

與 iLink 計畫總辦公室團隊參訪聖荷西州立大學 Visiting San José State University with the iLink head office team

# 教育部 iLink 計畫 他山之石可以攻玉

廖志峰|管理學院院長

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張瑞剛|通識教育中心兼任副教授

#### 教育部推動人社領域與產業鏈結

教育部為強化大學校院人文社科領域院系與產業合作鏈結,透過人社領域課程創新、產業參與及競賽出題等方式,結合人文價值、人社領域知識專業及業界實務或實際問題,引導人社領域學生瞭解產業界實務需求或實際問題,並運用思辨分析及批判論述,培育具產業職能、問題解決能力之人才,特規劃於112年2月1日至115年12月31日推動「人文社會與產業實務創新鏈結計畫」(簡稱 iLink 計畫)。

iLink計畫推動期程分為第零期(112年2月1日至7月31日)、第一期(112年8月1日至114年1月31日)及第二期(114年2月1日至115年12月31日),計畫分三種補助類型,A類為重點學校發展計畫(全國只有4所學校),B類為跨領域教師合作計畫,C類為個別教師提升計畫。在第一、二期程,同一學校A、B類計畫至多補助各1案,A類計畫每案最高補助600萬元,B類計畫每案最高補助250萬元,C類計畫每校至多補助2案,每案最高補助40萬元。

### 本校獲 iLink 計畫最高額補助

本校在 iLink 計畫第零期獲 1 個 A 類計畫 (DIGI<sup>+</sup> 綠色金融保險科技跨域產學創新鏈結計畫 (I))、2 個 B 類計畫(Data Go 生活服務業跨域實務創新鏈結計畫、臺灣民俗文化與技藝產業傳播計畫);在第一期計畫,本校獲 1 個 A 類計畫 (DIGI<sup>+</sup> 綠色金融保險科技跨域產學創新鏈結計畫 (II))、1 個 B 類計畫 (數據驅動設計思考賦能生活服務業跨域創新鏈結計畫)、2 個 C 類計畫 (數位變生-3D 掃描課程實踐計畫、囊螢慢慢東高 O2O

社群商務行銷),4個計畫均獲得最高額補助。本校同時是北區區域資源整合中心,負責發展數位教材、推動北區計畫學校教師工作坊與共學社群、規劃北區區域實務專題比賽及配合計畫總辦公室辦理競賽。

本校 A 類計畫聚焦於「綠色金融、保險、科技」 產業,目標是結合人文思維、專業知識加值與各產 業實務需求,以達成建構創新產學合作模式及跨領 域之實務創新。本校已執行第零期計畫完竣,並達 預期目標,計有 7 門課程、270 名學生參與,產學 合作實習廠商有 42 家、業界到課演講有 41 場、舉 辦 2 次工作坊及 5 次教師共學社群。第一期計畫則 有 16 門課程、704 名學生參與,截至目前業界到課 演講有 37 場、舉辦 3 次工作坊及 5 次教師共學社群。

# 美國舊金山矽谷參訪

為具體達成前述大學校院人文社科領域院系與產業合作鏈結之目標,教育部資訊及科技教育司iLink 計畫總辦公室規劃於112年10月進行美國舊金山矽谷參訪,參訪重點為「如何讓人社領域學生未來在矽谷工作」。為此,iLink 計畫總辦公室與計畫總主持人逢甲大學翟本瑞教授,分別由課程教育端與科技產業端安排一系列參訪,課程教育端包含柏克萊加州大學(UC Berkeley)、聖塔克拉拉大學(Santa Clara University)、聖荷西州立大學(San José State University)、砂谷職業技術教育學校(Silicon Valley Career Technical Education, SVCTE)及薩拉托加高中(Saratoga High School);科技產業端則包含 Apple、Google、Meta 及 Splashtop 等全球高科技企業。

本校由李孟晃副校長及廖志峰院長代表參與 iLink計畫團隊赴美參訪,在此次參訪活動中發現,對 學生而言最具成效的學習即是完成實務專題。而實 務專題的規劃,最好是從切身議題出發,如此不但能 發揮同理心,也更能深入體認核心的價值。在實務 專題的執行過程中,則可融合批判力、創意思考、團 隊合作與溝通,進而提出問題解決的方案,再經由 實作活動,期能解決問題,同時亦培養學生問題解 決的能力。

