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2022 年台灣教育傳播暨科技學會年會@NTUE 國際學術研討會
Taiwan Association for Educational Communications and Technology
2022 International Conference (TAECT 2022)

壹、研討會介紹

一、研討會緣起

新冠肺炎（COVID-19）疫情自 2020 年起傳遍世界各地，全球迄今累積確診人數已超過上億人口（<https://www.cdc.gov.tw/>），疫情改變了人們的生活、行為甚至學習。繼去年本會特別關注教學現場的第一線教育工作者是否具備全面使用創新數位工具進行教學設計、教材製作及教學策略，以因應嚴峻疫情的挑戰後，今年我們跟隨 AECT 國際大會的腳步，特別邀請所有產官學教育科技領域的工作者，一起反思一個核心問題：數位科技如何影響學生的學習？每年都有最新的小工具上市，這些工具更小、更快、更強大、更便宜，我們跟得上學生利用這些工具學習的速度嗎？如何進行學習設計、績效改進和擴大教育應用面，在後疫情時代，這樣的議題值得從事教育科技工作者反思與探討。

台灣教育傳播暨科技學會（Taiwan Association for Educational Communications and Technology, TAECT），成立已超過一個甲子，為全國各大專院校教育科技、資訊科技、傳播科技等相關系所的教授與研究人員，以及中小學教師同仁，所組成的教育學術團體，以推動教育傳播暨科技研究與發展為職志，歷年均辦理以教育科技為主軸的學術研討會，成效豐碩。會議透過理論與實務的結合，藉由論文發表讓與會人員能在議題上進行討論、探究與反思，以達到學術研討的目的與效果。

此次與國立臺北教育大學課程與教學傳播科技研究所共同舉辦，該所於民國 101 年 8 月由原課程與教學研究所及教育傳播與科技研究所兩所整合而成，包含博士班、教育傳播與科技碩士班、課程與教學碩士班、教育傳播與科技碩士在職專班、課程與教學碩士在職專班、課程教學與學習科技碩士在職專班等六個班別。兩所之合併，希冀能整合課程、教學、媒體傳播、資訊科技等四大領域的知識內涵，以培育具科技與人文理念，嫻熟課程發展與教學設計、教學與評量方法、教育、科技、多媒體設計應用之專業人才為主。因此，台灣教育傳播暨科技學會與國立臺北教育大學課程與教學傳播科技研究所合作辦理，共

同探究後疫情時代下數位科技對學習的影響，必將獲得豐盛的成果。

二、研討會目的

本次研討會舉辦目的主要在於邀請海內外之學者、專家，以及相關領域之實務工作者，針對本次會議設定的議題進行研究成果發表、經驗分享與交流，透過議題做深入的討論，有助於了解透過各種數位科技的使用，期待在後疫情時代下提升數位科技對學習績效的影響。

具體目的簡述如下：

1. 邀請國際學者根據以往政策推動或計畫執行經驗，探討國際間教育傳播與科技的定位和角色，以及因應後疫情時代國家教育政策的未來發展與走向。
2. 探討在後疫情時代下，如何進行學習設計、績效改進和擴大教育應用面；學習者在學習模式改變下必須有的準備與心理調適為何？如何利用學生資料、數據開發創新學習型態與方法？如何利用數位科技進行學習評估、分析與數據探勘？
3. 探討後疫情時代，如何透過多元傳播媒體與新興科技促進各級教育層級(國中小、技職、高教、臨床醫護及業界培訓)的課程與教學設計及學習模式的改變與調整，提升學習成效，同時注意、杜絕數位科技運用可能引發的負面認知、情緒、行為反應？
4. 增進國內外教育傳播與科技學界、各級教育先進、教研實務工作者，以及數位科技等產官學界交流的機會，擴大理論與實務的互動，進行數位科技與新媒體融入教學的資源整合，以利各層級的教與學達到良好的成效。

三、研討會子題

今年台灣教育傳播暨科技學會與國立臺北教育大學課程與教學傳播科技研究所共同以「後疫情時代下數位科技對學習的影響」(The Impact of Digital Technology on Learning in the Post-pandemic Era) 為主題，辦理本屆國際學術研討會 TAECT2022。本研討會將邀請國內外專家、學者、實務經驗工作者參與，就會議擬定相關議題進行研究成果發表，期許在本次「後疫情時代下數位科技對學習的影響」之主題進行深入的探究與剖析。

在後疫情時代下，本次研討會的議題如下：

1. 數位科技提升學生資料無縫獲取、數據整合與運用
2. 有利教學規劃的學生資料運用及道德倫理議題
3. 數位科技整合運用對學習準備與調適之影響
4. 數位科技與學習工程於學習不同階段的成效評估、學習分析與數據探勘與影響

5. 人工智能和機器學習對學習的效能與潛在負面影響
6. 去中心化/web 3.0/區塊鏈和教育科技運用對學習的效能與潛在負面影響
7. 開放教育資源和支持開放教育資源的教學法對學習的效能與潛在負面影響
8. 創新教學模型的研發、運用與高層次認知能力（如：設計思考、運算思維、科學思考等）
9. 後疫情的教學挑戰與反思

四、相關補助單位

指導單位：國家科學及技術委員會 / 教育部

主辦單位：國立臺北教育大學課程與教學傳播科技研究所

合辦單位：台灣教育傳播暨科技學會

協辦單位：國立成功大學教育研究所 / 國北教大研發處 / 國北教大教育學院 / 財團法人中國視聽教育基金會

五、大會委員會組織與成員

(一) 大會榮譽主席

張霄亭 TAECT 榮譽理事長暨中國視聽教育基金會董事長

(二) 大會主席

于富雲 TAECT 理事長 / 國立成功大學教育研究所特聘教授

吳麗君 國立臺北教育大學教育學院院長暨教授

(三) 諮詢委員

楊叔卿 TAECT 前理事長/國立清華大學學習科學與科技研究所教授

劉一凡 前屆 TAECT 主辦單位代表/國立臺北護理健康大學醫護教育暨數位學習系副教授

趙貞怡 TAECT 副理事長/國立臺北教育大學課程與教學傳播科技研究所教授

張宇樑 TAECT 秘書長/國立嘉義大學教育學系教授

陳揚學 TAECT 副秘書長/國立政治大學師資培育中心教授

林秋斌 TAECT 副秘書長/國立清華大學學習科學與科技研究所教授

王怡萱 淡江大學教育科技學系教授

(四) 組織委員會

組織委員會主席

崔夢萍 國立臺北教育大學課程與教學傳播科技研究所教授

組織委員會委員

王俊斌 國立臺北教育大學課程與教學傳播科技研究所教授兼任所長

趙貞怡 國立臺北教育大學課程與教學傳播科技研究所教授

劉遠楨 國立臺北教育大學課程與教學傳播科技研究所教授

張循鉦 國立臺北教育大學課程與教學傳播科技研究所助理教授

陳思維 國立臺北教育大學課程與教學傳播科技研究所助理教授

(五) 議程委員會

議程委員會主席

趙貞怡 國立臺北教育大學課程與教學傳播科技研究所教授

議程委員會委員

于富雲 國立成功大學教育研究所教授

王怡萱 淡江大學教育科技學系教授

林秋斌 國立清華大學學習科學與科技研究所教授

崔夢萍 國立臺北教育大學課程與教學傳播科技研究所教授

張宇樑 國立嘉義大學教育學系教育行政與政策發展研究所教授

張循鉦 國立臺北教育大學課程與教學傳播科技研究所助理教授

陳思維 國立臺北教育大學課程與教學傳播科技研究所助理教授

陳揚學 國立政治大學師資培育中心教授

楊叔卿 國立清華大學學習科學與科技研究所教授

劉一凡 國立臺北護理健康大學醫護教育暨數位學習系副教授

劉遠楨 國立臺北教育大學課程與教學傳播科技研究所教授

(六) 工作人員

陳佳蓉 台灣教育傳播暨科技學會秘書

劉冠達 國立臺北教育大學課程與教學傳播科技研究所助教

朱芳儀 國立臺北教育大學課程與教學傳播科技研究所研究生

蕭莉旋 國立臺北教育大學課程與教學傳播科技研究所研究生

陳書屏 國立臺北教育大學課程與教學傳播科技研究所研究生

賴元 國立臺北教育大學課程與教學傳播科技研究所研究生

任苑琳 國立臺北教育大學課程與教學傳播科技研究所研究生

六、審查委員

于富雲	國立成功大學教育研究所教授
王怡萱	淡江大學教育科技學系教授
何俐安	淡江大學教育科技學系教授
李佳玲	世新大學廣播電視電影學系副教授
李明穎	靜宜大學大眾傳播學系教授
林 菁	國立嘉義大學數位學習設計與管理學系教授
林珊如	國立陽明交通大學教育研究所教授
林秋斌	國立清華大學學習科學與科技研究所教授
侯政男	義守大學大眾傳播學系教授
洪榮昭	國立師範大學工業教育系教授
胡全威	世新大學口語傳播暨社群媒體學系副教授
徐新逸	淡江大學教育科技學系教授
郝永崴	國立師範大學教育系教授
高台茜	國立東華大學教育與潛能開發學系教授
崔夢萍	國立臺北教育大學課程與教學傳播科技研究所教授
張宇樑	國立嘉義大學教育學系教育行政與政策發展研究所教授
張循鋁	國立臺北教育大學課程與教學傳播科技研究所助理教授
張瓊穗	淡江大學教育科技學系教授
陳延昇	國立陽明交通大學傳播研究所副教授
陳信助	中國文化大學教育學系副教授
陳奕璇	國立屏東大學教育學系副教授
陳思維	國立臺北教育大學課程與教學傳播科技研究所助理教授
黃思華	臺北市立大學教育系副教授
楊叔卿	國立清華大學學習科學與科技研究所教授
楊美雪	國立師範大學圖文傳播學系教授
廖遠光	中國文化大學師培中心教授
趙貞怡	國立臺北教育大學課程與教學傳播科技研究所教授
劉一凡	國立臺北護理健康大學醫護教育暨數位學習系副教授
歐陽閻	國立台南大學教育系教授
鄭元梧	世新大學數位多媒體設計學系教授
鄭安授	國立中山大學行銷傳播管理研究所副教授
蕭顯勝	國立師範大學科技應用與人力資源發展學系教授
蘇金豆	宏國德霖科技大學餐旅管理系暨通識教育中心教授

貳、研討會議程

一、議程

2022 年 12 月 09 日（五）			
時間		活動內容	主持人
08:30-09:00	30'	報到 Registration 場地：至善樓國際會議廳中廊	
09:00-09:20	20'	開幕致詞 Opening 國立臺北教育大學 陳慶和校長 國立臺北教育大學教育學院 吳麗君院長 台灣教育傳播暨科技學會 于富雲理事長	王俊斌所長
09:20-10:20	60'	專題演講 1 / Keynote Speech 1: 主題：大學的跨領域資訊教育及程式設計教育 國立政治大學李蔡彥校長	黃思華教授
10:20-11:00	40'	茶敘 Tea break / 海報論文 P1 P1-01 #283 基於問題解決子目標狀態之學習提示設計 趙伯堯、林恩頌 P1-02 #4101 結合工作範例與形成性測驗之學習活動 趙伯堯、張家榮 P1-03 #1351 藉由教學工作坊探究護校大學生的敘事動畫策展能力 張君豪 P1-04 #1968 探討網路閒晃行為與學習態度在疫情影響下對於數位學習使用意願之分析 鄭翔鴻、施育廷、鄭祥維、李佳穎、湯寧尹、陳鴻仁 P1-05 #2254 疫情期間跆拳道數位教學探討 陳致戎、李佳融 P1-06 #2373 知識性自媒體對成年人網路使用之相關：以自主學習為調節變項 陳旻苓 P1-07 #3560 An Investigation of the Influences of Joyful English Sentence-making Learning System: A Prior Knowledge Approach Yi-No Hsieh, Sherry Chen P1-08 #3567 新冠肺炎疫情期間結合數位科技進行社區健康評估	張循鉅教授

		黃珮綺、蘇美禎 P1-09 #3791 運用關聯規則發掘學生適性選修課程 陳垂呈、蔡宜珊 P1-10 #1867 做筆記結合學生出題策略對國小生筆記品質影響之實證性研究 李冠儀、于富雲 P1-11 #4389 學生出題策略應用於國小數學學習障礙學生學習之研究 張振皓、于富雲	
11:00-12:00	60'	專題演講 2 / Keynote Speech 2: 場地：至善樓國際會議廳 主題：Using Learning Analytics to Support Social & Emotional Learning: A Data-Driven Instructional Design Model 美國 Northern Arizona University Prof. Chih-Hsiung Tu	趙貞怡教授
12:00-13:00	70'	午餐 Lunch 場地:視聽館 F204、205	
13:00-14:00	60'	專題演講 3 / Keynote Speech 3: 場地:至善樓國際會議廳 主題：Learning with Digital Technology: A Pandemic Look Back and Forward. 馬來西亞 Universiti Putra Malaysia Prof. Su Luan Wong	于富雲教授
14:00-14:40	40'	茶敘 Tea Break/ 海報發表 P2 場地:至善樓國際會議廳中廊 P2-01 #5959 師生對數位學習平台持續使用之意圖- 運用 PAD 情緒模型探討 張若羚、成力庚 P2-02 #6333 The Potential of Students Reading Comprehension Skill via Team Game Tournament Approach Rani Purba, Yih Shuan Chen P2-03 #6375 在 Covid 19 疫情下翻轉學習模式對於數位學習使用意願的影響 施育廷、楊芷瑄、陳怡靜、蕭凱峻、陳鴻仁 P2-04 #7838 影響學習者網路協作探究學習因素之探究 丁士珍 P2-05 #8008 後疫情時代教師教學模式的轉變研究 巴白山、高銘懋 P2-06 #8622 加護病房二年期新進臨床護理師呼吸器照護學習需求評估 鄭巧蘭、張君豪	張循鉅教授


