

「生態與環境想像」通識課程的行動學習歷程

李曉菁^{1*}、林煒舒²

¹元智大學通識教學部兼任助理教授

²元智大學通識教學部 USR 計畫執行長

摘要

當代環境問題多元，異質的環境意識亦導致不同問題的解決取徑，環境教育教學者如何規劃適當的課程，在詮釋、批判或實證的課程研討方法中取得平衡，甚至進一步與真實情境與實作學習連結，是這篇論文希望探求的問題。研究者在元智大學通識教學部自 104-2 學期起開設「生態與環境想像」課程至今，最初的教學目標以結合「經典五十」課程，透過引介歐美生態經典論述，引導課堂學生具備生態理論思辨能力，從而建構具有正向的環境倫理觀。本研究歷經四個學期的教學與調整，以行動學習作為歷程研究方法，與協同教師合作訪談、參與 USR 計畫、進行戶外教學課程調整與實施學生學習回饋分析。課程的運作從初期的純粹理論講授，到導入戶外教學，讓學生的學習與在地環境連結，進而產生理論與實務得以互相對話的行動學習歷程。由研究結果反思：教學不應傾向技術培訓，而強調學習者培養出解決問題與達成目標的能力。因此環境教育需要在不斷反思的行動中，建立與真實環境的連結，讓學生得以透過多元的課程規劃提升環境覺知。本課程轉向培養學生思考的「發展觀點」，甚至可促進學生自我效能的「滋養觀點」，在這過程中，學生成為透過環境經驗主動的學習者；而教師也成為異質環境經驗的組織者、參與者或探索者。

關鍵字： USR、戶外教學、行動學習、經典五十、環境教育

投稿日期：2018 年 05 月 25 日；接受日期：2018 年 11 月 12 日

而是怎麼學，從而導出本研究的主要貢獻在於：教學者不傾向技術培訓，而強調學習者培養出解決問題與達成目標的能力。從行動學習觀察教學關係，師生間從單一方向和階層關係，轉化為共同學習，而在解決問題的過程中，參與學習者彼此間也形成合作學習的夥伴關係。

二、未來教學調整之策略

本課程規畫方式有知識建構、深化概念、知識驗證與體驗學習等四個面向，教師需思考多元評量的方式，並將學生回饋納入下次課堂規劃考量。主要教學者與協同教師透過四學期教學規劃與反思的行動學習歷程，進行學習前的安排、學習中目標設定與學習後的評估。從學生的課堂表現、問卷與報告的探討中，了解到學生生態知識、情意與技能的確有透過課程規劃方式獲得增長。在課程的規劃運作上，教師也從初期的純粹理論講授，到導入戶外教學方法，以行動學習的取徑，自實際課程操作之中，使生態論述與在地環境得以相互對話。

本研究發現環境教育需要在不斷反思的行動中，建立與真實環境的連結，讓學生得以透過多元的課程規劃提升環境覺知，在這過程中，學生成為透過環境經驗主動的學習者；而教師也成為環境經驗的組織者、參與者或探索者。建議有志開設環境教育課程的教學者，在規劃過程如能將課程脈絡從有關(about)環境的知識，結合在(in)環境的行動，更能讓學生的真實體驗成為創造與共享知識的起步。

柒、參考文獻

王俊秀(2001)。環境社會學的想像。臺北市：巨流。

【Wang, C. S. (2001). *Imagination of Environmental Sociology*. Taipei: Chuliu.】

王順美(2014)。探討環境教育的背景脈絡及其概念。教育論叢，2，8。

【Wang, S. M. (2014). Exploring the context of environmental education and paradigmatic

