

The Inspiration via Japan of promoting ESD on Education Policies for Taiwan

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Abstract—This study was aimed to explore the policies, strategies, and outcomes of promoting ESD (Education Sustainable Development) in Japan. Then, it was discussed and analyzed the characteristics and disadvantages of Japan in promoting ESD on education policies. The results of this study were offered some inspiration for Taiwan in promoting ESD by Japan's implement of promoting ESD.

Index Terms—ESD, Japan, Education Policy

I. INTRODUCTION

Recently, many countries and schools emphasized ESD (education sustainable development), and it means that ESD had spread and emphasized by all over the world. The procedure of promotion and practice for ESD was not linearity, it was omnibearing in contrast. From asking the questions about environment pollution to the learning of environment, it appeared that many countries have considered the importance of symbiosis with the earth in the living and working [1].

It was clearly pointed out that promoting education, public awareness and training were the importance of ESD in Chapter 36 of Agenda 21. It also appeared that there were four trusts of ESD, including improving access to quality basic education, reorienting existing education programs, and providing training [2]. ESD was the most important way to establish the sustainable society, cultivate the talents for sustainable development, and promote the sustainable industries to develop. It was certain importantly, necessarily and worthily for ESD.

Japan was well-known and successful in promoting ESD in the world. In contrast with Japan, some problems of promoting ESD were occurred in Taiwan. For example, there was no cooperation among ministries related promotion of ESD, the promotion and implement weren't as a whole, the distribution of each aspect for ESD was uneven, the environment was the most part of promoting ESD in particular, the contents of ESD in environment, society, economic, culture weren't integrated, there was no education policy to support ESD and so on [3].

Therefore, this study was aimed to explore the policies, strategies, and outcomes of promoting ESD (Education Sustainable Development) in Japan. The results of this

study offered were about providing some inspiration for Taiwan in promoting ESD by Japan's implement of promoting ESD.

II. THE HISTORY OF ESD

ESD was called firstly in World Conservation Strategy in 1980s. Then, "Our Common Future" appeared in the report of World Commission on Environment and Development. In 1989, "promoting education, public awareness and training" was viewed as the important means of implementing ESD in Chapter 36 of Agenda 21. Chapter 36 of Agenda 21 was the first national document to emphasized that education was important means to achieve ESD. UNCED (The United Nations Conference on Environment and Development) spread ESD world widely after 1992. The aspects of ESD were involved environment, economic and society. UNESCO (The United Nations Education, Scientific and Cultural Organization) was required to reinforce "promoting education, public awareness and training" in few years. Many countries agreed to need more progress in ESD, so UNDESD (UN Decade of Education for Sustainable Development) was declared in 2002 [4]-[6].

Ministers of education adopted a declaration containing 360 commitments and calling for urgent action to mainstream ESD in 2014, at the World Conference on Education for Sustainable Development in Japan. At the same time, UNESCO launched the Global Action Program on ESD (GAP) to highlight 5 priority as action areas. Ministers of education adopted a global education strategy to implement SDG 4 entitled Education 2030 in 2015 in Korea. It could be contribution for 2030 Agenda and the 17 SDGs. In 2016, ESD was at the cores of 17 SDGs to achieve the sustainable future for all and the earth. After 2019, expanding the scale of ESD in policy and practice and make ESD become the basic education goals of formal education system in the world were followed [4].

III. THE IMPORTANCE AND VALUE OF ESD

Why ESD became the basic education goal of global formal education system? Because there were many problems about environment, poor, human rights, peace need to be solved, ESD was the answer to create new value and action after taking global thinking and local action. Thus, ESD not only aimed to create learning and

activities in sustainable society, but also cultivate leaders to create sustainable society [7]. Specially, ESD was focused on encourage the change of knowledge, skill, value and attitude to create a sustainable society for all.

Particularly, the implement of ESD were practiced from both individual and others. For individual, it embraced personality development, self-regulation and responsibility. It also included understanding the relationship with people, society and environment, cultivating the children to respect the relationship. Thus, it needed to make effort in cross discipline to solve kinds of problem, such as environment, economic, society, and culture [7]. Although ESD was often viewed as a cross discipline, it was with its own unique and development logical [6].

Moreover, it was essential to connect all aspect related ESD to work together with the base of establishing education for sustainable society. The areas contained the learning of environment, climate change, biological diversity, the learning of disaster prevention, international understanding, the learning related world heritage and local culture. The basic thinking of knowledge, value and action of ESD were surrounded by these areas. In other words, it meant that environment, economic, society were integrated to develop (Fig. 1) [7].

Therefore, the mean and importance of ESD was realize equal development for this generation and future generation by balancing and integrating ways to solve problems about environment, economic, and society.