		<p>P2-07 #9107 疫情時代數位學習系統對大學生程式學習的影響 林建良、林峻安、李岱龍</p> <p>P2-08 #9146 高等教育推動混成學習培力課程之初探 陳樹人、孫珮珮、許琬甄、謝瑋宸</p> <p>P2-09 #2755 探討外科護理人員對骨科術後照護教育訓練之需求評估 盧冠樺、張君豪</p>	
14:50-15:40	50'	<p>論文發表：A 場次 場地:至善樓國際會議廳</p> <p>A-01 #8733 資優生使用資訊科技媒體之想法與其親子關係之研究 周楷婕、張宇樑</p> <p>A-02 #9213 A Study on International Students' Perception and Actual Use of Mobile Learning in Taiwan Saruul Batkhuyag, Yu-Liang Chang</p> <p>A-03 #7793 後疫情下專題小組式課程之轉變與反思 李佳玲</p>	王建華教授
		<p>論文發表：B 場次 場地:視聽館 F204</p> <p>B-01 #3884 創新 MOOCs 課程之研發及其跨文化學習成效探討 楊叔卿、李浩文、Peter Stuckey、魏綺亭</p> <p>B-02 #1131 探討問題導向學習及創新創業課程對學生參與創新創業競賽活動之影響 黃國豪、鍾久祿、買馨誼</p> <p>B-03 #1163 Cool English 數位學習平臺融入視訊教學對偏鄉國小中年級學生英語學習動機及成效之影響 劉如庭、張循鋁</p>	岳修平教授
		<p>論文發表：C 場次 場地:視聽館 F205</p> <p>C-01 #1925 Using Digital Interactive Mobile Games to Expand English Learning Siao-Cing Guo, Szu-Hua Hsieh</p> <p>C-02 #3138 問題導向生活情境議題探究--以人工智慧在自然科學學習成效為例</p>	王怡萱教授

		<p>蘇金豆</p> <p>C-03 #4094</p> <p>低年級學習障礙學生加法計算數位教材需求分析與介面設計</p> <p>林佩汾、趙貞怡</p>	
		<p>論文發表：D 場次</p> <p>場地:視聽館 F207</p> <p>D-01 #4474</p> <p>機器學習之於真正學習的回顧與省思</p> <p>丁士珍</p> <p>D-02 #4821</p> <p>背景音樂對學習者學業情緒及認知負荷之影響-以線上統計課程為例</p> <p>王鈞亞、廖晨瑄、吳俊育</p> <p>D-03 #4965</p> <p>腎臟科病房腎臟切片檢查護理之課程需求評估</p> <p>柯惠芳、劉一凡</p>	陳奕璇教授
15:40-17:10	90'	<p>教案競賽發表</p> <p>場地:視聽館 F408</p> <p>T-01 小豆子的成長日記</p> <p>湯梓辰</p> <p>T-02 網路小偵探-真相只有一個</p> <p>陳振遠、林筠修</p> <p>T-03 漫漫疫情路</p> <p>林筠修、陳振遠</p> <p>T-04 SDGs 議題應用-海洋耗劫</p> <p>吳沛龍 (指導老師:蕭顯勝教授)</p> <p>T-05 不同歷史文化之下看疫情—啟發與省思</p> <p>李伊婕、陳人鶴、余子緣、黃立騏 (指導老師:陳揚學教授)</p> <p>T-06 Lego Education SPIKE 編程撰寫與設計製作</p> <p>林美雯 (指導老師:蕭顯勝教授)</p> <p>T-07 失控的網路</p> <p>姜蘇芸、洪郁庭 (指導老師:鄭朝陽教授)</p> <p>T-08 生活規劃師 Be a Planner!</p> <p>吳宥靜</p> <p>T-09 科技強化地方本位環境教育—以嘉義布袋好美寮自然保護區為例</p> <p>甘芷寧、林睿鈺、陳怡妙、楊曜羽 (指導老師:鄭朝陽教授)</p> <p>T-10 國小生活課程減塑大作戰之米奇妙妙屋</p> <p>林苡甄、陳思彤、巫珮妤 (指導老師:陳政煥教授)</p>	<p>崔夢萍教授</p> <p>評審：</p> <p>蘇金豆教授、</p> <p>郝永歲教授、</p> <p>張瓊穗教授</p>
18:00		晚宴：紅豆食府 (3 桌，邀請制)	

2022 年 12 月 10 日（六）			
時間		活動內容	主持人
08:30-09:00	30'	報到 場地:至善樓國際會議廳中廊	
09:00-10:10	70'	論文發表：E 場次 場地:至善樓 G101 E-01 #3244 幼兒園家長讓幼兒觀看 YouTube 的動機與影片內容篩選標準之研究 張欣慈、沈俊毅 E-02 #7200 任務式鷹架數位遊戲式學習與認知偏好對學習情緒、認知負荷與學習成就之交互影響 張基成、楊斯定 E-03 #5978 從「校方、教師、家長與學生」的觀點來評估我國所推動之「遠距課程」 莊雅婷 E-04 #5725 AI-Empowered English Language Learning: Design, Implementation, and Evaluation of a Theoretically-Based Online-Only Selective Course for EFL Learners Jo-Chi Hsiao, Jason S. Chang	張基成教授
		論文發表：F 場次 場地:至善樓 G102 F-01 #9480 學前幼兒使用互動體感遊戲學習對動作技能與社交能力影響之研究 蕭顯勝、黃慶瑄、陳政翰 F-02 #8394 不同錯題訂正策略對國小學童英語學業成就、高層次認知能力、英語錯題訂正看法、習慣與表現之影響 張聖玥、于富雲 F-03 #6386 Investigating College Students' Feedback Practices in and Perceptions of Three Different Peer Review Modes in Academic Writing Courses Yi-Chin Hsieh, Alvin Ping Leong, Yu-Ju Lin F-04 #6865 疫情時代下遠距教學於大專院校師生間的成效之探討 陳鵬宇	何俐安教授
		論文發表：G 場次 場地:至善樓 G207 G-01 #9446 探究線上學習與互動於高等教育之系統性回顧 王巧雯	廖遠光教授


		<p>G-02 #7552 探討後疫情時代下幼兒數位遊戲學習之實踐策略 湯梓辰</p> <p>G-03 #8397 國小中年級英文諧音單字記憶法之數位教材設計 陳書屏、趙貞怡</p> <p>G-04 #4624 探討胸腔科病房護理人員對肺阻塞課程教育訓練需求評估 陳淑娟、劉一凡</p>	
09:00-11:00	120'	<p>媒體競賽發表 場地:至善樓國際會議廳</p> <p>M-01 室內配線丙級技術士 SVVR 教學系統 張家齊 (指導老師:黃國豪教授)</p> <p>M-02 黑潮記憶-回首來時 陳俐婷、邱昱瑄、蕭宇彤、劉芷綺 (指導老師:賴婷鈴教授)</p> <p>M-03 新生兒即刻護理 VR 洪筱瑩、謝適鴻</p> <p>M-04 信光藥局員工訓練數位教材 劉俐佳、蘇玟雁、呂翊綾、黃子瑄、張瑩滢、謝函庭 (指導老師:王怡萱教授)</p> <p>M-05 費馬最後定理 李柏駿、江晨妤 (指導老師:陳揚學教授)</p> <p>M-06 未來的我們，還有沒有電？——能源永續博物館 黃宣紫、王力鎰、陳政煥 (指導老師:陳政煥教授)</p> <p>M-07 智慧型個人化二胡檢定輔助學習系統 蔡秉宗 (指導老師:黃國豪教授)</p> <p>M-08 全球公民教育人權議題數位遊戲式教材 簡聖芬 (指導老師:崔夢萍教授)</p> <p>M-09 防災逃生教學(遊戲式教材) 徐美云、胡紫晴 (指導老師:王怡萱教授)</p> <p>M-10 小佳冬，大危機 吳宗翰、湯博仁、翁嘉笙 (指導老師:陳奕璇教授)</p> <p>M-11 VR 化學實驗 林政佑 (指導老師:黃國豪教授)</p> <p>M-12 生命烏托邦(BioUtopia) 郭銓恩、顧尚萱、陳政煥 (指導老師:陳政煥教授)</p>	<p>陳思維教授</p> <p>評審： 陳信助教授、 陳延昇教授、 胡全威教授、 侯志欽教授</p>
11:00-11:20	20'	茶敘 Tea Break 場地:至善樓國際會議廳中廊	
11:20-12:00	40'	<p>頒獎：最佳論文獎、教案競賽、媒體競賽 場地:至善樓國際會議廳</p> <p>閉幕典禮暨下屆主辦單位交接儀式</p>	趙貞怡教授
12:10-14:00	60'	TAECT 會員大會暨午餐(理監事會議) 場地:至善樓 G101	于富雲理事長

二、專題演講者(一)介紹

	<p>Prof. Chih-Hsiung Tu Department of Educational Specialties College of Education Northern Arizona University Flagstaff, United States</p>
<p>Chih-Hsiung Tu, Ph.D. is a Professor at Northern Arizona University, Flagstaff, AZ, USA and an educational technology researcher and consultant with experience in online learning and teaching, open network learning, and instructional technology training. His research interests are using the lens of socio-cognitive learning, socio-cultural learning to examine distance education, online learning community, network learning environments, and social learning analytics. He has authored many articles, book chapters, books, multiple honors as keynote speaker, professional development, professional conference presentations, and others. He has served as an executive board member for ICEM (International Council for Educational Media), and International Division at AECT (Association for Educational Communications and Technology). Dr. Tu has global experience with international scholars from Turkey, Portugal, Brazil, Hong Kong, Singapore, Venezuela, Taiwan, China, Japan, Niger, and Cyprus etc.</p> <p>講題: Using Learning Analytics to Support Social & Emotional Learning: A Data-Driven Instructional Design Model</p> <p>Students and educators had unique susceptibility to burnout already even before the pandemic. Learning is not purely a cognitive process, but also is emotionally loaded and situated within a social context. If COVID-19 rendered us alone and lonely, forging instructional and social community building can combat the pall to accomplish learning physically alone but collaborative, interconnective, and together. The pandemic emphasizes the importance of holistic education with fostering students' multiple intelligences through effective social and emotional learning (SEL) that signals the need for more dynamic and flexible socio-emotional approaches. Owing to the nature concomitant of relational data, social learning analytics offer analytic powers to enhance SEL. Understanding students' socio-emotional development helps teachers to provide effective, just-in-time, and</p>	

personalized support. It is also beneficial to inform teachers to provide more adequate social-communicative, metacognitive, and affective learning via data-driven instructional design models. Despite a vast amount of educational data being collected, the data are rarely organized and provided to galvanize students' and instructors' learning and teaching. Being able to comprehend students' intricate SEL, via Data-Informed Learning Design in conjunction with social learning analysis, would support teachers to advance instructional design for continuous and timely improvements. Several dynamic, flexible, and interconnective activities and instructional designs, derivatives of socially and emotionally situated identity theory with learning analytics, are presented to address the learning and teaching needs in face-to-face, blended, remote, HyFlex, or online learning environments.

三、專題演講者(二)介紹

	<p>Prof. Wong Su Luan Faculty of Educational Studies, Universiti Putra Malaysia Malaysia</p>
<p>Dr. Su Luan Wong is a Professor at the Faculty of Educational Studies, Universiti Putra Malaysia (UPM). She has extensive teaching experience in educational technology, teacher education and teaching methods; and regularly conducts teaching and learning related training courses for educators. She is an active and passionate researcher and has published in more than 200 scholarly papers with a special focus on teaching and learning in ICT. She has served as the Principal Associate Editor of the Asia-Pacific Educational Researcher Journal (SSCI), Associate Editor of the Research and Practice in Technology Enhanced Learning (Scopus). She was also the Editor-in-Chief of the Pertanika Journal of Social Sciences and Humanities (Scopus).</p> <p>In recognition for her active role as a scholar, she was elected as an Executive Council member for the Asia-Pacific Society for Computers in Education (APSCE) in 2006, a post that she still holds until today. In 2011, she established a Special Interest Group — Development of Information and Communication Technology in the Asia-Pacific Neighbourhood under the auspices of APSCE to bridge the research gap between scholars from developing and developed countries. Her hard work and dedication to serve the research community has led to a highly coveted association to APSCE as the President for 2016-2017.</p> <p>講題: Learning with Digital Technology: A Pandemic Look Back and Forward</p> <p>Due to the COVID-19 pandemic in early 2020, the sudden and unplanned closure of many academic institutions worldwide caused more than a billion learners to be out of the classrooms. To cope with the unprecedented circumstances, many academic institutions pivoted from onsite learning to online learning. In this talk, I will reflect on how the pandemic changed the learning landscape of one public university in Malaysia. I will highlight several crucial steps the university took to</p>	

ensure academic continuity for students and academics during the closure. I will also provide tips on tweaking onsite lessons to accommodate the online learning environment. Some empirical data collected from students who were directly affected from the day the country went into a total lockdown on 18 March 2020 until its gradual transition back to on-site learning in late March 2022 will also be shared. I will then offer suggestions on conducting lessons in a hybrid flexible (HyFlex) learning mode in a low-tech classroom. My talk ends with some lessons learned from the pandemic as teaching-learning returns to some form of normalcy.

