is shown below:



	<p>Discover Student's Learning Path through Experiential ES Games 從體驗式獨立專題探究遊戲發現學生學習軌跡 10/2013 - 1/2015</p> <p>量化方法 Quantitative Method</p> <p>陳有義 博士 19/10/2013</p> 	<p>遊戲：研究架構</p> <div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> <p>A1. 背景資料</p> <ol style="list-style-type: none"> 性別 年齡/年級 家庭社經地位 地區 </div> <div style="width: 33%;"> <p>B1. 知識</p> <ol style="list-style-type: none"> 高知如何? 現況如何? 其他方案/政策? 有否目的/係數? </div> <div style="width: 33%;"> <p>B3. 行為</p> <ol style="list-style-type: none"> 有何做法? 有何行為? 有何期望? 是否養成? 次數多少? </div> <div style="width: 33%;"> <p>A2. 社會因素</p> <ol style="list-style-type: none"> 傳媒資訊 學校教育 政府政策 </div> <div style="width: 33%;"> <p>B2. 態度</p> <ol style="list-style-type: none"> 態度/看法如何? 滿意度如何? 參與性如何? 關注度如何? 可行性如何? 變遷/適應度如何? </div> <div style="width: 33%;"> <p>B4. 綜合</p> <ol style="list-style-type: none"> 有何關係因素? 有何影響? 有何阻礙/問題? 有何立場/問題? 有何好處/壞處? 有何成效/限制? 有何轉變/改變? </div> </div>
	<p>今日重點</p> <ol style="list-style-type: none"> 焦點問題 問卷設計 數據分析 編寫探究報告 	<p>焦點問題</p> <p>= A + B</p> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;"> <p>A1. 背景資料 A2. 社會因素</p> </div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;"> <p>B1. 知識 B2. 態度 B3. 行為 B4. 綜合</p> </div> </div>
	<p>1. 焦點問題</p>	<p>設計焦點問題</p> <p>瘦身及美容</p> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;"> <p>A1. 背景資料 A2. 社會因素</p> </div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px;"> <p>B1. 知識 B2. 態度 B3. 行為 B4. 綜合</p> </div> </div> <p>00:00:00</p> <ol style="list-style-type: none"> A1+B1 1. 青少年的 BMI 現況如何? A1+B1 2. 青少年對 BMI 的認識如何? A1+B2 3. 青少年滿意自己的身體及容貌嗎? A1+B4 4. 男女同學最在意身體的哪一部份? A1+B3 5. 青少年有何瘦身及美容方法? 男女有別嗎? A1+B4 6. 影響青少年的瘦身及美容行為的原因如何? A2+B2 7. 傳媒如何影響青少年的瘦身及美容態度? A1+B3 8. 零用錢多少是否影響青少年瘦身及美容行為?
	<ol style="list-style-type: none"> 個人成長與人際關係 能源科技與環境 今日香港 公共衛生 <div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="border: 1px solid gray; border-radius: 50%; padding: 10px; width: 30%;"> <p>處理及美容 市民身份認同 社交網站</p> </div> <div style="border: 1px solid gray; border-radius: 50%; padding: 10px; width: 30%;"> <p>資源回收 智能手機 環保政策 環保教育 堆填區</p> </div> <div style="border: 1px solid gray; border-radius: 50%; padding: 10px; width: 30%;"> <p>服裝瘦身 停車泊位方案 市區重建 直業</p> </div> <div style="border: 1px solid gray; border-radius: 50%; padding: 10px; width: 30%;"> <p>廚餘回收 有機產品</p> </div> </div>	<p>題目：中學生資源回收知識、態度與行為之研究</p> <p>研究架構</p> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid gray; padding: 5px;"> <p>背景資料</p> <ol style="list-style-type: none"> 性別 年齡/年級 家庭社經地位/地區 </div> <div style="border: 1px solid gray; padding: 5px;"> <p>資源回收知識</p> <ol style="list-style-type: none"> 回收及處理資源與知識 本地環境 回收與處理知識 資源回收和處理對 對生態環境的影響 </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid gray; padding: 5px;"> <p>社會因素</p> <ol style="list-style-type: none"> 傳媒資訊 學校教育 政府政策 </div> <div style="border: 1px solid gray; padding: 5px;"> <p>資源回收態度</p> <ol style="list-style-type: none"> 回收分類回收的態 回收與處理的態 少用與再使用的態 回收保存的態 </div> <div style="border: 1px solid gray; padding: 5px;"> <p>資源回收行為</p> <ol style="list-style-type: none"> 回收分類回收行 回收處理行 回收保存行 回收與再行 </div> </div>
<p>Reasons for not attaining objective:</p>	<p>NIL</p>	