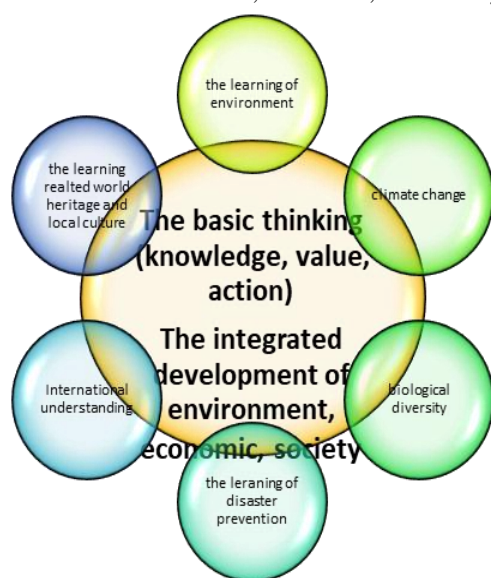


Figure 1. The basic thinking of dimensions of ESD

IV. THE SYSTEM OF PROMOTING ESD IN JAPAN ADMINISTRATION

In Japan, the Japanese National Commission for UNESCO and other related ministries were responsible for promoting ESD. Japan government held “the interministerial committee of development ESD” for making “the program of UNDESD of Japan”. The system of promoting ESD in Japan administration contained the Japanese National Commission for UNESCO, the

interministerial committee of development ESD, and UNESCO (Fig. 2) [8]. In particular, the members of “the interministerial committee of development ESD” were Cabinet Secretariat, Ministry of Education, Culture, Sports, Science and Technology, Ministry of the Environment, Ministry of Foreign Affairs of Japan and so on. Consequently, it was assumed that enhancing the promotion of ESD in Japan by establishing the system of promoting ESD in Japan administration. Meanwhile, it was criticized that the system was a top-down model of promoting strategy for ESD [5].

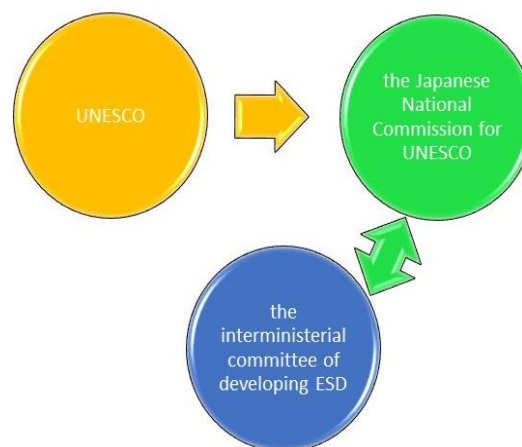


Figure 2. The system of promoting ESD in Japan administration

V. THE PROCEDURE OF PROMOTING ESD IN JAPAN

In 2005, Japan government had ministerial meeting for UNDESD (UN Decade of Education for Sustainable Development). Then, making programs for UNDESD in 2006. MEXT (Ministry of Education Culture, Sports, Science, and Technology, Japan) revised course of study for kindergarten, elementary school and senior high school and Education Promotion Basic Program, and hold forum of ESD in 2008. It also revised the course of study for senior high school and special education in 2009, and the program of UNDESD of Japan in 2011[8]. However, all schools in different level started to have activities of ESD because of education policy required while they did not understand ESD at the beginning [9]. It was assumed to be a kind of teaching about constructing knowledge for UNDESD, not traditional teaching about transferring knowledge [6].

Thus, the purpose of establishing the committee about ESD for Japan was all administrations closely linked to work in affairs about ESD, and could work for promoting ESD [10]. At the same year, the round-table conference of ESD was hold to promote ESD in Japan, and gathered NPO (Nonprofit Organization), education administration, local governments, private companies to exchange opinions about promoting ESD in the future [11].

VI. THE CHARACTERISTICS AND DISADVANTAGES OF PROMOTING ESD IN JAPAN

There were four characteristics of promoting ESD in Japan, including the positing of ESD in education policies,

the promotion of ESD practiced items in schools, working together and connecting closely for stakeholders, and international promotion of Japan in ESD as following [11] [12]:

A. *The Positing of ESD in Education Policies*

The positing of ESD on education was to have students with the view about sustainable society in the learning procedure. From then to now, there were some outcomes in improving surroundings and expanding training opportunity for ESD education committee, faculties and staffs. Based on these outcomes, it would consider the styles of schools and difference in school administration, and then propose the development stages. Furthermore, solving all kinds of problems about constructing sustainable society and being active in cooperation were needed. The strategies contained continuing to write and use reference about ESD, implement teacher education of ESD, and practice activities of promoting ESD.

B. *The ESD Items Practiced on Education Policy*

There were three parts about ESD items practiced in education policies. One was to cultivate talents about environment according to local situation. Another was to expand propaganda and activities in all areas. The other was to provide learning opportunity in every surrounding.

