

中文：環境心理 / 行為學研究與專案

英文： The issues and practices of Environmental Psychology/ Behavior

環境與文化資源學系社會與社區學習領域教學碩士班一年級 選三學分

禮拜四 10-12 教室：5201 上課時間：18:00-20:30

授課老師：曾慈慧 Tzuhui A. Tseng 分機：72817

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■課程目標：

環境心理學是門有趣的學科也是屬於跨領域的學習，是研究環境與人的心理和行為之間關係的一個應用社會心理學領域，又稱人類生態學或生態心理學。這裡所說的環境雖然也包括社會環境，但主要是指物理環境，包括噪音、擁擠、空氣質量、溫度、建築設計、個人空間等等。目前定義中，最好的是 Proshansky(1990)的描述：環境心理學是一門關心人與環境之間的互動與關係的學科。環境心理學為研究人與場所如何產生互動之學科，該場所可小到一個空間、大到整個區域。此學科乃休閒遊憩、觀光旅遊、景觀規劃與環境設計中，關於探討人如何使用環境，環境如何影響人之基礎學科。

你是否想過為何當你在一個城市住久之後，你覺得這個城市好像沒有你想像的大？

你覺得自己看地圖的能力如何？在某些城市你就是比較不會迷路？

為何晴天時候心情比較好？氣候環境對您而言有哪方面的影響？來自不同地區的人的行為會受到哪些氣候因素的影響？

要如何利用建築材質、色彩或家具營造出宴會的感覺？哪種規劃設計可以創造出紀念性空間？何種環境有助於老師教學與學生學習？那些環境鼓勵犯罪？

都市與鄉下可以給你不同的知覺與體驗？心情不好壓力很大的時候通常我們會去哪裡呢？

這些都是環境心理學領域要探討的。由於環境心理學領域中有許多科學的實證研究與場所之調查，因此本課程之目標除理論之講述之外，還將帶領學生實際操弄有關環境研究的相關議題。我們將利用課堂上課、實習以及同學報告認識這門領域，未來將可以運用到任何環境分析與區域研究中。

Course Outline (Tentative)

週數	日期	課程名稱	附註
1	9/14	課程介紹與評量之說明 下次討論 ◆回去請瀏覽 EDRA 網站 www.edra.org IAPS 網站 https://iaps-association.org/	買書(請大家自行購買或者影印)
2	9/21	何謂環境心理學 1.緣起、定義、內涵 2.研究現況與發展 3.環境心理學的研究方法 圖、文字講義	繳交作業一 10/6 前上傳
3	9/28	教師節放假	

4	10/5	環境認知 環境知覺理論 畫新竹市空間認知圖 認知圖與找路 Kevin Lynch 都市意象 圖、文字 ◆畫認知圖	繳交作業二 10/12 前上傳
5	10/12	潛在環境 潛在環境對人的影響： 氣候、高度、溫度、光、顏色。 討論你最喜歡與最討厭以及感到最有壓力的空間。	
6	10/19	請假	
7	10/26	工作環境與學習環境 校園、博物館與動物園 ◆找個學習環境走一走吧！	
8	11/02	11/03 校外教學 林業體驗	
9	11/09	期中考：影片欣賞 居住環境 居住環境 宿舍與城市 地方依附(place attachment) ◆補充健康社區、親兒童環境	繳交作業四 11/10 前上傳
10	11/16	自然環境： 環境偏好、戶外遊憩與野外經驗 治療性景觀環境 繳交期中作業	繳交期中作業 11/24 之前上傳
11	11/23	環境問題與行為對策 行為技術與環境問題、與健康有關的環境問題	
12	11/30	專題演講	
13	12/07	■ 課堂 paper 討論 三位同學	
14	12/14	■ 課堂 paper 討論 二位同學	
15	12/21	■ 課堂 paper 討論 二位同學	
16	12/28	停課：參加林業體驗補課	
17	1/04	期末考：交期末作業	繳交期末作業 1/05 之前上傳