欲達成培養學生解決問題能力之目標,需激發學生的學習興趣,並推動自主學習(self-directed learning)。在自主學習過程中,前述的實作經驗非常重要,因為實作是興趣的最佳檢驗歷程。以矽谷職業技術教育學校為例,每一課程都包含情境模擬、動手實作的教學活動,藉由專業的職人師資、設計最貼近真實情境的學習氛圍、強調密集專業證照取向、動手實作取得學分與工作資格等,並以真實情境、真實專案,促使學生更主動投入學習。

### 能力、態度與知識並重的學習

透過 iLink 計畫的推動,本校已成功啟動結合人 文社會學科與產業實務的創新教育模式,不僅強化 學生對於產業實務的理解與應用能力,亦促進跨領 域的學術與產業合作。透過 A、B、C 三類計畫的推 動,本校期待能透過實際的課程參與、產學合作實 習、工作坊及教師共學社群等多元活動,有效提升 學生的實務應用能力。

藉由本次美國舊金山矽谷參訪活動之學習與收穫,再次支持 iLink 計畫的構想。而透過與頂尖大學及全球知名高科技企業的互動,不僅獲得寶貴的教育與產業洞見,亦證明結合實務專題的學習方式,能有效強化學生的團隊合作與問題解決能力,此將是學生未來發展的重要基石。■



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Meta 公司內部裝置藝術 Internal installation art at Meta

# Ministry of Education iLink Program and the Lessons We Learned

Liao Chih-Feng (廖志峰), Dean of the College of Management Zhang Rui-Gang (張瑞剛), Adjunct Associate Professor in the Center of General Education

## Ministry of Education promotes linkage between humanity-social sicences and industry

The Ministry of Education (MOE) has focused on enhancing the link and collaboration between industry and departments in humanities and social sciences. Through innovative courses in humanities and social sciences, industry participation and competition, and combining values and knowledge in the area with practical issues in the industry, the MOE hopes to help students understand the practical needs and problems in the field and to encourage them to leverage analytical skills and critical thinking to become equipped with job and problem-solving skills. To achieve this goal, the MOE launched the "Humanity-Social Sicences and Industrial Innovation Linkage Program" (iLink), which takes place from February 1, 2023 to December 31, 2026.

iLink is launched in three stages: Phase Zero (February 1 to July 31, 2023), Phase One (August 1, 2023 to January 31, 2025), and Phase Two (February 1, 2025 to December 31, 2026). The program offers funds in three categories: Category A for major university development (only four universities are qualified nationwide); Category B for cross-disciplinary coteaching programs; Category C for individual development programs. For Phase One and Two, a university can receive funding for at most one project in Category A and Category B, respectively. Funding maximum stands at NT\$6 million for Category A projects, NT\$2.5 million for Category B projects. A university receives Category C funding for two projects at most, with a funding maximum at NT\$400,000 for each project.



03 矽谷職業技術教育學校之機器人課程實作活動 A robot making class at SVCTE

04 矽谷職業技術教育學校之施工技術課程實作活動 A practical construction class at SVCTE

### Shih Chien receives max iLink funding

At Phase Zero, Shih Chien University has received funding for one Category A program (DIGI+ Green Financing, Insurance and Technology Industry-Academic Cross-Disciplinary Innovation Linkage Program (I)) and two Category B programs (Data Go Consumer Service Industry Cross-Disciplinary Linkage Program, Taiwan Folk Culture and Craft Industries Dissemination Program). At Phase One, Shih Chien has received funding for one Category A program (DIGI+ Green Financing, Insurance and Technology Industry-Academic Cross-Disciplinary Innovation Linkage Program (II)); one Category B program (Data-Driven Design Thinking Empowering Consumer Service Industry Cross-Disciplinary Linkage Program); two Category C programs (Digital Twins-3D Scanning Training Course Program, O2O Commerce Marketing in Eastern Kaohsiung District). All four programs received the maximum funding in their categories. Shih Chien University is also the regional resource integration center in the northern region, responsible for developing digital materials, organizing workshops and collaborative learning communities, hosting competitions for the northern region and contests guided by the iLink head office.