四、專題演講者(三)介紹

	<p>李蔡彥 教授 國立政治大學校長 國立政治大學資訊科學系教授 國立政治大學創新與創造中心主任 國立政治大學人文創新數位學院執行長 教育部資訊及科技教育司司長 美國史丹佛大學資科系訪問教授</p>
<p>李教授為美國史丹福大學機械工程學博士。目前為國立政治大學資訊科學系教授，並擔任校長。李教授曾任教育部資訊及科技教育司司長、國立政治大學主任秘書、副教務長、教發中心主任、資科系主任及電算中心主任。李教授也曾任中華資訊與科技教育學會、以及台灣電腦圖學與互動技術學會理事長。李教授的研究興趣包含機器人學、電腦動畫、人工智慧、人機介面等領域，近年投入跨領域研究、資訊教育與通識教育，並主持教育部相關人才培育計畫。</p> <p>講題：推動大學普及化程式設計教育的歷程、經驗與展望</p> <p>全球經濟已逐漸進入到數位經濟與智慧經濟的時代，而資訊力也逐漸成為衡量一個國家競爭力的重要指標。以資訊科技素養為中心的跨領域整合能力，成了現代公民的重要核心能力之一。而普及化的程式設計教育於是成為培養國民基本資訊素養的重要工作。然而，要將程式設計教育在大學普及化，並非易事，特別是對非資訊領域的學生開設課程，多缺乏有經驗的師資及適合的教材，以提升學生的學習興趣與學習成效。107年起，在教育部高教深耕計畫的引導下，過去幾年各大學的推動政策逐漸清晰，校內與校際的教師社群逐漸形成，各類客製化的教材也漸趨完整，110學年度曾修習程式設計課程的學生人數比例也達到了 72%。然如何進一步提升學生的學習興趣、有效評量學習成效、進一步促進資訊科技在各領域的深入應用，均是未來亟待突破的挑戰。</p>	

2022 年台灣教育傳播暨科技學會年會@NTUE 國際學術研討會

發表規則

【口頭論文發表規則】

- 1.論文發表時間：2022 年 12 月 9 日(五) 至 2022 年 12 月 10 日(六)。
- 2.論文發表地點：國立臺北教育大學至善樓國際會議廳及視聽館（臺北市大安區和平東路 134 號）。
- 3.發表場地及時間，請參閱大會網站議程。
- 4.論文發表時間：每篇口頭報告時間 10 分鐘，會場將有服務人員於最後 2 分鐘按鈴一次，時間到按鈴二次。Q & A 統一於所有發表者發表後進行問答，共 20 分鐘，請各發表人確實掌握各場次時間。
- 5.為維持現場之秩序，請各報告人在論文發表時段場次開始前 10 分鐘，會同現場工作人員，將簡報電子檔安裝於發表場地電腦內，確認投影與聲音播放後，完成就座程序。
- 6.建議作者若有播放展示需求，可自備相關展示檔案，並自行完成測試。

2022 年台灣教育傳播暨科技學會年會@NTUE 國際學術研討會

發表規則

【海報論文發表規則】

- 1.海報論文發表與討論時間：2022 年 12 月 9 日(五)。
- 2.海報論文張貼地點：國立臺北教育大學至善樓國際會議廳中廊（臺北市大安區和平東路 134 號）。
- 3.海報論文張貼方式：製作海報一張（約 A1 size），於當天報到時，請自行將海報張貼於大會提供之海報架(寬 60 公分，高 90 公分) 上。請海報論文發表人（至少一位作者）須於發表海報攤位，與現場來賓互動簡報論文。
- 4.海報論文編號請參閱大會網站及大會手冊。
- 5.海報論文之標題：所發表之海報論文必須至少包括：（1）論文中英文名稱（2） 作者姓名（3）作者服務（就學）單位等基本資訊。
- 6.海報版面之設計：有關顏色、字體、圖表等，請發表人發揮創意自行設計展出之海報內容。
- 7.海報論文撤除時間：2022 年 12 月 9 日（星期五）17：10 前。在撤除時間後，仍未撤除相關資料者，本會有權代為處理。

2022 年台灣教育傳播暨科技學會年會@NTUE 國際學術研討會

發表規則

【教案競賽作品發表規則】

- 1.教案競賽作品呈現時間：2022 年 12 月 9 日(五)。
- 2.教案競賽作品呈現地點：國立臺北教育大學視聽館 F408（臺北市大安區和平東路 134 號）。
- 3.案競賽作品之發表編號請參閱大會網站及大會手冊。
- 4.教案發表時間：每篇口頭報告時間 6 分鐘，會場將有服務人員於最後 1 分鐘按鈴一次，時間到按鈴二次。Q & A 統一於所有發表者發表後進行問答，共 30 分鐘，請各發表人確實掌握各場次時間。
- 5.為維持現場之秩序，請各報告人在論文發表時段場次開始前 10 分鐘，會同現場工作人員，將簡報電子檔安裝於發表場地電腦內，確認投影與聲音播放後，完成就座程序。
- 6.建議作者若有播放展示需求，可自備作品相關展示檔案。

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發表規則

【數位媒體實作競賽作品發表規則】

- 1.媒體實作競賽作品呈現時間：2022 年 12 月 10（六）。
- 2.媒體實作競賽作品呈現地點：國立臺北教育大學至善樓國際會議廳（臺北市大安區和平東路 134 號）。
- 3.媒體實作競賽作品之發表編號請參閱大會網站及大會手冊。
- 4.媒體實作競賽發表時間：每份作品口頭報告時間 8 分鐘，會場將有服務人員於最後 1 分鐘按鈴一次，時間到按鈴二次。Q & A 統一於所有發表者發表後進行問答，共 20 分鐘，請各發表人確實掌握各場次時間。
- 5.為維持現場之秩序，請各報告人在作品發表開始前 10 分鐘，會同現場工作人員，將簡報電子檔安裝於發表場地電腦內，確認投影與聲音播放後，完成就座程序。
- 6.建議作者若有播放展示需求，可自備作品相關展示檔案；如有需提早架設準備，請聯繫主辦單位安排。

資優生使用資訊科技媒體之想法與其親子關係之研究

A Study of Gifted Students' Thoughts of Using Information Technology

Media and Their Parent-child Relationship

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【摘要】本研究旨在了解資優生使用資訊科技媒體之想法及資優生之親子關係、並探究其關聯性，採立意取樣選取南部某國中之三位資優生為研究對象，並採質性研究方法取向蒐集與分析研究資料，主要發現有：資優生對使用資訊科技媒體之想法趨向正面，主要的使用動機為打發時間和排解無聊情緒。資優生之親子關係為緊密、溫暖，父母的教養方式較為民主，但也會對子女的行為有所要求，他們皆表示同意且喜歡這樣的教養風格。3. 資訊科技媒體在資優生的親子關係間扮演世代溝通與聯繫的橋梁，透過網路科技能使彼此互相了解，並讓親子間有更多參與彼此生活的機會。

【關鍵詞】 資優生、使用資訊科技媒體之想法、親子關係

Abstract: This study aimed to explore the current status of gifted students' thoughts of using information technology media and their parent-child relationship. Data were gathered and analyzed qualitatively, where participants were three gifted students purposefully recruited from a junior high school. Main findings were: Targeted gifted students' thoughts of using information technology media were positive, where the main motivation was to kill time and make them feel less lonely. The parent-child relationship was close and warm, and the parenting style was democratic. Parents had certain requirements about their children's behaviors. Information technology media acted as a bridge where they can better understand each other and provide more opportunities to participate in each other's life for facilitating their parent-child relationship.

Keywords: gifted students, information technology media, parent-child relationship

A Study on International Students' Perception and Actual Use of Mobile Learning in Taiwan

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Abstract: The main purpose of this study was to investigate international students' perception and actual use of mobile learning during Covid-19 pandemic in Taiwan, associated with employing the Technology Acceptance Model. A survey approach was employed in this study. The instrument "Questionnaire of International Students' Perception and Actual Use of Mobile Learning" was administered to 130 international students in Taiwan to gather data. Corresponding statistics were applied to analyze the data, such as descriptive statistics, t-test, one-way ANOVA with the Scheffé Method, Pearson's product-moment correlation, and regression analysis. Findings showed that the targeted international students' "Perception of Mobile Learning" effectively predicted their "Actual Use of Mobile Learning"; moreover, the "Perceived Usefulness (PU)" sub-scale had the greatest influence.

Keywords: international student, mobile learning, perception, actual use

後疫情下專題小組式課程之轉變與反思

Project-based curriculum in the post-pandemic period: Transformation and reflection

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【摘要】 本研究探討專題小組式課程牽涉虛擬攝影棚與電腦操作單元時，在轉換成遠距課程的轉變與反思。以研究者所教授之「互動式多媒體」實作課程為實驗對象，採準實驗設計-不等組前後測設計，以實驗、控制組方式進行虛擬攝影棚與 APP 介面實證研究。實驗期間為 110 學年度上（控制組）與下學期（實驗組）。資料搜集包含量化與質化資料。研究結果顯示攝影棚教學搭配 Nearpod 同步教學活動可提升學習成效，然而網路與載具會影響學生學習效果與情緒。線上課程雖可解釋特殊場域課程，但無法取代。最後，專題小組式課程搭配分組與教學策略具有遠距潛力。

【關鍵詞】 專題小組式課程、動作捕捉、學習成效

Abstract: This study is designed to examine the transformation and reflection of a project-based course involving hands-on activities and software tutorials when it is converted online. The nonequivalent pretest-posttest design was adopted, and the experimental and control group methods were used to conduct an empirical study. Data collection includes both quantitative and qualitative data. The research results show that the hands-on unit at the virtual studio combined with Nearpod activities can improve students' learning performance, but the network and device will affect students' learning effect and mood. Although the hands-on unit can be improved and created suitable social distance through new technology and strategies, it cannot be totally online. Finally, project-based learning could be a suitable online learning method.

Keywords: Project-based learning, Motion Capture, Nearpod, YouTube, Learning performance

創新 MOOCs 課程之研發及其跨文化學習成效探討

A study of development of innovative MOOCs curriculum and its effects on cross-cultural learning

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【摘要】本研究自課程研發創新觀點，萃取轉化華人傳統文學《三國演義》於資工「離散優化數學」之 MOOCs，提供問題解決與最佳決策學習及應用。並以文化觀點切入並探究全球學習者對跨文化創新課程其學習成效、視覺設計、教學法、學習期待之看法。透過線上問卷收集 28 國 56 份之有效量化與質性數據。結果顯示，全球學生認為此創新課程提升參與度、學習動機及問題理解。前後測之學習成效無顯著差異，文化差異對融入華人角色視覺設計及教學法無顯著差異，學習期待則有顯著差異。研究提供改進 MOOCs 之教學創新與跨文化議題之新方向。

【關鍵詞】 離散數學、MOOCs、跨文化、圖形簡化策略、三國演義

Abstract: This study develops an innovative discrete optimization online course from the perspective of culture by transforming the Chinese literature "The Romance of the Three Kingdoms" to explore the opinions of learning performance, visual design, pedagogy, and learning expectations among global learners, also provides the learning and application optimal decision-making. A total of 56 valid online questionnaires from 28 countries were collected for analyzing quantitative and qualitative data. The results show that global students believe that innovative curriculum design can benefit learning engagement, motivation and problem comprehension. There were no significant differences in learning outcomes between the pre- and post-tests, visual design, pedagogy. However, there are significant differences in learning expectations. Several issues related to MOOCs are concluded and provide insights for future study in teaching innovation and cross-cultural issues.

Keywords: Discrete Mathematics, MOOCs, Cross-cultural comparison, Simplification, the Romance of the Three Kingdoms

探討問題導向學習及創新創業課程對學生參與創新創業競賽活動之影響

Impact of Problem-based Learning and Innovation and Entrepreneurship Courses on Students' Participation in Innovation and Entrepreneurship Competition Activities

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【摘要】很多大學都希望藉由開設問題導向學習（problem-based learning, PBL）課程或創新創業課程來增加學生對參與創新創業活動的意願，但目前缺乏大量資料的實證研究，故本研究以 9830 人為對象，對「PBL 課程」、「創新課程」及「創業課程」這三類課程是否真的對學生的創新創業有影響進行探討。研究結果顯示，三門課程皆對創新創業競賽活動有顯著影響，其中三門課程皆修習的學生參加創新創業活動比例最高，接著依序為修習創業課程、修習創新課程、至少修習三門中任一個課程，最後是修習問題導向課程的學生，未來學校在規劃創業輔導之課程時，可建議學生優先考慮參與創業課程，接著為創新課程、PBL 課程，來達到最好的成效。

【關鍵詞】問題導向學習、創新課程、創業課程、創新創業活動

Abstract: Many universities hope to increase students' willingness to engage in innovative and entrepreneurial activities by offering problem-based learning courses or innovation and entrepreneurship courses, but empirical studies with substantial data are lacking. The target population for this study was 9,830 students. The results showed that all three courses had a significant impact on innovation and entrepreneurship activities, with the highest percentage of participation among students who took all three courses, followed by took entrepreneurship courses, innovation courses, at least one of the three courses, and lastly, students who took problem-based courses. In the future, when planning entrepreneurship counseling programs, schools may suggest that students consider taking entrepreneurship courses first, followed by innovation and problem-oriented courses for best results.