■教學方式：

上課理論講述與討論(power point)

個案分析與討論

文獻導讀

學生課堂報告

■評量方式：

Assignments 課堂作業與報告: 30%

Attendance and discussion 上課態度與討論: 30%

Midterms 期中考: 20%

Final 期末報告: 20%

(報告遲交一率 60 分以下，上課發問與全勤均會加分。上課可用餐、但請勿滑手機、走動或聊天視同缺席)

■參考書目：

I. Prerequisites 指定參考書

Frank T. McAndrew, 危芷芬譯，2008，環境心理學，台北：五南出版社。
ISBN：9789571109824

II. 上學年指定 PAPER 課堂指定報告

◆環境知覺

1.Chung-Shing Lee, J. Thad Barnowe, David E. McNabb, (2005) Environmental perceptions, attitudes and priorities: cross-cultural implications for public policy, *Cross Cultural Management: An International Journal*, 12(1), 61-83.

◆地方依附

2.Dallago, L., Perkins, D. D., Santinello, M., Boyce, W. I., Molcho, M., & Morgan, A. (2009). Adolescent Place Attachment, Social Capital, and Perceived Safety: A Comparison of 13 Countries. *American Journal of Community Psychology*, 44(1/2), 148-160.

◆環境教育

3.Bogne, F. X. (2002). The influence of a residential outdoor education programme to pupil's environmental perception. *European Journal of Psychology of Education*, 17(1), 19-34.

◆兒童的週遭環境

4.Broberg, A., Kyttä, M., & Fagerholm, M. (2013). Child-friendly urban structures Bullerby revisited. *Journal of Environmental Psychology*, 35, 110-120.

◆自然連結

5.Brügger, A., Kaiser , F. G., & Roczen, N. (2011). One for all? Connectedness to nature, inclusion of nature, environmental identity, and implicit association with nature. *European Psychologist*, 16, 324-333.

◆友善兒童、活動與健康鄰里環境

6. Islam, M. Z., Moore, R., & Cosco, N. (2014). Child-Friendly, Active, Healthy Neighborhoods Physical Characteristics and Children's Time Outdoors. *Environment and Behavior*, 48(5),

◆復癒活動與 Campbell 範型

7. Beute, F., Kaiser, F. G., Haans, A., & de Kort, Y. (2017). Striving for mental vigor through restorative activities: Application of the Campbell Paradigm to construct the Attitude toward mental vigor scale. *Mental Health & Prevention*, 8, 20-26.

III. References 參考書

1. Bell et al.著・聶筱秋等譯 (2003)・環境心理學・台北：桂冠圖書股份有限公司。
2. Stokols, D. and Altman, I. (Eds.) (1987). *Handbook of environmental psychology* (Vol. II). New York, NY: Wiley & Sons.
3. Rutledge, Albert J., 1993. *A Visual Approach to Park Design*. John Wiley & Sons, Inc. New York.
4. 李素馨 譯・行為觀察與公園設計・田園城市文化事業有限公司。民88年。
5. 研究與設計：環境行為研究的工具・民85・關華山 譯・田園城市文化。
6. 王錦堂 編・1994・環境設計應用行為學・東華書局。
7. 社會與行為科學研究法・楊國樞・文崇一・吳聰賢・李亦園 編・東華書局・民86。
8. 常懷生・1995・建築環境心理學・田園城市。

