A Comparison of the Regional Environmental Education Centers in Korea and Taiwan: Systems, Roles, and Practices

Yu-Long Chao¹, Heekyung Kim², Chankook Kim^{3*}

1. Assistant Professor, National Formosa University

^{2.} Advisory Expert, Policy Planning Bureau, Ministry of Environment, Korea

3. Associate Professor, Korea National University of Education

Abstract

Based on the interviews with key members from the Gyeonggi-do Environmental Education Center (GEEC) in Korea and the Kao-Ping Environmental Education Regional Center (KPEERC) in Taiwan, this study compares their systems, roles, and practices. Korea has a national-regional-local EE center system and its EE Promotion Act supports the designation of EE centers while Taiwan's EE Act does not stipulate the establishment of EE centers. Setting up a database of EE organizations and creating an exchange platform for environmental educators are the most important achievements of GEEC and KPEERC, respectively. As for the roles of regional EE centers, the interviewees in both centers place more weight on "a supportive role for other organizations" than "an executive role to directly perform EE practices." The two centers face similar difficulties due to lacks of budget and manpower with EE expertise. The three-year contract-based operations may threaten stability or long-term planning of both centers. Nevertheless, they have similar achievements in initiating networks among EE partners and devising strategies to meet local EE needs. For future development, the GEEC members will put more effort in planning regional EE policies while KPEERC counterparts anticipate more active participation in regional sustainability.

Keywords: functional role, operation, regional environmental education center

投稿日期: 2017年02月10日;接受日期: 2017年09月25日

^{*} 通訊作者

References

- Allen, V. L., & van de Vliert, E. (1984). A role theoretical perspective on transitional processes. In V. L. Allen & E. van de Vliert (Eds.), *Role transitions:* explorations and explanations (pp. 3-18). New York, NY: Plenum.
- Ballantyne, R., & Packer, J. (2006). Promoting learning for sustainability: principals' perceptions of the role of outdoor and environmental education centres. *Australian Journal of Environmental Education*, 22(1), 15-29. doi: 10.1017/S0814062600001622
- Biddle, B. J. (1979). *Role theory: expectations, identities and behaviors*. New York, NY: Academic Press.
- Biddle, B. J. (1986). Recent developments in role theory. *Annual Review of Sociology*, 12, 67-92.
- Cha, S. C., Jung, G. I., Lee, K. M., Oh, C. G., Chang, Y.-H., & Lee, S. W. (2016). A study on functions of the environmental education centers in accordance with hierarchy. *The Environmental Education*, 29(2), 233-250. (in Korean)
- Chen, D.-S. (1992). An institutionalism analysis on formal organizations. *Review of Social Sciences*, 40, 111-133. (in Chinese)
- Chou, J. (2011). Practicing Environmental Education: Environmental Learning Centers. Taipei: Wunan. (in Chinese)
- Chou, J., & Chiang, Y.-C. (2013). Exploring the characteristics of quality environmental learning centers by the Delphi technique. *Journal of Environmental Education Research*, 9(2), 1-32. doi: 10.6555/JEER.9.2.001
- Chou, J., & Lin, M.-R. (2000). A planning research on local environmental learning center: an example of Taichung metropolitan area. Research report of the Ministry of Education. Taipei: Ministry of Education. (in Chinese)
- Chiang, P.-Y. (2016). The evaluation of central environmental education regional center's operating mechanisms and effectiveness. Unpublished master's thesis, National Taichung University of Education, Taichung.