Keywords: Problem-based learning, innovation courses, entrepreneurship courses, innovation and entrepreneurship activities

Cool English 數位學習平臺融入視訊教學

對偏鄉國小中年級學生英語學習動機及成效之影響

The Effects of Integrating the “Cool English” E-learning Platform into Video Teaching for Students’ English Learning Motivation and Effectiveness

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【摘要】本研究旨在探討運用「Cool English」數位學習平臺融入偏鄉國小中年級英語視訊教學，對學生在英語學習動機與英語學習成效之影響。本研究採「問卷調查」及「半結構訪談」的方式進行，選取新北市某偏鄉國小中年級學生，共7人，進行為期兩週 Cool English 平臺教材融入英語視訊教學課程。教師以 Cool English 線上教學資源及自編簡報，利用口頭問答等形式對學生進行測驗，發現大部分學生皆無法自信地回答教師。藉由 Cool English 內的小遊戲及影片任務，提升學生之英語學習動機及成效。研究結果發現：Cool English 平臺教材融入英語視訊教學，能提升偏鄉國小中年級學生之英語學習動機及興趣進而提升學習成效。本研究結果可提供國小英語科教師應用數位平臺資源融入視訊教學之參考。

【關鍵詞】 Cool English、偏鄉國小、學習成效、學習動機、視訊教學

Abstract: The purpose of this study is to explore the effect of using the "Cool English" English online learning platform to integrate English video teaching on students' English learning effectiveness and English learning motivation. In order to improve students' English learning effectiveness and motivation, we decided to use mini-games and video tasks in Cool English. The research results found that the integration of Cool English platform teaching materials into English video teaching can improve the English learning effectiveness, English learning motivation and interest of middle-grade students in rural primary and secondary schools. The results of this study can provide a reference for elementary school English teachers to integrate digital platform resources into video teaching.

Keywords: Cool English, rural elementary school, Learning Effect, Learning Motivation, video teaching

Using Digital Interactive Mobile Games to Expand English Learning

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Abstract: In recent years, mobile technology has developed exponentially and has the potential to support language learning. Mobile technology provides learners with a more enhanced connected experience with other users, communities, and the environment. The researchers utilized a mobile application to create scavenger hunt mobile games to encourage the use of English. In the scavenger hunt activity, students need to carry out tasks that include answering questions, acquiring resources, and performing required tasks. This study adopted quantitative and qualitative methods to investigate the effect of the scavenger hunt game on students' English vocabulary on campus, as well as on their motivations and attitudes in regard to learning English. The results indicated that the two groups that played the mobile games including located-based and web-based games--performed significantly better in English vocabulary than the paper-based group. The qualitative data also revealed positive experiences from the two mobile groups.

Keywords: mobile games, location-based games, technology-enhanced language learning, game-based learning

問題導向生活情境議題探究--以人工智慧在自然科學學習成效為例

Problem-Based Life Situational Issues Exploration--Taking the Learning Effectiveness of Artificial Intelligence in Natural Sciences

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【摘要】本研究目的聚焦在以問題導向學習(PBL)教學法，設計人工智慧(AI)在人臉辨識系統與智慧路燈和無人機的生活情境議題教材，融入自然通識課程，發展具效信度之學習感知問卷，評量學生對課程之滿意度、學習情形與學習成效評估。依據有效評量工具，評量 56 位大學生對新興科技情境議題的學習成效，研究結果呈現如下：

1. 建構出 AI 應用在人臉辨識系統與智慧路燈和無人機情境議題的教材；2. 發展出具信效度之學習感知問卷；3. 大部分學生們對 AI 融入 PBL 教學感到滿意；4. 多數學生認為整合不同學科的跨領域學習，有助於改善自我學習效能，並確保持續性的學習興趣；5. 眾多學生同意本課程能提升學習成效。

未來將著重在教學實務中，融入易用性的 AI 教材內容，增進互動學習的機會；再者，研究中增加有效的樣本數，提高實驗的縱深面向研究廣度。

【關鍵詞】人工智慧、生活情境議題、問題導向學習、智慧路燈、無人機

Abstract: This research focuses on problem-based learning (PBL) teaching methods and designs artificial intelligence (AI) in face recognition systems and intelligent street lights as teaching materials. To integrate teaching materials of life situation issues into the natural general curriculum and develop a learning perception questionnaire with validity and reliability to evaluate students' perception of the curriculum. Based on a valid assessment tool, 56 college students were assessed on their learning of emerging technology contextual issues to evaluate their satisfaction, learning situation, and learning effectiveness. The results of the study are as follows:

(1)Construct teaching materials for AI application in face recognition systems, smart street lights and drone situations;(2)Develop a learning perception questionnaire with reliability and validity;(3)Most students are satisfied with the integration of AI into PBL teaching;(4)Most students believe that the integration of cross-domain learning in different subjects can help improve self-learning effectiveness and ensure continuous learning interest;(5)Many students agree that this course can improve learning outcomes. In the future, the focus will be on teaching practice, incorporating easy-to-use AI textbook content, and enhancing the opportunities for interactive learning; in addition, increasing the number of effective samples in the research to improve the depth of the experiment and the breadth of research.

Keywords: artificial intelligence, life situation issues, problem-based learning, intelligent street lights, drone

低年級學習障礙學生加法計算數位教材需求分析與介面設計

Needs Analysis and Interface Design of Addition Calculation Digital Teaching Material for Low Grade Students with Learning Disabilities

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【摘要】 本研究採個案研究法，以質性資料為主。為瞭解低年級學習障礙學生加法計算數位教材現況與需求，邀請5位國小特教教師進行半結構式訪談，根據訪談與文獻探討資料進行數位教材現況與需求分析，並採用Newman與Lamming(1995)的人機介面設計流程，探討適用於低年級學習障礙的加法計算數位教材介面設計，提供學生更適性的學習資源。研究結果發現數位教材需求為1. 課前課後評量功能 2. 立即提示與反饋 3. 錯誤類型分析功能 4. 簡潔易操作的介面 5. 多元方式的文字呈現 6. 可彈性調整的功能，研究也根據學習障礙需求提出介面設計實例，在介面初步設計後訪談上述5位教師意見，整理可持續提升數位教材之建議。

【關鍵詞】 學習障礙、加法計算、數位教材、人機介面設計

Abstract: The study was conducted by case studies and mainly based on qualitative data. To understand status and needs of addition calculation digital teaching material for low grade students with learning disabilities, five special education teachers were invited to the semi-structured interviews. The research analyzed status and needs based on interview materials and literature. Furthermore, this research followed the process developed by Newman and Lamming(1995) to explore the suitable interface design. The research is expected to provide better learning resources for students. The needs of teaching material are shown as follow: 1. Diagnostic and summative evaluation, 2. Immediate prompting and feedback, 3. Analysis of error patterns, 4. Simple and user-friendly interface, 5. Multiple text presentation, 6. Flexible functions. Based on the needs of learning disabilities, the study also presented an interface design, and organized suggestions by interviews.

Keywords: Learning Disabilities, Addition calculation, Digital Material, User Interface Design

機器學習之於真正學習的回顧與省思

A Review and Reflection on Machine Learning versus Real Learning

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【摘要】 本研究旨在探討學習、人類學習和機器學習的定義，說明機器學習與真正學習的相關和差異。機器學習是人工智慧的一個重要分支，藉由機器類比人類真實學習活動，使機器獲得相應的技能和知識。機器學習過程是機器透過特定程序和規則，從已知到未知獲得一定知識的過程，但兩者需具關連性。人類學習過程是在教學情境中透過與教師、學生和資訊互動，獲得知識、技能和態度的過程，注重遷移和應用，學習者能透過「後設認知」監控歷程，並進行自我調控。自我調控和個人化教育的需求不斷增長，期以此比較結果為基礎，能在未來提出促進機器學習應用在教育 4.0 中的創新方法。

【關鍵詞】 機器學習、人類學習、真正學習

Abstract: This study aims to investigate the definitions of learning, human learning, and machine learning, and to illustrate the relevance and differences between machine learning and real learning. Machine learning is an important branch of artificial intelligence in which machines acquire skills and knowledge by analogy with real human learning activities. The process of machine learning is the process by which a machine acquires knowledge from the known to the unknown through specific procedures and rules, but the two need to be related. Human learning is the process of acquiring knowledge, skills, and attitudes through interaction with teachers, students, and information in instructional contexts, with an emphasis on transfer and application, where learners can monitor the process through "postulated cognition" and self-regulation. The growing demand for self-regulation and personalized education is expected to build on the results of this comparison to propose innovative ways to facilitate the application of machine learning in Education 4.0 in the future.

Keywords: machine learning, human learning, real learning

背景音樂對學習者學業情緒及認知負荷之影響-以線上統計課程為例

How does background music influence learner's academic emotion and cognitive load in an online statistics course.

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【摘要】 網路科技日新月異，隨著 COVID-19 的疫情肆虐，線上學習已成為學習主要型態。配合線上教材的多媒體設計日益精良，雖然使學習材料更能引起學習者的注意力及興趣，喚起學業情緒，但也可能導致認知超載。比起學習成果，當代教育工作者更加注重學生的學習歷程，學業情緒或認知負荷等相關文獻漸漸如雨後春筍般冒出。透過對抗平衡實驗設計，本研究收集共 39 位受試者數據，探討背景音樂介入對學習者在線上統計課程中學業情緒及認知負荷的影響。研究結果顯示，在學習過程中加入輕快的咖啡聽音樂能引起學習者正向的學業情緒，但也導致認知負荷隨之增加。研究結果對改善教學設計有實質的建議。

【關鍵詞】 學業情緒、認知負荷、背景音樂、線上學習、統計學習

Abstract: With the prevalence of web technologies and the outbreak of COVID-19, many students turn to the online environment to continue their learning. Intentional instructors also prepare online teaching materials with multimedia to better attract students' attention by evoking their positive emotions. However, fancy designs may also lead to learners' cognitive overload. Therefore, this study aimed to investigate whether adding background music in online instructional videos could evoke academic emotions and induce learners' cognitive loads. With a counter-balanced experimental design, we collected data from 39 graduate students in an online statistics course. The results demonstrated that although adding Cafe music in videos aroused students positive academic emotions, it also increased their cognitive load. The implications of this study to aid the multimedia design were discussed.

Keywords: academic emotions, cognitive load, background music, online learning, statistics learning

腎臟科病房腎臟切片檢查護理之課程需求評估

The Needs Assessment of Educational Training Course in Nephrology Ward Renal Biopsy Examination Nursing

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【摘要】腎臟切片檢查是腎臟病房臨床上重要且也最常被專科諮詢檢查護理的項目，新進人員無法獨力完成此檢查護理，目前教學方式為紙本講義自學與師徒制教學方式無正式課程設計，且此檢查為侵入性檢查有一定之風險，培訓照護能力則顯重要，故經由課程需求評估研究得知此課程在職教育需求如下，知識面兩主題為：腎臟切片檢查前、後之護理與腎臟切片合併症之護理。照護能力面：一般照護能力、護理指導之能力與有效交班能力。在課程設計，護理臨床教師選擇數位學習影片、示範教學與情境模擬及個案討論為主要教學方式，並表示課程教學時間長度為 30 分鐘，在週五，於 10 點鐘為最適合之課程安排。

【關鍵字】腎臟切片、護理、課程需求

Abstract: Kidney biopsy is a clinically important item in the renal ward and is most often consulted by specialists. New recruits cannot complete this examination and nursing alone. The current teaching methods are self-study by paper handouts and mentoring. There is no formal curriculum design, and this examination is invasive and has certain risks, and training and nursing ability is very important. Therefore, through the course needs assessment study, we know that the on-the-job education needs of this course are as follows. The two topics of knowledge are: before and after kidney biopsy, and kidney biopsy Comorbidity care. Nursing ability: general nursing ability, nursing guidance ability and effective shift transfer ability. In the course design, nursing clinical teachers chose digital learning videos, demonstration teaching, situational simulation and case discussion as the main teaching methods, and indicated that the course teaching time was 30 minutes, and on Friday, 10 o'clock was the most suitable course arrangement.