2. Project impact on:

(a) Learning effectiveness



By experiencing beforehand what students will encounter in their IES allow students to actual know what they will react or perform during the 2 phases of IES. This experiential knowledge of students provides good first-hand knowledge to the teaching and learning of LS curriculum. In short, the proposed model of teaching and learning in this project is verified to be an effective model.

All participating teachers agreed to this model as a good model for IES. Teachers were able to identify various experiences of students to be discussed in coming IES lessons.

(b) Professional development

Teacher's professional development comes in few ways:

- This is an innovative model and curriculum design to conduct IES lessons
- The experiences students gain created a deep impact upon students prior to the lessons
- Teachers acquire skills of designing, conducting and facilitating experiential learning for IES
- Teachers acquire skills to integrate students' experience into IES lessons

(c) School development

School development has taken place in the following dimensions:

- Improved the IES learning culture of the schools
- Enhanced the teacher's professional development
- Raise student's attitude and ability towards IES

3. Cost-effectiveness

Budget Items <i>(Based on Schedule II of Agreement)</i>	Approved Budget (a)	Actual Expense (b)	Change [(b)-(a)]/(a) +/- %
Staff Cost (Project Assistant)			
Services (Consultation, curriculum development etc)			
General Expenses (Student's handbook, printing, reports, Audit Fee etc)			

4. Deliverables and modes of dissemination; responses to dissemination

- Program project handbooks
The handbook has collection of student's activities with description and reflection. This handbook is distributed to students by their form teachers. Form teachers reviewed the activities in the games to involve their deeper reflection and facilitated students to make practical

This form/guidelines can be downloaded from the QEF webpage at <http://www.info.gov.hk/qef/>



applications to their current life.

- Student handbooks for the program

In this handbook, under the facilitation of teachers, students can practice the lessons to collect data and verified the results. There is also section where students could write down their feeling, and reflection as part of the learning portfolio.

The handbooks were submitted to teachers to analyze student's behavior and reflection. When the 4 schools redistributed the handbooks to the students, teachers facilitated students to review the learning process and problems faced, and how to deal with similar problems in the future.

- Student's reflection for the program

The student's reflection sheets were collected and analyzed. Teachers have an overall view of student's general and specific patterns on student's life knowledge, skills and attitudes. This analysis forms the basis of future activities designed by schools. Students also understand the meaning of games that could facilitate their learning and growth.

5. Activities list

Activity	Date	No. of Activity
Working committee meeting	19/10/2013, 15/2/2014, 17/5/2014	3
School visit	22/10/2013, 20/11/2013	2
Game for students	Total of 8 days for 4 schools: 24/6, 2/7/2014 1: 25/7, 3/7/2014 , 15/7 : 16/7, 18/7	8
Project evaluation meeting	2/7/2014, 3/7/2014, 15/7/2014, 18/7/2014	4
	活動總次數	17

6. Difficulties encountered and solutions adopted

Difficulty: How to prepare students to get into the mode of doing IES, especially the beginning part of evaluating literature to form their possible topics. This is important because if students did not prepare quality reading materials before coming to the game, students will not have good articles to work on and time will be wasted.

Solution: School teachers informed and guided students to submit articles well before the game days. On the other hand, teachers have also prepared some quality articles to be used during the game. In so doing, we let students exercise self initiative to look for good articles, at the same time, we ensure there were quality articles to be used during the game.