• 系統編號	RN9401-0616
• 計畫中文名稱	建立一個可以轉化網路吸引特質爲積極學習動機之前瞻性數位學習平台
• 計畫英文名稱	Transforming Internet Attraction to Constructive Learning Motivation through an Innovative E-Learning Platform (I)
• 主管機關	行政院國家科學委員會 • 計畫編號 NSC92-2524-S038-002
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• 研究人員	李友專 Li, Yu-Chuan
• 中文關鍵字	線上遊戲; 網路沉迷; 網路成癮; 學習動機; 數位學習; 學習策略
• 英文關鍵字	Online Game; Internet Attraction; Internet Addiction; Learning Motivation; E-Learning Platform; Learning Strategy
• 中文摘要	在目前國內教育正面臨改革之際，許多學生對繁雜科目的課室教學感到煩 惱，甚至有排斥之傾向，但對課外之網路遊戲卻非常熱衷。由於在各種遊戲吸引 及同儕競爭之下，其花費在網路遊戲的時間遠比學科教育學習的時間超出許多， 甚至對網路遊戲之攻略密笈熟練程度遠高於教科書內容，如此之網路吸引甚至達 到網路沉迷或成癮之程度，是本計劃中一項有興趣之研究主題，因此如何利用具 有網路遊戲特性之數位學習 GBeL (Game-Based e-Learning)，將此網路吸引之特質 轉變成學習動機便是本計劃之主要目的。 本計劃利用 open source 的網路遊戲平台開發一個具有網路遊戲特性之數位 學習平台 GBeL (Game-Based e-Learning platform)，並且經由評估分析學習者之 心理狀態，來建置一個醫學教育網路學習連線遊戲，以達到引發學習者將網路遊 戲之吸引特質轉化成學習動機。本計劃也進一步針對學習策略及成效做評估，以 一年的成果，經由二次的試玩測驗結果分析，已經初步發現同學普遍對於這類型 的學習模式有好感。雖然本計劃只得到一年的經費支援，但是達成 ─讓教室像『虛 擬遊樂場』 、學習成爲『過關遊戲』、而以教科書當『遊戲攻略本』之境界的目標， 應該已經有了初步的成果，並且證明是可行的。
• 英文摘要	In spite of the constant attention on education reform in Taiwan, students seem to become less interested in what they were taught in a classroom. From elementary school pupils to college students, they are far more attracted by computer games (especially online games) than any class in the school. A straight-forward approach of e-learning may just convert what's taught in a class into a set of web-based materials with slides and video. Based on ours and others' experience, this approach fell short of attracting students' attention most of the time and failed to fulfill e-learning's promise. In light of the recent popularity of online games (OLG) in Taiwan, we build and evaluate a Game-Based e-Learning (GBeL) platform in this program project by using an open source MMORPG platform. This program project consists of 4 component projects, each plays a very important supporting role to each other. The first

component project (CP#1) will be responsible to build this GBeL platform by soliciting and integrating OLG components. The 2nd component project (CP#2) will implement a set of models and guidelines so that people can create content for the GBeL platform. The success of CP#1 and CP#2 will depend heavily on the detail observation and analysis of OLG attraction and addiction behavior by the 3rd component project (CP#3). The 4th component project will, on the other hand, evaluate the impact of GBeL to the students who uses GBeL platform as their e-Learning tool. This program project will contribute to the development of a brand new field where OLG and e-Learning can be married and give our under-motivated students a lift. After 2 tests, we've found that students are very interested in the new way of learning. Though, we've only been founded for one year, we would not be able to develop completed content of a course. We still hope there is any research chance to prove that GBeL will be a success way of learning. Furthermore, it may very well become a new segment in Taiwan's much-needed knowledge-based economy because of its scalability and ubiquity.