Shih Chien's Category A programs focus on the "green financing, insurance and technology" industries. The goal is to combine humanities mindsets, professional knowledge and pratical demand in the industries to build a new collaboration model between industry and academia and to boost practical cross-disciplinary innovation. The Phase Zero program has been completed and reached the targets. In total, 270 students participated in seven courses, 42 companies offered internships, 41 lectures were given by industry professionals, two workshops and five collabora-

透過 ipad 的虛擬實境互動,瞭解 Apple Park 的環境永續設計。 Learning about the environmentally sustainable design of Apple Park through VR interaction on iPads



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tive learning communities were organized. Phase One includes 16 courses, which 704 students participated in. So far, 37 lectures by industry professionals, three workshops and five collaborative learning communities were organized.

## Visit to Silicon Valley in San Francisco

To reach program goals, the iLink head office of the Department of Information and Technology Education, MOE planned a visit in October 2023 to Silicon Valley in San Francisco, the US, with the focus on "how to develop humanities and social sciences students to become the talent Silicon Valley needs in the future." Jai Ben-Ray (翟本瑞), Professor at Feng Chia University and the Principal Investigator of iLink, organized a series of visits based on education and IT industry components. For education purposes, the visits include UC Berkeley, Santa Clara University, San José State University, Silicon Valley Career Technical Education (SVCTE) and Saratoga High School. For the IT industry, the visits include Apple, Google, Meta, Splashtop and other global IT companies.

Lee Meng-Huang (李孟晃), Vice President of Shih Chien University, and Liao Chih-Feng (廖志峰), Dean of the College of Management, represented the university while participating in the iLink visit in the US. They found the most effective learning for students is to complete practical projects.



66 馬丁路德金恩博士圖書館原型製作室
Prototype production room at Dr. Martin Luther King
Jr. Library

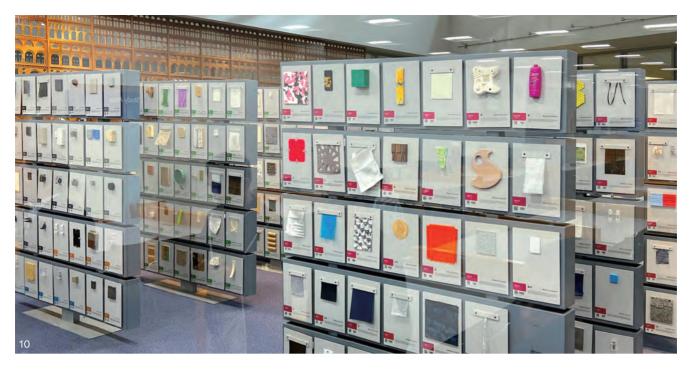
The design of practical projects is better when based on more personal issues so students can be more sympathetic and have a deeper understanding of the core values of the project. During the execution of the project, students are encouraged to use their critical thinking skills, creative thinking, teamwork, and communication skills to propose a solution, which is followed by hands-on activities to provide students opportunity to solve problems.

The key to teaching problem-solving skills is to give students the motivation to learn and become self-directed learners. During the self-directed learning process, the hands-on learning experience is crucial as it is the best way to identify one's interests. Take Silicon Valley Career Technical Education (SVCTE) for instance. Every course includes the elements of simulation scenario and hands-on learning.

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矽谷職業技術教育學校之汽車維修課程,該課程與多間不同汽車產業合作。 A car maintenance and repair course at SVCTE. The course collaborates with several companies from the automobile industry.





| 10 | 馬丁路德金恩博士圖書館材料展示區 | Material display area at Dr. Martin Luther King Jr. Library

Taught by professionals from the industry, the courses are designed to simulate real-life situations, focus on acquiring professional certifiates and require students to participate in hands-on learning to obtain credits and work qualifications. The real-life scenarios and real cases incentivize students to learn.

# Ability-, attitude- and knowedge-based learning

Through the launch of iLink programs, Shih Chien University has successfully put in place an innovative education model that combines humanities and social sciences subjects with industry practices. The new model not only enhances students' understanding and application skills of real projects in the industry but also promotes cross-disciplinary collaboration between academia and industry. With the implementation of Category A, B and C programs, Shih Chien hopes to effectively enhance students' employability through class participation, internships, workshops and lecturers' co-learning communities and other activities.

The lessons learned from the visit to Silicon Valley again endorses the concept of the iLink program. The exchange with top universities and world-renowned IT companies not only provided great insight on education and industry, but proved learning through practical projects would effectively enhance students' teamwork and problem-solving skills, important skills for their future development.