Keywords: kidney biopsy, nursing, curriculum needs

幼兒園家長讓幼兒觀看 YouTube 的動機與影片內容篩選標準之研究

A Study of Parents' Motivations and Standards of Content Filtering on YouTube Videos for Preschool Children

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【摘要】 隨著科技日新月異，資訊產品推陳出新。本研究旨為了解幼兒園家長讓幼兒觀看 YouTube 之現況，並分析不同背景變項之下，幼兒園家長讓幼兒觀看 YouTube 的動機和影片內容篩選標準之差異情形。本研究以自編問卷進行調查 110 學年度臺北市的公立幼兒園家長，所得資料運用描述性統計、t 考驗、單因子變異數分析。歸納結果為：一、幼兒大多於三歲以前接觸 YouTube，每日使用約 0-1 小時，以使用智慧型手機和平板觀看 YouTube 為最多。二、幼兒園家長讓幼兒觀看 YouTube 的動機以舒壓、學習、休閒為主。三、幼兒園家長讓幼兒觀看 YouTube 的內容篩選標準以家長須過濾內容與親子共同討論為主。

【關鍵詞】 YouTube、觀看動機、影片內容篩選標準、幼兒、幼兒園家長

Abstract: This thesis aims at grasping the current status of preschool children watching Youtube and analyzing parents' motivations and standards of content filtering. This study surveyed a group of parents of Taipei City public preschools and analyzed the materials with descriptive statistics, t-test and one-way analysis of variance. There were three main results obtained from this study. First, most of the children get in touch with Youtube before 3 years old, mostly watching the videos with smart phones and tablets for about 0 to 1 hour daily. Second, the motivations of the parents letting children watching Youtube are mainly for relaxing, learning and leisure. Third, parent-led scrutiny and parent-child discussion are the major standards of content filtering on Youtube.

Keywords: Youtube, watching motivation, standards of content filtering, children, parents of preschool children

任務式鷹架數位遊戲式學習與認知偏好對學習情緒、認知負荷與
學習成就之交互影響

Interactive Effects of Task-Based Scaffolding DGBL and Cognitive Preference
on Learning Emotion, Cognitive Load and Learning Achievement

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【摘要】本研究目的旨在探討鷹架數位遊戲式學習與認知偏好對學習者的學習情緒、認知負荷與學習成就之交互影響。結果顯示：1.鷹架數位遊戲式學習與認知偏好對學習情緒、認知負荷及學習成就都有顯著交互效果。2.硬鷹架數位遊戲式學習時，序列型學習者的學習情緒、認知負荷與學習成就顯著優於整體型的；軟鷹架數位遊戲式學習時，整體型學習者的學習情緒、認知負荷與學習成就顯著優於序列型的。3.序列型學習者使用硬鷹架與整體型學習者使用軟鷹架數位遊戲式學習時，其學習情緒、認知負荷、與學習成就皆顯著優於無鷹架數位遊戲式學習時。4.正向學習情緒、增生認知負荷、學習效果、與學習效率（四個正面屬性變項）兩兩之間呈現正相關；負向學習情緒、外在認知負荷（兩個負面屬性變項）兩兩之間呈現正相關。研究結果對實務推動與理論發展皆有具體貢獻及啟示。

【關鍵詞】認知負荷、認知偏好、數位遊戲式學習、學習成就、學習情緒、鷹架

Abstract: This study was to explore the interactive effects of scaffolding digital game-based learning (DGBL) and cognitive style on learning emotions, cognitive load and learning achievement. The findings presented that 1. There existed significantly interactive effects of scaffolding DGBL and cognitive style on learning emotion, cognitive load and learning achievement. 2. Learning emotion, cognitive load, and learning achievement of serialist learners were significantly better than those of holist learners in hard scaffolding DGBL. Conversely, learning emotion, cognitive load, and learning achievement of holist learners were significantly better than those of serialist learners in soft scaffolding DGBL. 3. Learning emotion, cognitive load, and learning achievement of serialist learners using hard scaffolding DGBL and holist learners using soft scaffolding DGBL were significantly better than those of learners using non-scaffolding DGBL. 4. The relationships among positive learning emotion, germane cognitive load, learning effect, and learning efficiency (four variables with positive attribution) were significantly and positively correlative, while the relationship between negative learning emotion and extraneous cognitive load (two variables with negative attribution) was significantly and positively correlative.

Keywords: Cognitive load, Cognitive style, Digital game-based learning, Learning emotion, Learning efficiency, Scaffolding

從「校方、教師、家長與學生」的觀點來評估我國所推動
之「遠距課程」

**Evaluation of the Future Long-Distance Courses -from the
Perspective of the School, Teachers, Parents and Students**

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【摘要】在臺灣這波疫情之下，包括小學、中學、高中和大學在內的各個年齡段的學生都在運用網路在家中進行遠距課程，加速資訊科技的運用。自1970年代以來，數位化時代迅速成型，拜疫情之賜，在家遠距課程與線上自主學習日趨成熟，對遠距課程與使用影響深遠。在分析國內外文獻、調查報告與教師線上社群動態等文獻資料，發現(1)政府及相關單位應注意在學校實體課程做出補救或讓學生有再次學習因疫情而受損的相關課程機會。(2)長期存在的成就差異應做相關的教育援助和服務。(3)學生在疫情後的心理健康和福祉需要關懷輔導。(4)面對網路線上的騷擾，學生必須被灌輸正確的資訊素養觀念。

【關鍵詞】 遠距課程政策、遠距課程、數位化教學、學習損失、Covid-19

Abstract: Under the epidemic influence in Taiwan, students of all ages, including elementary schools, middle schools, high schools, and universities, are using the internet to conduct online courses at home, accelerating the use of information technology. Since the 1970s, the era of digitization has taken shape rapidly. Thanks to the epidemic, online teaching and learning at home has become part of normal life, which has a profound impact on online learning and usage. Based on the analysis of research papers from domestic and foreign literature and the application of the resources, we found (1) The government and schools should pay attention to making remedial teaching courses in schools or giving students the opportunity to learn related courses again. (2) Persistent achievement disparities should be related to educational assistance and services. (3) Students need counseling for their mental health and well-being after the pandemic. (4) Facing online harassment students must be taught correct concept of information literacy.

Keywords: Long-Distance Courses Policies, Long-Distance courses, Digital Teaching, Learning Loss, Covid-19

AI-Empowered English Language Learning: Design, Implementation, and Evaluation of a Theoretically-Based Online-Only Selective Course for EFL Learners

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Abstract: As researchers have recognized the potential of artificial intelligence (AI) in enhancing teaching/learning, AI-powered tools are impacting the TESOL field. This influence is particularly urgent in this post-pandemic era. However, few studies examined the design of online English courses with AI-powered tools, student perceptions, and student performance. In this case study, a selective online course which aimed to cultivate autonomous EFL learners by teaching them how to use AI-powered tools was delineated. This course was designed based on learning theories. A learning loop was created to connect in-class learning with after-class practice. Results showed that students had better optimal experience in student-centered presentations than in teacher-centered lectures, and it was language proficiency that significantly predicted semester grade and assignment quantity.

Keywords: artificial intelligence, AI-powered tools, online course design for TESOL, optimal experience

學前幼兒使用互動體感遊戲學習對動作技能與社交能力影響之研究

A Study of the Effects of Interactive Gesture-based Game Learning on
Motor Skills and Social Skills in Preschool Children

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【摘要】本研究以互動式體感遊戲結合 IPO 教學策略,配合肢體動作技能,讓學前幼兒利用遊戲學習社交能力。本研究邀請新北市某幼兒園中班 101 位學生參與,分為實驗組 54 人與對照組 47 人。研究結果顯示,實驗組採用互動體感遊戲結合 IPO 教學策略的動作技能與社交能力皆比起對照組採用傳統繪本式教學的學習表現更好。從幼兒與幼兒園教師的反饋中發現,幼兒對於互動式體感遊戲皆有高度評價與學習興趣,並期待持續有新的學習內容與遊戲可以繼續參與。

【關鍵詞】學前幼兒、互動式體感遊戲學習、動作技能、社交能力

Abstract: In this study, 101 students in a kindergarten middle class in New Taipei City were invited to participate. 54 students in the experimental group and 47 in the control group participated. The study results showed that the experimental group used an Interactive Gesture-based Game combined with an IPO teaching strategy to learn Motor Skills and Social Skills better than the control group that used traditional picture book teaching. Feedback from the children and the kindergarten teachers showed that the children were highly appreciative of the Interactive Gesture-based Game, were interested in learning, and looked forward to continuing to participate in new learning content and games.

Keywords: Preschool children, Interactive gesture-based game learning, Motor skills, Social skills

不同錯題訂正策略對國小學童英語學業成就、高層次認知能力、英語錯題訂正
看法、習慣與表現之影響

Effects of Different Error Correction Strategies on Primary School Students'
English Academic Achievement, Higher Order Thinking Skills, Views and
Habits of English Error Correction, and Error Correction Performance

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【摘要】 本研究探討教師訂正、自我訂正和合作訂正三種訂正策略對國小生的英語學業成效影響。採不等組前後測準實驗研究設計，邀集三個五年級班級學生為樣本（ $n=115$ ），經12週實驗教學以及單因子共變數分析、單因子變異數、成對樣本 t 檢定進行資料分析，結果雖然未發現三組學生在英語學業成就、後設認知策略、批判思考傾向、錯題訂正立即表現等有顯著差異，仍獲得幾個具實證與教學實務價值的重要結果：一、自我訂正組在英語錯題訂正看法與習慣上顯著優於教師訂正組；二、在撤離訂正架構後，教師訂正組和合作訂正組的訂正表現都顯著下降，僅自我訂正組仍能保持訂正表現；三、經教學實驗後，僅自我訂正組英語後設認知策略使用達顯著提升。

【關鍵詞】 合作訂正、自我訂正、英語學習、教師訂正、高層次認知能力

Abstract: This study examined the effects of teacher correction, self-correction, and collaborative correction on primary school students' English academic achievement, use of English metacognitive strategies, critical thinking dispositions, and views, habits, and performance of English error correction. A 12-week non-equivalent pretest-posttest quasi-experimental research study involving three fifth-grade classes ($n=115$) was conducted, and the data were analyzed by the analysis of covariance, analysis of variance, and paired sample t -test. Despite that there were no significant differences between the three groups in most of the examined variables, the self-correction group significantly outperformed the teacher correction group in views and habits of English error correction. Furthermore, only the self-correction group participants benefited in terms of increased use of English metacognitive strategies and retained English error correction performance after the withdrawal of the error-correction framework.

Keywords: collaborative correction, English learning, higher order thinking skill, self-correction, teacher correction

Investigating College Students' Feedback Practices in and Perceptions of Three Different Peer Review Modes in Academic Writing Courses

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Abstract: The importance of peer review practice in writing courses has been strongly supported by pedagogical research. This study investigated college students' practices and perceptions of three peer review modes in an academic writing course: (i) face-to-face peer review (F2F), (ii) anonymous computer-mediated peer review (CMPR), and (iii) blended peer review (F2F and CMPR). The sample involved three classes (n=66) enrolled in an academic writing course at a Singaporean university. Surveys and focus-group discussions were administered to investigate their perceived usefulness of feedback and the processes of giving feedback. The nature of the feedback received was also examined. The findings show that the students generally preferred the blended mode, which addresses the limitations of both F2F and CMPR by leveraging the merits of both modes.

Keywords: peer review, blended, feedback, anonymous, CMPR

疫情時代下遠距教學於大專院校師生間的成效之探討

The Effectiveness of Distance Learning In College Students and Teachers In COVID-19 Era

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【摘要】 隨著 2020 年 COVID-19 疫情在全世界的爆發，高等教育機構面臨到前所未有的衝擊及挑戰。原先習以為常的實體教學，也受到疫情的影響中斷抑或是改為線上的遠距教學以延續。台灣在步入 2021 年後，也受到疫情的嚴重衝擊，各級學校自三級警戒期間全面改為遠距教學。本研究旨在於透過探討於三級警戒期間的遠距教學之成效，以了解到於全面遠距教學期間的學習問題及反思。

【關鍵詞】 高等教育、遠距教學、新冠肺炎、三級警戒

Abstract: With the outbreak of COVID-19 pandemic all around the world in 2020, higher education institutions are confronted with unprecedented impact and challenge. The physical classes we used to have also been forced to suspended by the pandemic or switched to online distance learning to go on. In 2021, due to the strike of the severe pandemic, all education institutions are forced to turn into strict distance learning by the policy. This research aims to explore through the effectiveness of distance learning in level 3 alert era to realize the learning problems of fully implemented distance learning and the reflections.

Keywords: higher education, distance learning, COVID-19, level 3 alert

探究線上學習與互動於高等教育之系統性回顧

A Systematic Review of Online Learning and Interaction in Higher Education

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【摘要】 本研究系統性回顧 2010-2020 年之文獻，研究發現：2018 年之文獻篇數為最多；發表數量已美國、西班牙和中國為前三多；量化研究、問卷調查及內容分析為常見研究方法與工具。研究領域以調查「學習態度」居冠，其次為「資訊通訊科技」以及「跨兩種領域以上」。目前互動類別「學習者」與學習者、科技媒體之互動為最多。研究目的側重於「評估效果」、「系統探索」和「情感因素」，研究主題以學習者、教學者和科技媒體為多。建議未來在高等教育線上學習與互動之應用與研究，研究目的以「學習者特徵」、「線上學習課程」和「線上學習教學策略」；研究主題以教學者、課程便利、課程評估、組織支持以及領導力與政策和管理等進行研究。

【關鍵詞】 線上學習互動、系統性回顧、高等教育、策略

Abstract: This study systematically reviewed the literature from 2010 to 2020, and found that: 2018 had the largest number of literature; the United States, Spain and China were the top three in the number of publications; quantitative research, questionnaire survey and content analysis were common research methods and tool. The research field is the survey "Learning Attitude", followed by "Information and Communication Technology" and "Across More than Two Fields". At present, the interaction category "learner" has the most interaction with learners and technology media. The research objectives focus on "assessment effects", "systematic exploration" and "affective factors", and the research topics are mostly learners, educators and technological media. It is recommended to apply and research on online learning and interaction in higher education in the future. The research objectives are "Learner Characteristics", "Online Learning Courses" and "Online Learning Teaching Strategies"; the research topics are teachers, course facilitation, course evaluation, and organizational support As well as leadership and policy and management research.