IV. Other Information 修改自畢恆達「環境心理學」

◎環境心理學教科書書目

- Proshansky, H. M., Ittelson, W. H., & Rivlin, L. G. (Eds.). (1970). *Environmental psychology: Man and his physical setting*. New York: Holt, Rinehart and Winston. 第一本環境心理學讀本
- Toepfer, C. T., Bicknell, A. T., Fox, L., Kirk, W., & Sayre, R. (Eds.). (1972). *Environmental psychology: Selected readings*. New York: MSS Information.
- Deasy, C. M. (1974). *Design for human affairs*. New York: Wiley.
- Ittelson, W. H., Proshansky, H., Rivlin, L., & Winkel, G. (1974). *An introduction to environmental psychology*. New York: Holt, Rinehart & Winston. 第一本環境心理學教科書
- Mehrabian, A., & Russell, J. A. (1974). *An approach to environmental psychology*. Cambridge, MA: The MIT Press.
- Heimstra, N. W., & McFarling, L. (1974). *Environmental psychology*. Monterey, CA: Brooks/Cole.
- Canter, D. (Ed.). (1975). *Environmental interaction: Psychological approaches to our physical surroundings*. England: Surrey University Press.
- Mercer, C. (1975). *Living in cities: Psychology and the urban environment*. Harmondsworth, England: Penguin Books.
- Mehrabian, A. (1976). *Public places and private spaces: The psychology of work, play, and living*. New York: Basic Books.
- Proshansky, H. M., Ittelson, W. H., & Rivlin, L. G. (Ed.). (1976). *Environmental psychology: People and their physical settings* (2nd ed.). New York: Holt, Rinehart & Winston.
- Porteous, J. D. (1977). *Environment & behavior: Planning and everyday urban life*. Reading, MA: Addison-Wesley.
- Stokols, D. (Ed.). (1977). *Perspectives on environment and behavior: Theory, research and applications*. New York: Plenum.
- Bell, P. A., Fisher, J. D., & Loomis, R. J. (1978). *Environmental psychology*. Philadelphia:

Saunders.

- Farbstein, J., & Kantrowitz, M. (1978). *People in places: Experiencing, using, and changing the built environment*. Englewood Cliffs, NJ: Prentice-Hall.
- Heimstra, N. W., & McFarling, L. (1978). *Environmental psychology* (2nd ed.). Monterey, CA: Brooks/Cole.
- Kaplan, S., & Kaplan, R. (Eds.). (1978). *Humanscape: Environments for people*. North Scituate, MA: Duxbury Press.
- Wicker, A. W. (1979). *An introduction of ecological psychology*. Monterey, CA: Brooks/Cole.
- Levy-Leboyer, C. (1979/1982). *Psychology and environment*. Beverly Hills, CA: Sage.
- Holahan, C. J. (1982). *Environmental psychology*. New York: Random House.
- Feimer, N. R., & Geller, E. S. (Ed.). (1983). *Environmental psychology: Directions and perspectives*. New York: Praeger.
- Fisher, J. D., Bell, P. A., & Baum, A. (1984). *Environmental psychology* (2nd ed.). New York: Rinehart & Winston.
- Deasy, C. M., & Lasswell, T. E. (1985). *Designing places for people: A handbook on human behavior for architects, designers, and facility managers*. New York: Whitney Library of Design.
- Gifford, R. (1987). *Environmental psychology: Principles and practice*. Boston: Allyn and Bacon. 有中譯本，不過因為沒有拿到翻譯著作權，所以在台灣著作權法通過之後，心理出版社就不再賣了。
- Lang, J. T. (1987). *Creating architectural theory: The role of the behavioral sciences in environmental design*. New York: Van Nostrand Reinhold.
- Bell, P. A., Fisher, J. D., Baum, A., & Greene, T. E. (1990). *Environmental psychology* (3rd ed.). Fort Worth, TX: Holt, Rinehart and Winston.
- McAndrew, F. T. (1993). *Environmental psychology*. Pacific Grove, CA: Brooks/Cole. 有中譯本，危芷芬翻譯，五南出版社。
- Bonnes, M., & Secchiaroli, G. (1995). *Environmental psychology: A psycho-social introduction*. Thousand Oaks, CA: Sage.
- Veitch, R., & Arkkelin, D. (1995). *Environmental psychology: An interdisciplinary perspective*. Englewood Cliffs, NJ: Prentice Hall.
- Bell, P. A., Greene, T. C., Fisher, J. D., & Baum, A. (1996). *Environmental psychology* (4th ed.). Fort Worth, TX: Harcourt Brace College.
- Bechtel, R. B. (1997). *Environment and behavior: An introduction*. Thousand Oaks, CA: Sage.
- Gifford, R. (1997). *Environmental psychology: Principles and practice* (2nd ed.). Boston: Allyn and Bacon.
- Cassidy, T. (1997). *Environmental psychology: Behaviour and experience in context*. East Sussex, UK: Psychology Press.
- Bell, P. A., Greene, T. C., Fisher, J. D., & Baum, A. (2000). *Environmental psychology* (5th ed.). Fort Worth, TX: Harcourt Brace College.
- Gifford, R. (2002). *Environmental psychology: Principles and practice* (3rd ed.). Colville, WA: Optimal Books.