- concepts in environmental education. *Educational Discourses*, 2, 8.】
- 汪浩(譯)(2004)。《風險社會－通往另一個現代的路上》(原作者：U. Beck)。臺北市：巨流。(原著出版年 1986)
- 【Wang, H. (2004) (Tran). *Risk society: Towards a new modernity*. (Original author: U. Beck). Taipei: Chuliu.】
- 李文昭(譯)(2018)。《寂靜的春天》(原作者：R. Carson)。臺中市：晨星。(原著出版年 1962)
- 【Li, W. J. (2018) (Tran). *Silent spring*. (Original author: R. Carson). Taichung: Morning Star Group.】
- 李瑛、何青蓉(主編)(2014)。《成人教與學的豐富視界：師生與內容共構的課堂》。臺北市：華騰。
- 【Li, Y., & Ho, C. J. (Eds.) (2014). *The abundant vision of adult teaching and learning: The classroom co-constructed by teachers, students and the content*. Taipei: Farternng.】
- 李曉菁(2017)。《環境議題下社大相關課程的論析：風險社會的觀點》。載於李瑛、何青蓉(主編)，《社會變遷與成人教育實踐之路》(pp. 91-118)。臺北市：華騰。
- 【Li, H. C. (2017). The analysis of relevant courses in community universities under the category of environmental issues: The perspective from risk society. In Y. Li, & C. J. Ho (Eds.), *Towards a road of social transformation and the practice of adult education*. Taipei: Farternng.】
- 李靜滢(譯)(2015)。《沙郡年紀》(原作者：A. Leopold)。臺北市：果力文化。(原著出版年 1949)
- 【Li, J. Y. (2015) (Tran). *A sand county almanac and other writings*. (Original author: A. Leopold). Taipei: Reveals Books.】
- 周儒、呂建政(譯)(2015)。《戶外教學》(原作者：D. R. Hammerman, W. M. Hammerman, & E. L. Hammerman)。臺北市：五南。(原著出版年：1994)
- 【Chou, J., & Lu, C. C. (Tran.)(2015). *Teaching in the outdoors* (Original author: D. R. Hammerman, W. M. Hammerman, & E. L. Hammerman). Taipei: Wunan.】
- 許雅惠(譯)(2002)。《成人及繼續教育：理論與實務》(原作者：P. Jarvis)。臺北市：

五南。(原著出版年：1995)。

【Xu, Y. U. (Tran.)(2002). *Adult and continuing education: Theory and practice* (Original author: P. Jarvis). Taipei: Wunan.】

徐綺穗(2007)。行動學習理論及其對教師教學的啟示。**國教之友**，58(3)，50-56。

【Xu, Q. S. (2007). Action learning theory and its inspiration toward teachers' teaching. *Guo Jiao Zhi You*, 58(3), 50-56.】

張馨勻(2017)。「生態與環境想像」戶外教學參訪心得：凱達格蘭·坑仔蘆竹。

載於梁家祺(主編)，**元智全球在地文化報**，57，第4版。

【Zhang, X. Y. (2017). Feedback to “Ecology and Environmental Imagination” teaching in the outdoors: Kai da ge lan, keng zai lu zhu. In Liang, J. C. (Ed.), *Yuan Ze Glocal Culture Newspaper*, 57, 4】

廖婉如(2017)。Ecological Taoyuan。載於梁家祺(主編)，**元智全球在地文化報**，

57，第4版。

【Liao, W. R. (2017). Ecological Taoyuan. In Liang, J. C. (Ed), *Yuan Ze Glocal Culture Newspaper*, 57, 4】

蔡敦浩、李慶芳(2016)。**實踐智慧：常實踐、得智慧**。取自：

http://reskm98.blogspot.tw/2016/07/blog-post_31.html

【Tsai, T. H., & Lee, C. F. (2016). Practice wisdom: Practice frequently, getting wisdom. Retrieved from http://reskm98.blogspot.tw/2016/07/blog-post_31.html】

薛絢(譯)(2014)。**民主與教育**(原作者：J. Dewey)。台北市：大塊文化。(原著出版年：1916)。

【Xue X. (Tran.)(2014). *Democracy and education* (Original author: J. Dewey). Taipei: Locus.】

Argyris, C., & Schön, D. (1974). *Theory in practice: Increasing professional effectiveness*. London, England: Jossey-Bass.

Brockbank, A., & McGill, I. (1998). *Facilitating reflective learning in higher education*. London, England: Society for research into higher education, Ltd.

Carson, R. (1962). *Silent spring*. New York, NY: Crest Book.

Gardner, G. T., & Stern, P. C. (2002). *Environmental problems and human behavior*.