Keywords: online learning interaction, systematic review, higher education, strategies.

探討後疫情時代下幼兒數位遊戲學習之實踐策略

Discuss the Practical Strategies of Early Childhood Digital Game-based Learning in the Post-epidemic Era

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【摘要】「後疫期時代」是指因應 COVID-19 影響下，人們生活狀態的改變，而這改變包括了學校向學習者提供教學的方式。目前，教育的趨勢是應用線上教學，但幼兒難以獨自應用科技進行學習，因此後疫情時代下教學的改革對幼兒的需求更是重要，教師如何遵循保持身體距離的指導方針，提供同幼兒教育面對面環境中的相同最適當的實踐，像是：教學目標及期望的建立、觀察目標下的幼兒行為建模、以及如何提供即時和明確的反饋。本文主要探討幼兒園在後疫情時代下可執行之數位遊戲教學策略，以支持幼兒學習並維護因後疫情時代下所需之身體距離之協定。

【關鍵詞】 後疫期時代、幼兒學習、數位遊戲教學策略。

Abstract: The post-epidemic era refers to the changes in people's living to the impact of COVID-19, and this change includes the way schools provide teaching. At present, the trend in education is to use online learning. However, it is difficult for young children to apply technology alone, so the reform of education is even more important for young children. How teachers can follow physical distancing guidelines to provide the same best practices as in a face-to-face setting, such: establishment of instructional goals, modeling of behaviors, and provide immediate and explicit feedback. This article mainly discusses the self-directed game learning that kindergartens can implement to support young children's learning and maintain the physical distancing agreement required in the post-epidemic era.

Keywords: post-epidemic era, children learning, digital game-based learning strategies.

國小中年級英文諧音單字記憶法之數位教材設計

A Study of E-Learning Materials Construction of Mnemonic Keyword Method on English Vocabulary for Middle Grade in Elementary School

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【摘要】在後疫情時代中，線上數位教材顯得格外重要。因此本研究主題為建置一套適用於疫情期間線上使用的國小中年級英文科諧音單字學習之數位教材，對3位英文教師進行訪談，了解其需求分析，透過文獻探討與訪談內容，依據人機介面開發流程，建置國小中年級英文諧音單字記憶法之數位教材。數位教材受試者為4位，透過使用者滿意度問卷與訪談進行本教材之評估，瞭解「簡學」、「趣味」、「美學」之三項使用性原則。研究結果顯示，使用者整體滿意度為4.23，簡學性為4.25，趣味性為4.10，美學為4.35，使用者對國小中年級英文諧音單字記憶法數位教材之滿意度高。

【關鍵詞】諧音單字記憶法、人機介面開發、線上學習、數位教材

Abstract: In the post-epidemic era, online E-Learning teaching materials are particularly important. Therefore, the purpose of this research is to design and develop a set of the E-Learning materials Constructions suitable for the learning of Mnemonic Keyword Method on English Vocabulary for elementary and middle grades during the epidemic. 3 English teachers were interviewed for demand analysis. The researcher used the literatures data and interview content, and followed the Human-computer Interface Design process to complete the E-Learning materials Construction of Mnemonic Keyword Method on English Vocabulary for Middle Grade in Elementary School. Through the feedback and interviews evaluated by 4 users, we could understand the applicability of the E-learning materials—learnability, interest and aesthetics. The result reveals that the total satisfaction was 4.23, the learnability satisfaction was 4.25, the interesting satisfaction was 4.10 and the aesthetics satisfaction was 4.35. The user expressed satisfaction with the E-Learning materials Construction of Mnemonic Keyword Method on English Vocabulary for Middle Grade in Elementary School.

Keywords: Mnemonic Keyword Method on English Vocabulary, Human-Computer Interface Design, E-Learning, E-Learning Teaching Materials

探討胸腔科病房護理人員對肺阻塞課程教育訓練需求評估

Explore the Needs Assessment of Pulmonary Obstruction Education Training Course for Thoracic Ward Nurses

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【摘要】慢性阻塞性肺疾病除醫療問題外，其他社會、心理問題也隨著罹病人數增加而日趨複雜化。為瞭解胸腔科護理師對肺阻塞課程需求及對行動輔助教育教材需求。本研究採立意取樣以胸腔科病房護理人員為研究對象進行問卷調查，為描述性及相關性研究設計。結果顯示胸腔科護理師對於肺阻塞課程為高度需求，以肺阻塞的治療與處置之需求最高，同時護理師建議使用 APP 互動式網頁為教材。由於本研究對象僅收集護理人員，建議可增加團隊相關人員瞭解不同成員的經驗及看法，如：個管師、藥師或營養師等，增加研究的運用性。

【關鍵詞】胸腔科病房護理師、肺阻塞課程、需求評估、在職教育

Abstract: Chronic obstructive pulmonary disease (COPD) that increases in the number of patients, is not only medical problems, but also social and psychological problems that are becoming more complicated. In order to understand the needs of thoracic nurses for pulmonary obstruction courses and the needs of mobility-assisted education materials, this study was conducted a questionnaire survey with thoracic ward nurses as the research objects, which was designed for descriptive and correlational research. The results show that thoracic nurses have a high demand for pulmonary obstruction courses, with the highest demand for the treatment and disposal of pulmonary obstruction. At the same time, nurses recommend using APP interactive web pages as teaching materials. The research object only collects data from nurses, and it is suggested that relevant team members can learn more about the experience and opinions of different members, such as: personal management, pharmacist or nutritionist, etc., to increase the applicability of the research.

Keywords: Thoracic Ward Nurses, COPD Education Course, need assessment, in-service education.

基於問題解決子目標狀態之學習提示設計

Design of Learning Hints Based on Sub-goal States in Problem-solving

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【摘要】 研究顯示，新手學習者在解決程式問題遭遇困難主要是因為缺乏程式設計技能(design skills)，例如程式設計方案、拆解問題、以及組合與實作程式設計方案以產生有效程式碼的技能。基於子目標之工作範例有助於程序性問題解決之學習、以及數位導師有潛力追蹤學習者學習狀態，本研究結合子目標狀態與數位導師技術，設計基於問題解決子目標狀態之數位導師、以及相對應之學習活動。初步的測試結果顯示，學生能在數位導師的引導下達成子目標，進而完成問題解決活動。

【關鍵詞】 程式設計技能、子目標狀態、數位導師

Abstract: Research shows that the difficulty of programming novices in solving program problems is mainly due to lack of design skills, such as programming plans, decomposition of problems, and composition of programming plans to generate effective code for the problem solutions. Given that sub-goal-based worked examples are helpful for learning procedural problem solving and that digital tutors have potential in tracing students' learning status, the purpose of this study is to incorporate sub-goal states and digital tutor technique to design a sub-goal-based tutor and its corresponding learning activities. The results of a pilot test showed that students were able to achieve sub-goals in problem solving and complete the corresponding tasks under the guidance of the digital tutor.

Keywords: Programming design skills, sub-goal states, digital tutor.

結合工作範例與形成性測驗之學習活動

Incorporating Worked Examples and Formative Quizzes into a Learning Activity

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【摘要】工作範例被證實能有效的降低學習者認知負荷，進而專注於解決問題的步驟與重要規則，提升學習成效，而另一方面，形成性評鑑能在學習者嘗試問題解決後提供學習回饋，協助學習者持續修正或改善他們的解法。本研究根據「資料結構」課程中核心的概念與演算法，結合工作範例與形成性測驗，發展能提供即時回饋的線上工作範例與學習流程、並評估此學習流程對學習活動的影響。先導評估結果顯示，受測者對此學習流程中的「克魯斯卡演算法」解說教材與線上工作範例有很正面的評價，也認為訂正解題步驟順序的學習活動能增加理解與解決問題效能。

【關鍵詞】線上工作範例、形成性測驗、資料結構

Abstract: Worked examples have been proven to be effective in reducing learners' cognitive load and help the learners focus on problem-solving steps and important principles, which further improves learning outcomes. On the other hand, formative assessment can provide learning feedbacks after learners try to solve problems, assisting learners continually revise or improve their solutions. This study incorporates worked examples and formative quizzes, based on the core concepts and algorithms in the "Data Structure" course, to develop online work examples and learning processes, and further evaluates the influence of this learning process on learning activities. The results of the pilot evaluation showed that the participants had a positive feedbacks on the "Kruskal Algorithm" explanatory material and online work examples. They also believed that the learning activities of sorting the problem-solving steps could increase the understanding and problem-solving performance.

Keywords: Online worked examples, formative quizzes, Data Structure.

藉由教學工作坊探究護校大學生的敘事動畫策展能力

Investigating Nursing College Students' Curation Skills of Narrative

Animation through Hands-on Workshops

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【摘要】 護校大學生創作敘事動畫創作時，雖有豐富的衛教知識，但成品常無法發揮敘事動畫強化資訊傳播的媒體特質，進而影響觀賞者從中汲取知識的成效。此外，敘事動畫創作需涵蓋「知識策展力」、「抽象思考力」與「情境敘事力」三軸向的綜合表現，但三種能力對護校大學生動畫創作的影響仍待解答。鑑於此，本研究擬透過三個不同的引導式教學工作坊：「知識策展活動」、「抽象化思考活動」與「逆向拆解再製活動」，從學習者在工作坊中的表現，分析並探究三種能力與護校大學生敘事動畫創作表現的發展與關聯，期望提供未來教學設計時的參考與指引。

【關鍵詞】 敘事動畫、護校大學生、數位策展、衛教動畫創作、教學工作坊

Abstract: When designing narrative animations, although nursing college students possess abundant knowledge in healthcare, their animation design projects are not crafted in accordance with information processing theories, which in turn affects how the audience captures healthcare knowledge after viewing. It's assumed that the creation of narrative animation involves three genres of skills, including "knowledge curation," "abstract thinking," and "situated storytelling." However, the interaction effect between these three skills and the narrative animation projects remains unanswered. In view of this, the study intended to investigate nursing students' animation design performance with regards to the three skills by implementing three types of interventions, such as "knowledge curation task", "abstract thinking task " and "reverse construction task, hoping to provide guidance for animation instructional design practices in nursing colleges.

Keywords: narrative animations, digital curation, nursing college students, healthcare animation design, workshops.

探討網路閒晃行為與學習態度在疫情影響下對於數位學習
使用意願之分析

Analysis of Cyberloafing and Learning Attitudes towards Digital Learning
under the Influence of the Epidemic

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【摘要】由於 covid 19 疫情的影響使得數位學習與遠距教學日漸重要。但有別於到校上課，學生在數位學習過程中的學習行為並不會受到任何限制。因此，本研究在學生利用遠距教學的數位學習期間，探討網路閒晃行為、學習態度與數位學習使用意願所造成的影響。研究問卷調查以大學生與研究生為發放的對象，總共回收 97 份有效問卷，並進行迴歸分析與路徑分析。研究結果顯示學生進行數位學習時，網路閒晃行為對學習態度呈負相關與數位學習使用意願呈負相關，而學習態度對數位學習使用意願呈正相關。由此可知學生在進行遠距教學的數位學習，網路閒晃行為越明顯，將不易聚焦於學習內容，而學生的學習態度與數位學習意願呈現也會有明顯的下降。

【關鍵詞】網路閒晃、學習態度、持續使用意願

Abstract: Due to the impact of the covid 19 epidemic, E-learning and distance learning are becoming increasingly important. However, unlike school attendance learning, students' learning behaviors are not restricted in the process of E-learning. Therefore, this study examines the effects of cyberloafing behavior, learning attitudes, and intention to use E-learning during students' E-learning using distance instruction. A total of 97 valid questionnaires were collected from university and graduate students, and regression analysis and path analysis were conducted. The research results showed that when students engaged in E-learning, cyberloafing behavior was negatively correlated with learning attitude and intention to use E-learning, while learning attitude was positively correlated with intention to use E-learning. It is evident that the more students engage in distance learning, the less they can focus on the learning content, and the more students' learning attitude and intention to use E-learning will be significantly reduced.

Keywords: cyberloafing, learning attitude, continued willingness to use

疫情期間跆拳道數位教學探討

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【摘要】回顧疫情嚴峻下的線上跆拳道教學紀錄，本研究分為三個部分，第一視訊教學設備與學員安全，第二課程規劃能不能提升學童的學習成效，第三數位教學與實體教學的成效差別。研究參與為 8 名跆拳道學員，研究者已是視訊為主，搭配及時的通訊軟體進行動態跆拳道的遠距教學，透過視訊紀錄、教學者與教學夥伴探討、群組對話紀錄進行研究。最大困難點在於需要控制設備品質，以及掌握學員專注力須別有用心。結論：分析動態跆拳道線上教學與實體教學比較的效果品質，本研究數位跆拳道教學模式可作為後續教育者參考及修正方向參考。

【關鍵詞】跆拳道、體適能、遠距教學

Abstract: Reviewing the online taekwondo teaching records under the severe epidemic situation, this research is divided into three parts, the first is video teaching equipment and student safety, the second is whether curriculum planning can improve the learning effect of students, and the third is the difference between the effect of digital teaching and physical teaching. Eight taekwondo students participated in the research. The researchers are already video-based, with timely communication software for remote teaching of dynamic taekwondo. The research is conducted through video records, discussions between teachers and teaching partners, and group conversation records. The biggest difficulty lies in the need to control the quality of the equipment and the need for ulterior motives to master the students' concentration. It is concluded that the quality of online teaching is lower than that of normal physical teaching. All digital teaching on dynamic platforms is a reference content for educators in the future.