◎環境心理學手冊

- Stokols, D., & Altman, I. (Eds.). (1987). *Handbook of environmental psychology*. New York: Wiley.
- Bechtel, R. B., & Churchman, A. (Eds.). (2002). *Handbook of environmental psychology*. New York: Wiley.
- Werner, C. M., Brown, B. B., & Altman, I. (1997). Environmental psychology. In J. W. Berry & M. H. Segall & C. Kagitcibasi (Eds.), *Handbook of cross-cultural psychology: Vol. 3. Social behavior and applications* (2nd ed., pp. 255-290). Needham Heights, MA: Allyn & Bacon.

◎環境心理學年度評論

- Craik, K. H. (1973). Environmental psychology. *Annual Review of Psychology*, 24, 403-422.
- Stokols, D. (1978). Environmental psychology. *Annual Review of Psychology*, 29, 253-295.
- Russell, J. A., & Ward, L. M. (1982). Environmental psychology. *Annual Review of Psychology*, 33, 651-688.
- Holahan, C. (1986). Environmental psychology. *Annual Review of Psychology*, 37, 381-407.
- Saegert, S., & Winkel, G. H. (1990). Environmental psychology. *Annual Review of Psychology*, 41, 441-477.
- Stern, P. C. (1992). Psychological dimensions of global environmental change. *Annual Review of Psychology*, 43, 269-302.
- Sundstrom, E., Bell, P. A., Busby, P. L., & Asmus, C. (1996). Environmental psychology 1989-1994. *Annual Review of Psychology*, 47, 485-512.
- Suedfeld, P., & Steel, G. D. (2000). The environmental psychology of capsule habitats. *Annual Review of Psychology*, 51, 227-253.
- Lawrence, D. L., & Low, S. M. (1990). The built environment and spatial form. *Annual Review of Anthropology*, 19, 453-505.
- Dunlap, R. E. & Catton, W. R. (1979). Environmental sociology. *Annual Review of Sociology*, 5, 243-273.
- Buttel, F. H. (1987). New directions in environmental sociology. *Annual Review of Sociology*, 13, 465-488.
- Gieryn, T. F. (2000). A space for place in sociology. *Annual Review of Sociology*, 26, 463-496.

此外 · *Progress in Human Geography* 每一二年就會有關於 behavioral and perceptual geography 的回顧

環境心理學系列叢書

- Altman, I., & Wohlwill, J. F. (Eds.). (1976). *Human behavior and environment: Advances in theory and research*: Vol. 1. New York: Plenum.
- Altman, I., & Wohlwill, J. F. (Eds.). (1977). *Human behavior and environment: Advances in theory and research*: Vol. 2. New York: Plenum.
- Altman, I., & Wohlwill, J. F. (Eds.). (1978). *Human behavior and environment*: Vol. 3. *Children and the environment*. New York: Plenum.