- Choi, S.-J., Kim, I.-H., Kum, J.-H., & Cho, K.-Y. (2010). A study on perception of designating the environmental education center. *The Environmental Education*, 23(3), 126-139. (in Korean)
- EECapacity (n.d.). *Project activities*. EECapacity website. Retrieved from http://www.eecapacity.net/activities
- Environmental Protection Administration [EPA] (2016). An instruction to bidders about the review and selection of the commissioned case on "Project Work Plan of Establishing the Kao-Ping Regional Environmental Education Center." Taipei: The Executive Yuan. (in Chinese)
- Erickson, E., & Erickson, J. (2006). Lessons learned from environmental education center directors. *Applied Environmental Education & Communication*, *5*(1), 1-8. doi: 10.1080/15330150500302122
- Evans, B., & Chipman-Evans, C. (2004). *The nature center book: how to create and nurture a nature center in your community*. Fort Collins, CO: The National Association for Interpretation.
- Fadeeva, Z., Payyappallimana, P., Tabucanon, M., & Chhokar, K. B. (Eds.) (2014).
 Building a resilient future through multi-stakeholder learning and action: ten years of regional centres of expertise on education for sustainable development.
 Tokyo, Japan: United Nations University Institute for the Advanced Study of Sustainability.
- Falk, I. H., & Harrison, L. B. (1998). Indicators of social capital: social capital as the product of local interactive learning processes. Launceston, Tasmania: Centre for Research and Learning in Regional Australia, University of Tasmania.
- Fan, K.-S. (2016). Final report of "Work Plan of the Southern Environmental Education Regional Center" (The third year). (Project No. EPA-105-EA04-03-A149). Taipei: Environmental Protection Administration, the Executive Yuan. (in Chinese)

- Hsu, M.-Y., & Tang, Y.-J. (2017). Exploring the collaboration relationships with partner organizations of environmental education regional centers of the Environmental Protection Administration. *New Horizon Bimonthly for Teachers in Taipei*, 202, 1-7. (in Chinese)
- Kim, M.-O., & Lee, J.-Y. (2016). A study on operation factors of environment education centers and their relative importance. *The Environmental Education*, 29(1), 116-134. (in Korean)
- Liang, M. H. (2015). Research on a university as an environmental education regional center involved in the implementation of environmental education with local government (MOST 102-2511-S-259-007). Taipei: Ministry of Science and Technology. (in Chinese)
- Medir, R. M., Heras, R., & Geli, A. M. (2014). Guiding documents for environmental education centres: an analysis in the Spanish context. *Environmental Education Research*, 20(5), 680-694. doi: 10.1080/13504622.2013.833590
- Ministry of Government Legislation (2017). *Environmental Education Promotion Act* (Act No.15199). National Law Information Center. Retrieved from http://www.law.go.kr/LSW/eng/engMain.do
- Ministry of Interior and Safety (2017). *Gyeonggi provincial EE promotion and support ordinance*. Autonomy Law Information System. Retrieved from http://www.elis.go.kr/newlaib/laibLaws/h1126/laws_list_new.jsp?lawsNum=4 1000041001011 (in Korean)
- Ministry of Justice (2017). *Environmental Education Act* (ROC, No. 10600142241).

 Laws & Regulations Database of the Republic of China. Retrieved from https://law.moj.gov.tw/
- Minnesota Department of Natural Resource (1992). E. E. C. 2000: A study of environmental education centers. Saint Paul, MN: Author.
- Nomura, K., Hendarti, L., & Abe, O. (2003). NGO environmental education centers in developing countries: role, significance and keys to success, from a "change

- agent" perspective. International Review for Environmental Strategies, 4(2), 165-182.
- Padalino, J. J. (1986). National and regional centers for EE: following up on the recommendations of the first national congress for environmental education futures policies and practices. In D. A. Cox & W. B. Stapp (Eds.), *International perspectives on environmental education: issues and actions*. Selected papers from the Thirteenth Annual Conference of the North American Association for Environmental Education (pp. 152-156). Troy, Ohio: North American Association for Environmental Education.
- Pitoska, E., & Lazarides, T. (2013). Environmental education centers and local communities: a case study. *Procedia Technology*, 8, 215-221. doi: 10.1016/j.protcy.2013.11.030
- Powell, R. B., Stern, M. J., & Ardoin, N. (2006). A sustainable evaluation framework and its application. *Applied Environmental Education and Communication*, *5*(4), 231-241. doi: 10.1080/15330150601059290
- Schulze, S. (1991/2). Evaluation of environmental education centres—A research design for the case study method. *Southern African Environmental Education*, 12, 21-31.
- Simmons, D. A. (1991). Are we meeting the goal of responsible environmental behavior? An examination of nature and environmental education center goals.