For the first, to raise and use human resource based on “Environment Education Promotion Act” was the main point for cultivating talents. For the second, to have propaganda and promotion of awareness about ESD for natural environment, natural disaster, biological diversity, energy, resource, pollution, recycle/waste, chemical material, produce, consumption and people from each area was carried out. The outcomes of ESD items on education policy were expected to promote private companies and private organizations to have individual education and learning, and develop knowledge and skills of sustainable development by providing related materials and support from administration and agencies. To hold activities of expanding public awareness and have conversation were expected to practice, either. For the third, it held natural observational activities and the learning of environment by local schools and natural schools to create the opportunity of interaction with nature. In addition, delivering information system of biological diversity via living diagram in national parks with ecotourism was implemented. It was an occasion for experiencing the learning of ESD.

As a result of outcomes of ESD promotion in Education policy of Japan were inducted in three parts, containing the exploring of concepts and theories in ESD, ESD in schools, and ESD in communities [5].

The number of schools participated in ASP net (The UNESCO Associated Schools Networks) in Japan was the most after comparing other countries in the world. There were 1175 schools and NPOs participated ASP net in 2019[13]. The members of ASP net were public or private educational institutions which provided pre-primary, primary, secondary, technical or vocational education, or teacher training, in formal or non-formal settings. The memberships were based on a firm

commitment by the school leadership and community to promote the ideals and values of UNESCO by reinforcing the humanistic, ethical, cultural and international dimensions of education [14].

Briefly, UNESCO Associated Schools were viewed as the base for ESD promotion and are making efforts to increase the number of member schools for MEXT and the Japanese National Commission for UNESCO [15].

C. *Working Together and Connecting Closely for Various Stakeholders*

It was essential to work together between administrations, NPOs, private companies, researchers, the various stakeholders in local community to establish a sustainable society. It formed a meeting of agreement composed by multiple stakeholders by ESD. The main center was an educational facility with sociality, such as government, schools, NPOs, private companies and so on. Now all areas in Japan worked hard to promote the spread of ESD. However, it was limited to work hard for some areas, and there was no progress in cooperation among areas. For this reason, there were some measures implemented, including establishing the national center for supporting ESD, cooperation with enterprise of human resource of environment and expanding the affairs about ESD.

D. *International Promotion of Japan in ESD*

Japan kept promoting ESD by UNESCO and other organization, and the items of promotion comprehended the policy making, promotion of ESD in the world, and the cooperation with other overseas countries.

Firstly, ESD was one of the goal for Quality Education (One of goals for SDGs, Sustainable Development Goals, SDGs) in “2030 Agenda”. ESD should play an important role in other areas except education in the trend of ESD according to “2030 Agenda”. And to be a supporter for spreading UNDESD. For this reason, Japan devoted to reflecting ESD ideals and values in education policies. In addition, Japan government not only supported for promoting ESD, but made cooperation in policies about various and relating development with other areas except education.

Secondly, promotion of ESD in the world it made efforts in the cooperation with UNESCO and GESD (Global Education Sustainable Development), and advanced on ESD in the world by UNESCO. Besides, encouraging UNESCO to use UNESCO-Japan prize on ESD to urge participants to collect and provide materials, and took part in GAP (Global Action Program). This item also supported REC (Regional Centre of Expertise Cebu) and ProSPer. Net (Promotion of Sustainability in Postgraduate Education and Research).

Finally, Japan spread ESD Prizes for elementary and senior high schools by cooperating with China and Korea in TEMN (Tripartite Environment Ministers Meeting) and SEAMEO (Southeast Asian Ministers of Education Organization). Furthermore, it decreased the disaster risk by international cooperation and fostered EDS and helped with improving strategies of disaster and enhancing regional network.

VII. CONCLUSIONS

For the inspirations from education policy of promoting ESD in Japan for Taiwan, there were three dimensions inducted from promoting strategies and characteristics of ESD in Japan, including the system of promoting ESD in administration, the ESD policies practiced in schools and the activation of local communities by ESD.

Firstly, the promotion of ESD policies would be based on the interministerial and integrated resources and cooperation. Taiwan government would establish the interministerial committee of promoting ESD to integrate resources from each ministry and make and implement national strategies, program, goals and tasks for each level of administration. Especially, the strategic promotion of ESD would be top-down, and inventory the working items practiced and related ESD for a long time.

Secondly, ESD policies practiced in schools would be based on the teacher training and integrated curriculum. The teachers played an important role of promoting ESD in schools. For this reason, it was necessary to train teachers in understanding the ideals and practiced methods of ESD. Then, integrating ESD in the curriculum would be realized, and teacher possibly provide the methods of constructing knowledge for students. Because ESD was a new concept of learning knowledge skill for students, so it would be suggested to integrated ESD into 12- Years Basic Education Curricula for teachers in schools. To work hard for implementing activities of ESD in cross discipline would be needed with a base of environment, economic, society and culture.

Thirdly, the activation of local communities by ESD would be based on the combination of each level school and local communities' resource. It would be the most important to reinforce the interactions of environment, economic and society between students, teachers, and local people to establish the sustainable society for all.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

Yilin Lee analyzed the data and wrote the paper; Szu-Wei Yang revised the paper; all authors had approved the final version.

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