- Altman, I., Rapoport, A., & Wohlwill, J. F. (Eds.). (1980). Human behavior and environment: Vol. 4. Environment and culture. New York: Plenum Press.
- Altman, I., Wohlwill, J. F., & Everett, P. B. (Eds.). (1981). Human behavior and environment: Vol. 5. Transportation and behavior. New York: Plenum Press.
- Altman, I., & Wohlwill, J. F. (Eds.). (1983). Human behavior and environment: Vol. 6. Behavior and the natural environment. New York: Plenum.
- Altman, I., Lawton, M. L., & Wohlwill, J. F. (Eds.). (1984). Human behavior and environment: Vol. 7. Elderly people and the environment. New York: Plenum.
- Altman, I., & Werner, C. M. (Eds.). (1985). Human behavior and environment: Vol. 8. Home environment. New York: Plenum Press.
- Altman, I., & Wandersman, A. (Eds.). (1987). Human behavior and environment: Vol. 9. Neighborhood and community environments. New York: Plenum Press.
- Altman, I., & Zube, E. H. (Eds.). (1989). Human behavior and environment: Vol. 10. Public places and spaces. New York: Plenum Press.
- Altman, I., & Christensen, K. (Eds.). (1990). Human behavior and environment: Vol. 11. Environment and behavior studies: Emergence of intellectual traditions. New York: Plenum Press.
- Altman, I., & Low, S. M. (Eds.). (1992). Human behavior and environment: Vol. 12. Place attachment. New York: Plenum.
- Altman, I., & Churchman, A. (Eds.). (1994). Human behavior and environment: Vol. 13. Women and the environment. New York: Plenum.
- Zube, E. H., & Moore, G. T. (Eds.). (1987). Advances in environment, behavior, and design: Vol. 1. New York: Plenum Press.
- Zube, E. H., & Moore, G. T. (Eds.). (1989). Advances in environment, behavior, and design: Vol. 2. New York: Plenum Press.
- Zube, E. H., & Moore, G. T. (Eds.). (1991). Advances in environment, behavior, and design: Vol. 3. New York: Plenum Press.
- Moore, G. T., & Marans, R. W. (Eds.). (1997). Advances in environment, behavior, and design: Vol. 4: Toward the integration of theory, methods, research, and utilization. New York: Plenum Press.
- Baum, A., Singer, J. E., & Valins, S. (Eds.). (1978). Advances in environmental psychology: Vol. 1. The urban environment. Hillsdale, NJ: Erlbaum.
- Baum, A., & Singer, J. E. (Eds.). (1980). Advances in environmental psychology: Vol. 2. Applications of personal control. Hillsdale, NJ: Erlbaum.
- Baum, A., & Singer, J. E. (Eds.). (1981). Advances in environmental psychology: Vol. 3. Energy: Psychological perspectives. Hillsdale, NJ: Erlbaum.
- Baum, A., & Singer, J. E. (Eds.). (1982). Advances in environmental psychology: Vol. 4. Environment and health. Hillsdale, NJ: Erlbaum.
- Baum, A., & Singer, J. E. (Eds.). (1985). Advances in environmental psychology: Vol. 5. Methods and environmental psychology. Hillsdale, NJ: Erlbaum.
- Lebovits, A. H., Baum, A., & Singer, J. E. (Eds.). (1986). Advances in environmental psychology: Vol. 6. Exposure to hazardous substances : psychological parameters. Hillsdale, NJ: Erlbaum.

其他重要讀本及書籍 · 不勝枚舉

- Michelson, W. (1970). *Man and his urban environment: A sociological approach.* Reading, MA: Addison-Wesley.
- Perin, C. (1970). *With man in mind: An interdisciplinary prospectus for environmental design.* Cambridge, MA: The MIT Press.
- Zeisel, J. (1975). *Sociology and architectural design.* New York: Russell Sage Foundation.
- Bennett, C. (1977). *Spaces for people: Human factors in design.* Englewood Cliffs, NJ: Prentice-Hall.
- Moore, G. T., Tuttle, D. P., & Howell, S. C. (1985). *Environmental design research directions: Process and prospects.* New York: Praeger.
- Garling, T., & Golledge, R. G. (Eds.). (1993). *Behavior and environment.* New York: Elsevier Science.
- Wapner, S., Demick, J., Yamamoto, T., & Takahashi, T. (Eds.). (1997). *Handbook of Japan-United States environment-behavior research: Toward a transactional approach.* New York: Plenum.
- Nasar, J. L., & Preiser, W. F. E. (Eds.). (1998). *Directions in person-environment research and practice.* Hampshire, UK: Ashgate.
- Walsh, W. B., Craik, K. H., & Price, R. H. (Eds.). (2000). *Person-environment psychology: New directions and perspectives* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum.
- Wapner, S., Demick, J., Yamamoto, T., & Minami, H. (Eds.). (2000). *Theoretical perspectives in environment-behavior research: Underlining assumptions, research problems and methodologies.* New York: Plenum.