 The Journal of Environmental Education, 22(3), 16-21. doi: 10.1080/00958964.1991.10801963
- Viloria, L. A. (1991). A network of regional centres of environmental education and training: a strategy for developing countries. *Marine Pollution Bulletin*, 23, 633-635. doi: 10.1016/0025-326X(91)90747-G
- Wilson, T. L. (1993). The TVA network of centers for environmental education: an examination of factors that contribute to success. Unpublished doctoral dissertation, The Ohio State University, Columbus, OH.

Wilson, T., & Martin, J. (1991). *Centers for environmental education: guidelines for success*. Retrieved from ERIC database. (ED350145)

Chao, Yu-Long

Assistant Professor, National Formosa University

Tel: 05-6315864

E-mail: chaoyulong@gmail.com

Address: No.64, Wenhua Rd., Huwei Township, Yunlin County 632, Taiwan (R.O.C.)

Kim, Heekyung

Advisory Expert, Policy Planning Bureau, Ministry of Environment, Korea

Tel: +82-44-201-6538

E-mail: iciness@hanmail.net

Address: No.11 Doum 6-ro, Government Complex, Sejong Bld. 6-3, Sejong-si

30103, Korea

Kim, Chankook

Associate Professor, Korea National University of Education

Tel: +82-43-230-3761

E-mail: ckim@knue.ac.kr

Address: No.250 Taeseongtabyeon-ro, Gangnae-myeon, Cheongju-si, Chungbuk

28173, Korea

作者簡介:

趙育隆 國立虎尾科技大學通識教育中心助理教授

電話:05-6315864

電子郵件: chaoyulong@gmail.com

通訊處:632 雲林縣虎尾鎮文化路 64 號通識教育中心

金喜京 韓國環境部政策企劃官室專門委員

電話: +82-44-201-6538

電子郵件: iciness@hanmail.net

通訊處: No.11 Doum 6-ro, Government Complex, Sejong Bld. 6-3,

Sejong-si 30103, Korea

金燦國 韓國教員大學環境教育系副教授

電話: +82-43-230-3761

電子郵件: ckim@knue.ac.kr

通訊處: No.250 Taeseongtabyeon-ro, Gangnae-myeon, Cheongju-si,

Chungbuk 28173, Korea

韓國與臺灣環境教育區域中心之比較:體系、角 色與實務

趙育隆¹, 金喜京², 金燦國^{3*}

- 1. 國立虎尾科技大學通識教育中心助理教授
 - 2. 韓國環境部政策企劃官室專門委員
 - 3. 韓國教員大學環境教育系副教授

摘要

根據對韓國京畿道環境教育中心 (Gyeonggi-do Environmental Education Center, GEEC) 與臺灣高屏區環境教育區域中心 (Kao-Ping Environmental Education Regional Center, KPEERC) 重要成員的訪談,本研究比較了其體系、角色與實務。韓國有一套包含國家-區域-地方的環教中心體系且其環教推廣法中訂有環教中心的指派程序,而臺灣的環教法並未規定環教中心的設置。建立環教組織的資料庫與創造環境教育者的交流平台分別是 GEEC 與 KPEERC 認為的最大成果。關於環教區域中心角色,兩中心受訪者皆較側重於是一種「對其他組織的支持性角色」勝過「直接實施環教實務的執行性角色」。兩中心皆面臨經費與環教專業人力不足的類似問題,每三年合約式的營運對兩中心的穩定性與長期規劃也可能都有影響。儘管如此,雙方在環教夥伴之間開始形成網絡與研擬能反映地方環教需求的策略等方面仍有相似的成果。關於未來發展,GEEC 成員建議能更致力於區域環教政策的規劃,KPEERC 成員則指出了更主動參與區域永續發展的方向。

關鍵字:環境教育區域中心、功能角色、營運