Keywords: Taekwondo, physical fitness, distance learning

知識性自媒體對成年人網路使用之相關：以自主學習為調節變項

**The Relevance of Knowledge-Based Self-Media to Adult Internet
Use.Independent Learning as a Moderating Variable**

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【摘要】 自媒體崛起,舉凡食衣住行育樂,人人都能將自己的所見所聞製作成影片上傳網路平台成為自媒體,也因此讓畢業後的自主學習管道變得更多元,本研究企圖瞭解成人教育使用知識性自媒體的相關性,與自主學習運用網路學習的相關情形,包含學習時使用知識性自媒體之必要性及主要選擇進修方向等自我調控問題。研究透過問卷調查方式分析發現,民眾自主學習時,知識性自媒體並非第一選擇,而選擇知識性自媒體學習最主要因素是工作需求,學習平台以 YOUTUBE 為主,講師優劣則是影響成人自主學習的重要因素,建議專業人士投入自媒體避免知識亂象。

【關鍵詞】 成人教育、知識性自媒體、自主學習、終身學習、新媒體

Abstract: With the rise of self-media, everyone can make videos of what they have seen and heard and upload them to online platforms as self-media. The study was conducted to understand the self-regulation issues such as the necessity of using knowledge-based self-media in learning and the main choice of study direction. The study revealed through questionnaire analysis that knowledge-based self-media is not the first choice for self-learning, and the most important factor for choosing knowledge-based self-media is work demand, the learning platform is mainly YOUTUBE, and the quality of instructors is an important factor affecting adults' self-learning.

KeyWords: Adult Education, Knowledge-based Self-Media, Independent Learning, Lifelong Learning, New Media

An Investigation of the Influences of Joyful English Sentence-making Learning System: A Prior Knowledge Approach

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Abstract: To help students learn how to construct English sentences, this study developed a Joyful English Sentence-making Learning System (JESLS), where game-based learning and scaffolding hint were integrated together. Furthermore, empirical investigation was conducted to examine the impacts of prior knowledge on learners' task performance in the JESLS context. The results showed that high prior knowledge learners (HPKs) showed better task performance than low prior knowledge learners (LPKs), in terms of both task scores and task time. These findings can be used to contribute two areas, i.e., human-computer interaction and digital learning.

Keywords: game-based learning, scaffolding hint, prior knowledge

新冠肺炎疫情期間結合數位科技進行社區健康評估

Applying Digital Technology to Community Health Assessments during the COVID-19 Pandemic

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【摘要】 2019 年 12 月底中國大陸境內出現第一起 COVID-19 案例，隨後在境內及國際間蔓延開來並肆虐全球。臺灣地區確診病例及死亡人數亦不斷攀升。本研究運用社區為夥伴模式結合數位科技，以擋風玻璃式調查、重要人物視訊訪談、電子問卷調查、官方與非官方網路資料收集等方式進行評估，了解民眾因疫情所造成的生活改變及因應方式。研究結果顯示目前健康問題有幼童染疫風險高、社區民眾對疫情的健康識能不足、疫情期間生活型態改變及防疫訊息傳達不良等四項健康問題。建議社區健康專業人員，盤點社區資源並應用各地特色及優點、整合居民觀點並凝聚社區共識、集結人力，共同推動社區防疫相關健康服務。

【關鍵詞】 新冠肺炎、社區為夥伴模式、社區健康評估、數位科技

Abstract: The first case of COVID-19 appeared in mainland China at the end of December 2019, and then it spread domestically and internationally and ravaged the world. The number of infected cases and deaths in Taiwan is also rising. This study applying digital technology to the community as a partner model to conduct online literature review, windshield surveys, key informants' online interview, official and unofficial online information, and electronic instruments to collect data. To conduct an overview of core of population demographics, eight subsystems of the community, and perspectives of community residents were provided. To understand the changes in people's lives caused by the COVID-19 pandemic and how to cope with it. The results show that the current health problems include the high risk of infection among the child, the lack of health literacy of the community about the pandemic, changes in lifestyle during the pandemic, and poor communication of pandemic prevention information. It is recommended that community health professionals take community resources inventory and apply local characteristics and advantages, integrate residents' perspectives, build community consensus, and gather manpower to jointly promote community health services related to pandemic prevention.

Keywords: COVID-19 pandemic, community as partner model, community health assessment, digital

運用關聯規則發掘學生適性選修課程

Using Association Rules to Find Adaptive Courses for Students

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【摘要】本研究以學生的修課資料為資料來源，以 k 位學生為探勘目標， $k \geq 1$ ，利用資料探勘中的關聯規則發掘學生適性課程。文中設計一個方法探勘關聯規則，其前置項目集必須為 k 位學生已曾修讀過的課程，後置項目集必須為 k 位學生這學期可選修的課程，可分別做為發掘 k 位學生適性課程的依據。本研究修改 Apriori 演算法，直接組合 k 位學生的修課資料中項目與這學期可選修的課程項目形成項目集，判斷這些項目集是否為高頻項目集，將可更有效率找到目標項目集。根據提出的方法建置一個發掘學生適性課程探勘系統，可提供學校規畫學生適性課程推薦的參考資訊。

【關鍵詞】 資料探勘、關聯規則、修課資料、適性課程

Abstract: This study uses the students' course taking data as the source of mining data. Taking k students as the mining target, $k \geq 1$, and to use the association rules in data mining techniques to find students' adaptive courses. A method is designed to mine the association rules whose antecedents must be courses that k students have taken, and consequent must be courses that k students can take this semester. The above association rules can be used as the basis for finding k students' adaptive courses. We modified the Apriori algorithm to directly combine the items in the course taking data of k students with the course items that can be taken this semester to form itemsets, and to judge whether these itemsets are frequent itemsets. The target itemsets can be found more efficiently. According to the proposed method, a mining system for finding students' adaptive courses is built. The results of mining can provide useful reference information for school to plan students' adaptive courses.

Keywords: data mining, association rule, course taking data, adaptive course

做筆記結合學生出題策略對國小生筆記品質影響之實證性研究

The Effect of Note-taking with Students-generated Questions

Strategies on the Quality of Student Note-taking

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【摘要】 本研究旨探討做筆記結合學生出題策略對國小六年級學生社會科筆記品質之影響，採準實驗研究法，邀集臺南市某國小六年級兩班學生（共 48 位），配合社會科教學，進行為期十一週實驗教學活動。單因子共變數資料分析結果發現：實驗組（筆記結合學生出題策略）在筆記品質內容以及形式兩向度皆顯著優於對照組（筆記策略課程）；進一步內容分析發現，實驗組學生產出的題目多能對應學習教材內的不同學習重點；另，兩組學生在不同顏色註記及符號輔助使用程度上亦有明顯不同。

【關鍵詞】 國小學童、筆記品質、筆記策略、學生出題

Abstract: The purpose of this research is to explore note-taking with student-generated questions strategies on note-taking quality. A quasi-experimental research method was adopted, and two classes of sixth-grade students (N=48) from one elementary school in Tainan city were invited to participate in an eleven-week study. The experimental group was exposed to note-taking with student-generated questions strategies, and the control group was exposed to the note-taking-only condition. Data analyzed by the one-way analysis of covariance technique revealed that the experimental group performed statistically significantly better than the control group on note-taking quality in both content and style dimensions. Finally, the results from further content analysis of students' work revealed that most generated questions were targeted at different main ideas and that the use of color and symbols for annotation purposes of students from both groups was very different.

Keywords: elementary students, note-taking strategy, note-taking quality, student-generated questions

學生出題策略應用於國小數學學習障礙學生學習之研究

Applications of the Student Question-generation Strategy to Elementary Students with Mathematics Learning Disabilities

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【摘要】 本研究目的有二，一、探討學生出題策略運用於國小四年級數學學習障礙生對其數學學習動機與出題策略使用動機之影響；二、數學學習障礙學生對不同出題鷹架在助益性、偏好、難度之看法。研究採混和研究法，以國小四年級三名數學學習障礙學生為研究對象，經三週教學活動、6次的學生出題活動，採用對數學和出題活動學習動機量表以及學生訪談兩項研究工具，收集量化與質化資料。主要研究發現：一、在學生出題策略下進行數學學習，學生對數學學習動機有正面的看法。二、參與者對所進行的出題活動展現正向的學習動機與觀感，支持使用學生出題策略來進行數學學習的作法。三、三種學生出題鷹架皆有助數學概念的理解。四、「正確答案」出題鷹架屬較不熟悉的運作概念，初始接觸時較不獲參與者喜歡。五、「故事結構」出題鷹架具趣味性，但因依賴文字的撰寫，難度較高。六、「如果不是」出題鷹架有利新題目產出，運用上較簡單。

【關鍵詞】 國小學生、學生出題策略、學習動機、數學學習障礙、鷹架

Abstract: The purposes of this research are two-fold: first, to understand the learning motivation of elementary school students with mathematics learning disabilities toward math and the integrated student question-generation (SQG) strategy; second, to investigate student perceptions regarding the three introduced SQG scaffolding types in terms of learning usefulness, preference, and difficulties. A mixed-methods research method was adopted for the study. The participants are three fourth-grade students with mathematics learning disabilities. A total of 6 student question-generation activities were designed in accordance with three units of mathematics, lasting three weeks. Both quantitative and qualitative data were collected via learning motivation scales and interviews. Major findings are: 1. All three participants expressed positive learning motivation toward math under the arranged context. 2. All three participants supported the use of SQG for their math learning. 3. All three integrated SQG scaffolds were perceived as helpful for understanding math. 4. With “the answer is” being less familiar, it was not fond of by the participants at the onset of the activity. 5. While the “story grammar category” scaffolding was perceived as interesting, with its demands on writing, it was perceived as difficult. 6. The “what if” SQG scaffolding was valued as helpful for coming up with new questions and perceived as easy to use.

Keywords: elementary school students, learning motivation, mathematics learning disabilities, scaffolding, student question-generation strategy

師生對數位學習平台持續使用之意圖- 運用 PAD 情緒模型探討

Using PAD Model to Explore the Intention of Teachers and Students to Use E-learning Platform

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【摘要】近年來隨著網際網路的興起，數位學習展開了人們快捷且多元的學習管道與方式，不僅帶給師生在教學及學習上非常便利外，也改變大眾的學習模式。本研究以 SOR 理論為基礎，結合了科技接受模型 TAM 及 PAD 情緒模型為架構，歸納出可能影響使用者持續使用數位學習平台之變項，分別為「外部平台因素」及「個體情緒體驗」及「行為反應」。其中「外部平台因素」為環境刺激的變項。PAD 情緒模型「個體情緒體驗」為有機體。「持續使用意圖」則為投入(input)變數後的行為反應(output)。以 SPSS 軟體進行資料分析探討使用者在數位學習平台環境刺激與回應之間的關係。

【關鍵詞】 SOR 模型理論、TAM 科技接受模型理論、PAD 情緒模型理論、遊戲化、無所不在學習

Abstract: As the internet raises in recent years, e-learning opens a diverse learning way. It not only brings the convenience for teachers and students but also changes the study way. The study based on SOR Model and integrated the frame of TAM Model and PAD Model, which concluded the variables of affecting users to use e-learning platforms constantly and they were respectively the factors of external platforms, individual emotional experience and behavioral responses. The factors of external platforms were the environmental stimuli variables, individual emotional experience was organism, and behavioral responses were the outputs of inputting the variables. To investigate the relationship between environmental stimuli and response for users on e-learning platforms by using SPSS software to analyze the information.

Keywords: SOR Model , TAM Model , PAD Model , Gamificaiton , U-Learning

The Potential of Students Reading Comprehension Skill Via Team Game Tournament Approach

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Abstract: The article's purpose is to explore students' learning outcomes through Team Game Tournament (TGT) in third grade students, and 2) to explore students' motivation on teaching-learning processes through TGT. The subject was 24 students from third grade at the school in Affiliated Experimental Elementary School of National Pingtung University, Taiwan in English class. The target class was chosen in the fact that the English teacher and students from the target class were willing to participate in the whole process of this study. The research instruments used were: 1) documentation 2) reading comprehension test, and 3) the questionnaire of students' perspectives on learning via TGT in English lessons. The data was statistically analyzed by mean, standard deviation.