◎環境心理學期刊

- Environment and Behavior* (1969--)
- Journal of Environmental Psychology* (1981--)
- Children, Youth and Environments* (1984-)
- Architecture and Behaviour* (1980—1995)
- Journal of Architectural and Planning Research* (1984--)
- Environmental Design Research Association Proceedings* (1969--)

◎環境心理學研究所

Environmental Psychology Program, Graduate School and University Center, City University of New York, 1968—

Environment-Behavior Studies, PhD Program in Architecture, University of Wisconsin, Milwaukee

School of Social Ecology, University of California, Irvine

Man-Environment Relation, Pennsylvania State University, 1968-1986

其他 UC Berkeley, U of Arizona, Georgia Institute of Technology,

◎環境心理學學術組織

1.美國環境設計研究學會 ENVIRONMENTAL DESIGN RESEARCH ASSOCIATION (EDRA)

北美 1968- <http://www.edra.org/>

2. International Association for People and Their Surroundings (IAPS) 歐洲 1981-

- 後改名 International Association for People-Environment Studies
<http://www.bwk.tue.nl/iaps/home.htm>
3. Man-Environment Relations Association (MERA) 日本 1982-
<http://kenko.human.waseda.ac.jp/mera/index-j.html>
4. People and Places Environment Research (PAPER) 澳洲、紐西蘭 1983-
Environment-Behavior Research Association (EBRA) 中國 1996-
<http://www.chinaebra.org>
5. Human-Environment Relations Studies (HERS) 台灣 1997- (非正式)
6. Environmental Psychology in the UK 英國 1999-
<http://www.surrey.ac.uk/~pss1su/epuk/index.html>
7. Division 34: Population and Environmental Psychology. American Psychological Association
<http://web.uvic.ca/~apadiv34/> 網頁上可以閱讀 Population and Environmental Psychology Bulletin
1974: Task Force in Environment and Behavior.
1976: 與第 34 小組 Population 小組合併
1979: 出版 Resources in Environment and Behavior
9. Division of Environmental Psychology. International Association of Applied Psychology 1979-
<http://www.psy.gu.se/iaap/envpsych.htm>
http://www.psy.gu.se/iaap/IAAP_newsletter.htm
10. Section on Environmental Psychology. Canadian Psychological Association
<http://www.psych.ubc.ca/~enviropsych/> 網頁上可以看她們的 newsletters
11. Specialty Group: Environmental Perception and Behavioral Geography. The Association of American Geographers
<http://www.geog.ucsb.edu/epbg/>

■作業詳述

課堂 papers 作業

1. 負責導讀的同學需要整理出一張 A4 的重點發給同學，其於沒有輪到導讀的同學也需要瀏覽一下當週閱讀的 paper，上課才能積極參與討論。
2. 未輪到的導讀同學請寫學習單，期末請彙整學習單給老師

作業一

- 請瀏覽 EDRA 與 IAPS 的網站後，寫下心得。並且說明您個人有何特殊的環境體驗經驗，並且對這門課程的期許。

作業二

- 請劃出新竹市的空間認知圖。

作業三

- 自己選擇一間博物館、動物園等，實際觀察是否有課本上所說的空間梯度、博物館疲勞、感興趣的動物園區域等現象。

作業四

■林業體驗學習單。

■期中與期末個人作業

兩人一組嘗試寫小研究!!