- (2nd ed.). Boston, MA: Pearson.
- Gough, A. (1997). *Education and the environment: Policy, trend and the problems of marginalisation*. Melbourne, Australia: The Australian Council for Educational Research Ltd.
- Jarvis, P. (1995). *Adult and continuing education: Theory and practice* (2nd ed.). London, England: Routledge.
- Leopold, A. (1968). *A sand county almanac: And sketches here and there*. London, England: Oxford University Press.
- Lucas, A. (1972). *Environment and environmental education: Conceptual issues and curriculum implications*. Doctoral dissertation, Ohio University, Athens.
- Marquardt, M. J. (2004). *Optimizing the power of action learning: Solving problems and building leaders in real time*. Mountain View, CA: Davies-Black Publishing.
- Naess, A. (1972). The shallow and the deep, long-range ecology movement: A summary. *Inquiry* 16, 95-100.
- Palmer, J. A. (1998). *Environmental education in the 21st century*. London, England: Routledge.
- Pratt, D. D., & Associates (1998). *Five perspectives on teaching in adult and higher education*. Malabar, FL: Krieger Publishing Company.
- Ritter, M. (1992) (Tran). *Risk society: Towards a new modernity*. (Original author: U. Beck). London, England: SAGE.
- Robottom, I., & Hart, P. (1993). *Research in environmental education: Engaging the debate*. Geelong, Victoria: Deakin University.
- Rugg, H. (1931). *Culture and education in America*. New York, NY: Harcourt, Brace & Co.

作者簡介：

李曉菁 元智大學通識教學部兼任助理教授

電話：0937188615

電子郵件：carolshop999@hotmail.com

通訊處：320 桃園縣中壢市遠東路 135 號

林煒舒 元智大學通識教學部 USR 計畫執行長

電話：0910806961

電子郵件：lws571@gmail.com

通訊處：320 桃園縣中壢市遠東路 135 號

Li, Hsiao-Ching

Adjunct Assistant Professor, Yuan Ze University College of General Studies

Tel: 0937188615

E-mail: carolshop999@hotmail.com

Address: No.135, Yuandong Rd., Zhongli Dist., Taoyuan City 320, Taiwan (R.O.C.)

Lin, Wei-Shu

CEO, Yuan Ze University Taoyuan Cultural Corridor USR Project Office

Tel: 0910806961

E-mail: lws571@gmail.com

Address: No.135, Yuandong Rd., Zhongli Dist., Taoyuan City 320, Taiwan (R.O.C.)

An Action Learning Study on a General Education Course: “Ecology and Environmental Imagination”

Hsiao-Ching Li ^{1*}, Wei-Shu Lin ²

^{1.} Adjunct Assistant Professor, Yuan Ze University College of General Studies

^{2.} CEO, Yuan Ze University Taoyuan Cultural Corridor USR Project Office

Abstract

Alternative environmental consciousness leads to different approaches to solve contemporary environmental problems. This study aims to explore how the environmental educators may design appropriate courses and find a balance between interpretive, critical and practical courses, through which students can link to real lives. The researcher has offered a course under the title of “Ecology and Environmental Imagination” since the second semester of 104 academic year in the College of General Studies in Yuan-Ze University. The original teaching purpose of this course is to combine the reading of “Classic 50” and introduce students to certain classic European and American ecological discourses. Through reading these classics, students are expected to develop critical thinking and positive environmental ethics. However, throughout the teaching, the researcher deeply senses the necessity to connect environmental knowledge and local environment. This research has gone through teaching and adjustment for four semesters, through which outdoor pedagogy has been programmed in the course so as to enhance students’ environmental consciousness. The approach of action learning has been applied to this research, including interviews with the cooperative teacher, participating in the USR plan, conducting questionnaires and analyzing students’ feedbacks. The exercise of the course turned out to be a combination of abstract discourses and a link to local environment. Thus, students can develop learning processes via discussions and

dialogues between theories and practices. This research leads to the belief that teachers are supposed to not only train learners' specific skills, but also focus on cultivating learners' abilities to solve problems and achieve goals. Therefore, environmental education requires continuous reflexive actions to build up links to actual environment. Students' environmental awareness can therefore be enhanced through the course plan which focuses on the development perspective that helps cultivating students' ability to think, and even the nourishment perspective that helps improving students' self-efficacy. Through environmental education, students play the role of active learners, while teachers play the role of organizers, participants or even explorers to heterogeneous environmental experiences.

Keywords: USR, outdoor pedagogy, action learning, Classic 50, environmental education