Keywords: Team Game Tournament, Reading Comprehension, Motivation

在 Covid 19 疫情下翻轉學習模式對於數位學習使用意願的影響

Impact of a Flipped Learning on Willingness to Use E-Learning in the Covidien 19 Epidemic

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【摘要】由於 covid 19 疫情影響使得台灣許多學校相繼停課，大多數教育機構被迫在很短的時間內改成線上學習課程。在遠距教學下的數位學習，以學生為課程主體的翻轉學習方式備受關注。因此，本研究探討在 Covid 19 疫情下翻轉學習模式對於數位學習使用意願的影響。針對大學生與研究生透過問卷調查法進行研究，研究結果顯示學生在 covid 19 疫情下進行翻轉數位學習時，其內容豐富性、溝通有用性、學習成就面及學習興趣面 4 個面向皆對數位學習使用意願呈正相關。顯示學生對於數位學習是具有一定熟悉度，並且翻轉教學方式普遍感受度佳。

【關鍵詞】翻轉學習、數位學習、持續使用意願

Abstract: Due to the impact of the covid 19 epidemic, many courses have been canceled for many schools in Taiwan. Most educational institutions have been forced to switch to online learning courses within a short period of time. In the learning context of E-learning under distance learning, the student-based flipped learning approach has attracted much attention. Therefore, this study examines the impact of the flipped learning model on the intention to use E-learning in the Covid 19 epidemic. The research results showed that students' intentions to use E-learning was positively correlated with the four aspects of content richness, communication usefulness, learning achievement, and learning interest when they engaged in flipped E-learning under the Covid 19 epidemic. It shows that students had certain acquaintance with E-learning and generally felt good about the flipped teaching method.

Keywords: flipped learning, e-learning, continued willingness to use

影響學習者網路協作探究學習因素之探究

Exploring the Factors that Influence Learners' Online

Collaborative Inquiry Learning

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【摘要】 近年數位環境替探究學習開創更多潛在優勢，本研究旨在探討影響學習者網路協作探究學習之因素。30 位大學生在一學期中，採用知識論壇裡的線上知識構建活動，討論並完成一個線上設計任務。採焦點團體訪談、知識論壇回饋資訊，透過持續比較法、使用行為順序法分析資料。結果與討論，參與者線上知識建構活動為發散到收斂的過程，且（1）互動即時性（3）多媒體素材的可擴充性（4）間接接觸降低學習者焦慮（5）能反覆評估改進想法，似乎可促進網路協作學習；然而（1）難達共識（2）難避免批評性回饋（3）分工難達平衡，似乎有影響網路協作活動。

【關鍵詞】 網路協作探究學習、科技學習、知識論壇

Abstract: In recent years, the digital environment has created more potential advantages for inquiry learning, and this study aims to investigate the factors that influence learners' collaborative online inquiry learning. 30 university students discussed and completed an online design task over the course of a semester using online knowledge building activities in a knowledge forum. Focus group interviews and knowledge forum feedback were used to analyze the data through a continuous comparison method and the use of behavioral sequencing. The results and discussions showed that the participants' online knowledge construction activity was a diffusion to convergence process, and (1) interactive real-time (3) scalability of multimedia materials (4) indirect contact to reduce learner anxiety (5) ability to repeatedly evaluate improvement ideas, which seemed to facilitate collaborative learning online; however, (1) difficulty in reaching consensus (2) difficulty in avoiding critical feedback (3) difficulty in achieving a balanced division of labor, which seemed to affect collaborative online activities.

Keywords: online Collaborative Inquiry Learning, e-learning, Knowledge Forum

後疫情時代教師教學模式的轉變研究

Research on the Transformation of Teachers' Teaching Mode in the Post-epidemic Era

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【摘要】 自 2019 年末，covid-19 開始在全世界發酵。為了應對疫情生活，各類職業都進行了或大或小的轉型，其中亦包含「教學」的變遷。線上課程成為了幾年來的主要教學模式，但也因此產生了線上教學平台的選擇、考試、作業的繳交、小組合作的困難……等等問題。且對於這些老師與學生來說，在疫情逐漸平緩的後疫情時期，適應也是一種挑戰。因此本文研究了諸多以後疫情與疫情期間對教育相關論文，並輔以現今教師培育相關文獻，嘗試於找尋適合後疫情時代與其過後的新時代的新教育方式，藉此開創新型態的教育並引導教師培育、教師教學方式的轉變，且期望達成線上教學的常態化。

【關鍵詞】 線上學習、數位平台、教學方式、教師培育、後疫情時代

Abstract: Since the end of 2019, covid-19 has been fermenting around the world. In response to the epidemic, online courses have become the main teaching mode for several years, but various difficulties have arisen as a result. And for these teachers and students, adaptation is also a challenge in the post-epidemic period when the epidemic gradually subsides. Therefore, this paper studies a number of papers related to education in the future and during the epidemic, supplemented by relevant literature on teacher training today, trying to create a new type of education and guide teacher training and the transformation of teachers' teaching methods, and hope to achieve online teaching. normalize.

Keywords: Online learning, Digital platform, Teaching methods, Teacher training, Post-pandemic era

加護病房二年期新進臨床護理師呼吸器照護學習需求評估

Assessment of Learning Needs for Respirator Care for New Clinical Nurses in the Intensive Care Unit During the Two-year Period

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【摘要】 本文說明加護病房內呼吸器為最常見的維生儀器，當呼吸器有問題時，需仰賴護理師的正確判斷與處理，但新進護理師並未接受呼吸器照護相關課程。兩年期護理師多因經驗不足，對呼吸器及時處理狀況能力不足，故缺乏自信。藉由此研究探討加護病房兩年期新進護理師，對於呼吸器病人照護的學習問題與需求，做為未來繼續在職教育的課程規劃參考。新進護理師不論年資，對於教育的需要性、成效、教材選擇都有高度共識，其中發現 9 成的護理師認為情境模擬教學可增加學習成效；對於數位教材也有高達 77% 的人使用過，可做為未來教學策略及方式的參考。

【關鍵詞】 兩年期護理師、呼吸器、學習需求評估、情境模擬

Abstract: This article explains that respirators in the intensive care unit are the most common life-sustaining equipment. When there is a problem with the respirator, it is necessary to rely on the correct judgment and treatment of the nurses, but the new nurses have not received courses related to respirator care. Most of the two-year nurses lacked self-confidence due to lack of experience and lack of ability to deal with the situation of the respirator in a timely manner. This study explores the learning problems and needs of new nurses in the intensive care unit for the care of ventilator patients during the two-year period, and serves as a reference for curriculum planning for future continuing on-the-job education. Regardless of their seniority, new nurses have a high degree of consensus on the need for education, effectiveness, and choice of teaching materials. It was found that 90% of the nurses believed that situational simulation teaching could increase learning effectiveness; As a reference for future teaching strategies and methods.

Keywords: two-year nurse practitioner, respirator, learning needs assessment, situational simulation

疫情時代數位學習系統對大學生程式學習的影響

The Impact of e-Learning Systems on University Students Programming Learning in the Pandemic Era

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【摘要】 COVID-19 對教育各領域帶來了一系列全新的挑戰，教師和學生可以透過數位學習系統進行教與學，並且可以使用各種方式進行線上互動和協作。程式設計課程的數位學習環境相較於過去的面對面教學方式截然不同，本研究欲探討通識程式課程學生對於混成學習(Blended learning)及遠距同步(synchronous online learning)的數位環境感知是否不同，於事藉由網路學習環境量表中易取(Access)、整合(Integration)、互動(Interaction)、反應(Response)、結構(Structure)五個向度，蒐集學習者對網路學習環境的感知。研究者選擇中部某大學通識程式課程大一至大四不同科系共 61 位學生進行兩次問卷調查，第一次於混成學習階段中課程實施的第 9 週進行施測，第二次則於遠距同步階段課程實施的第 17 週進行施測。經相依樣本 t 檢定分析結果，發現無論混成學習或遠距學習方式對大學生程式學習的影響並無差異。可見現今遠距學習的科技亦能達到傳統面對面的教學成效，課程教學日誌分析發現混成學習的互動效果較遠距同步為佳，將來可進一步增加遠距同步系統的互動性藉以提升學生的學習成效。

【關鍵字】 數位學習、程式設計課程、混成學習、科技教育

Abstract: COVID-19 brings a whole new set of challenges to the field of education, as teachers and students can learn through digital learning systems and interact and collaborate online in a variety of ways. As programming courses are very different from face-to-face teaching, this study collected students' perceptions of the e-Learning environment using the five dimensions of the e-Learning environment scale: Access, Integration, Interaction, Response and Structure. The researcher selected a university in central Taiwan for the study. A total of 61 students from freshmen to seniors of a university in central Taiwan were selected to take the survey twice, the first time in the ninth week of the blended learning stage and the second time in the seventeenth week of the distance learning stage. The results of paired sample t test analysis showed that there was no difference in the impact of either blended learning or distance learning on university students' programming learning. It is evident that today's distance learning technology can also achieve the effectiveness of traditional face-to-face interaction, which will allow further analysis of student learning outcomes in the future.

Keywords: e-Learning, programming learning, blended learning, technology education

高等教育推動混成學習培力課程之初探

A Preliminary Study on the Promotion of Blended Learning

Empowerment Program in Higher Education

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【摘要】疫情間的混成教學勢必成為疫後的常態，如何做好虛實整合的混成教學設計，攸關學生學習成效。本文旨在探討高等教育推動混成學習下，教師需要必備的知能。經導入 20 小時數位混成學習專業培訓課程，教師反饋的結果顯示其對研習活動或課程的安排與期待，偏好從實體走向線上化。另「課程對我有實質的收穫」、「課程點燃我對教學的熱情」及「我願意嘗試將課程所學運用到自己的課堂」，經統計分析，教學年資 10 年以上平均數均高於年資 10 年以內教師，依問卷結果推測應針對不同年資教師，採取不同激勵策略，以鼓勵教師發展混成教學模式。

【關鍵詞】線上學習、混成學習、高等教育、培力課程

Abstract: During the COVID-19 period, blended learning is bound to become the norm after the epidemic. How to do a good job in the design of blended learning that integrates virtual and real is critical to students' learning effectiveness. This paper aims to explore the necessary knowledge and skills that teachers need under the promotion of blended learning in higher education. After introducing a 20-hour digital blended learning professional training course, the results of teachers' feedback show that their arrangements and expectations for learning activities or courses, prefer to move from physical to online. In addition, "the course has brought me substantial gains", "the course has ignited my enthusiasm for teaching" and "I am willing to try to apply what the course has learned to my own classroom". According to statistical analysis, the average teaching experience of more than 10 years is higher than teachers with less than 10 years of experience, according to the results of the questionnaire, it is inferred that different incentive strategies should be adopted for teachers of different seniority to encourage teachers to develop a blended teaching model.

Keywords: online learning, blended learning, higher education, empowerment program

探討外科護理人員對骨科術後照護教育訓練之需求評估

Exploring the Needs Assessment of Surgical Nurses for Postoperative Orthopedic Care Education and Training

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【摘要】 骨折在外科病房很常見的疾病，手術介入是最主要的介入方式。減除病人手術後的疼痛、增加患肢活動度及肌肉力量，術後照護、衛教及復健運動在臨床照護工作上是非常重要的。在臨床的骨科術後照護教育除了單位一年舉辦兩堂實體課程外，其餘時間不會硬性安排課程教學，因應臨床醫療體系複雜忙碌，沒有更多時間額外學習。骨科術後照護常仰賴學長姐的經驗傳承，對於學習吸收都是不一致性的，所以對於骨科術後的照護品質的呈現就會不一致，期望藉由本次研究了解外科護理人員對於骨科術後照護教育課程需求，希望作為以後在職訓練與教學課程內容的參考。

【關鍵詞】 外科護理人員、骨折、手術後照護、教育訓練

Abstract: Fractures are very common in surgical wards and surgical intervention is the main intervention. Post-operative care, health education and rehabilitation exercises are very important in clinical care to reduce post-operative pain and increase mobility and muscle strength of the affected limbs. In clinical orthopedic post-operative care education, except for two physical courses held by the unit a year, there are no mandatory courses for the rest of the year, as the clinical health care system is complex and busy, leaving little time for additional learning. It is hoped that this study will help to understand the needs of surgical nurses for orthopedic postoperative care education courses and serve as a reference for future on-the-job training and teaching course content.

Keywords: Surgical paramedics, fractures, post-operative care, education and training

TAECT 2022 大會交通資訊

自行開車

中山高：圓山交流道下→建國南北快速道路→左轉和平東路→國立臺北教育大學

北二高：木柵交流道下→辛亥路→右轉復興南路→右轉和平東路→國立臺北教育大學

搭乘捷運

科技大樓站：文湖線「科技大樓站」出口行至和平東路左轉約 1 分鐘即可到達。

搭乘公車

公車（復興南路口站下車）：237、295、紅 57、復興幹線

公車（國立臺北教育大學站下車）：18、52、72、207、211、235、278、278(區間車)、284、568、662、663、680、685、688、和平幹線

騎乘 U-bike

為鼓勵使用大眾運輸系統，達成環保與節能目的，本校正門口及東側門設有 U-bike（1.0 及 2.0）租賃站。

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|------------|-------------|----------------------|----------|
| 01 校門 V | 02 鐘樓 | 03 舊宿舍區 | 04 文藝樓 S |
| 05 行政大樓 A | 06 圖書館 H | 07 科學館 B | 08 視聽館 F |
| 09 至善樓 G | 10 學生活動中心 L | 11 學生宿舍 一宿 O
二宿 P | 12 藝術館 M |
| 13 體育館 K | 14 籃排球場 T、J | 15 明德樓 C | 16 田徑場 I |
| 17 溫水游泳池 Z | 18 創意館 E | 19 大禮堂 Q | 20 篤行樓 Y |
| 21 北師美術館 X | | | |

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