題目自訂，嘗試寫出研究計畫書。需包含研究主題、研究動機、研究目的。

文獻回顧。根據要探討的變項論述過去研究的發展，分析其優缺限制。

研究方法、研究對象、研究地點、研究設計、研究工具與簡易的研究成果。

期中 11/17 須繳交文獻回顧部分。

期末 01/07 必須有簡易的研究成果。

題目：

1. 學習環境對於學生與師長的影響。

參考

▪Effect of campus design on human needs and educational objectives

Sherif, N. & Gabr, H. S.

▪Understanding the relationship between university physical learning environments and students and staff outcomes: A systematic review

McKay, D. R., Edgerton, E., McKechnie, J., Simpson, A., & Mesbahi, E.

2. 社會認同與親環境行為

參考

▪ The influence of environmental identity on perceived social status of pro-environmental behaviors

Uren, H. V., Roberts, L. D., Dzidic, P. L. & Leviston, Z.

▪The value of what others value: How personal and group values relate to pro-environmental attitudes and behaviors.

Bouman, T. & Steg, L.

3. 自然連結與親環境行為

參考

▪The relationship between connectedness to nature and environmental identity: results of a systematic review.

Jovarauskaite, L. & Balunde, A.

4. 環境行為的溢出效應之研究

參考 Thomas G. O. 的相關研究

▪Behavioral and policy spillover of the English plastic bag charge: Finding from a longitudinal mixed-methods research

Sautkina, E., Thomas, G. O. & Poortinga, W.

▪Pro-Environmental actions and behavioral spillover effects cultures: When (and Where) does one thing lead to another?

Nash, N., Whitmarsh, L. & Capstick, S.

5. 節能減碳的永續性

參考

- Motivations and barriers to sustainability in commercial building: a qualitative investigation
Whitey, S. & Riemer, M.
- Determinants of more sustainable modes of transportation for the commute.
Kibbe, A., Arnold, O. & Kaiser, F. G.
- The green road taken: Sustainable travel behavior of individuals within the campnell paradigm.
Kaiser, F. G. & Arnold, O.

■ 林業體驗參訪

11/3 (五) 請大家把時間空下來 新竹縣五峰鄉林班地及正昌製材廠。

本計畫透過林業體驗課程的推廣，讓民眾認識 FSC 認證與森林永續的重要性，藉由知性、感性、趣味的遊程設計與體驗課程的規劃，打造民眾對國產材的認識與重視，進而促進對國產材的消費與認同。

時間	體驗課程主題	體驗課程內容
8:40-9:00	報到	簽到、分組、名牌分發
9:00-10:00	相見歡	工作人員介紹行程、前往林班地
10:00-11:30	FSC 初體驗	認識 FSC 森林 參觀集材與造材作業
11:30-12:30	午餐	體驗林業工作人員如何在山上 用餐 自然體驗活動帶領
13:30-15:30	製材廠初體驗	製材場介紹 製材場體驗課程(磨光、上漆)
16:00-17:00	參觀林產品	常見林產品介紹 參觀展覽門市 伐木達人遊戲體驗
17:00	賦歸	

■ 註 1：活動若遇雨天改成室內介紹與森林經營遊戲體驗

■ 請在各梯次活動前二星期 MAIL 報名表資料或填寫 GOOGLE 表單，額滿為止。

https://docs.google.com/forms/d/100NU-NdJjogNTAZ-fccLuCZ_gDrkKXHqyEiKs-b6Das/edit

第____篇 姓名：_____ 班級：_____ 學號：_____

作者：_____ 年份：_____

篇名：_____

刊名稱：_____ 卷期：_____ 卷_____期_____頁數：_____

研究動機					
研究目的					
重要文獻					
研究方法	質化/量化	研究對象	研究工具	研究設計/抽樣	資料分析方法
研究結果/ 重要發現					
心得					
本篇文章 發想題目					