An Investigation into Nature Education for Children in Their Early Childhood (II) : Suggestions from Educational Reform in Japan and the U.K.

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An Investigation into Nature Education for Children in Their Early Childhood II

-Suggestions from Educational Reform in Japan and the U.K.-

by

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Introduction

At the recently held Kyushu-Okinawa Summit Meeting 2000: July 21_23, 2000, leaders of the eight major industrialized nations, who are actively engaged in steering the world affairs, gathered together at the threshold of the 21st century. Naturally, Japanese prime minister, Mr. Yoshiro Mori, and the prime minister of the United Kingdom, Tony Blair, were also present.

The main theme of this summit was to examine matters pertaining to the ways in which the world should be evolving in the 21st century. After the summit was over, a report was officially announced on the result of the meeting as G8 Communiqué 2000.

In this report, at the end of the preamble, a suggestion was made as follows: A new era dawns. Let us move forward together, with hope toward the 21st century of greater prosperity, deeper peace of mind and greater stability. 1) In the report, the role of education is especially emphasized and items such as follows are included;

①Education is indispensable to mitigate poverty.
②Education for all people should be achieved by 2015, and bilateral efforts and efforts made in cooperation with international organization must be increased to achieve sexual equality in education by 2005. Information technology (IT) must also be utilized in education. 2)

Incidentally, early childhood education is an important education activity at the very beginning of early education to nurture children so that they will grow to be a promising human being who will contribute to households, schools and the society in the future. Sound mind and body of children will brighten up the world for people, as the Holy Bible says," You can not enter the heaven unless you become like a child." 3)

So, what kind of world is welcoming us in the 21st century? The only thing I can say for sure, I presume, is whether it becomes a success or failure is all up to us. Present is the only path leading to the future. Nurturing children to be sound and healthy, who will inherit the future of mankind, is a relevant task for us today, more important than anything else.

In trying to achieve this goal, I find abundant nature plays a key role in the way it supports children's growth with sound mind and body. At the beginning of his book entitled, "Garden for Children at Kinder-garten", Friedrich Froebel, who created the first kindergarten in the world, states that "It is extremely important for education of human being, and for governance of various nations and mankind --- that human beings and their children know nature thoroughly by heart and fuse with nature from their heart." 4)

In this study, I will first make a general observation of the worldwide trend of education based on the content of G8 Education Ministers' Meeting Forum held from April 1 to 3, several months prior to the G8 Kyushu-Okinawa Summit. Then, I will examine the actual condition of educational reforms in both Japan and the United Kingdom, and then
attempt to explore the present status and future directions of Japan and the U.K. In conclusion, I will discuss the future outlook of early childhood education and the possibility of nature education toward the 21st century.

I. Report of G8 Education Ministers' Meeting and Forum

At Cologne Summit held in 1999, for the first time in the history of the Summit, education was taken up as one of the major topics. In the following year, to follow up this initiative, education ministers of G8 nations gathered together in one room for the first time at the Kyushu-Okinawa Summit 2000, to have an extensive discussion on the following agenda and themes, focusing on educational problems each country is faced with today.

<Agenda and Theme>

* Provisional Agenda of G8 Education Ministers' Meeting
  Theme: Education in a Changing Society
  Session I: Educational Challenges in a Changing Society
  Session II: Lifelong Learning and Distance Learning
  Session III: Educational Innovation and ICT
  Session IV: Promoting International Exchange of Students, Teachers, Researchers and Administrators
  (Follow up to Cologne Summit)

* Theme of G8 Education Ministers' Forum

Education toward an Age of Living Together and Knowledge-based Society
  - Looking for the ways of mutual understanding and development of different cultures and of further international understanding and goodwill.

The result of the meeting is summarized in the "Report of G8 Education Ministers' Meeting and Forum: CHAIR'S SUMMARY" as follows.

Education and Lifelong Learning can be regarded as something that provide individuals with "Passport to mobility", which is necessary for staying flexible and accommodating to changes which may emerge in the midst of social transformation from traditional industrial society to knowledge-based society. Furthermore, the content and the form of education and learning to be provided need to be re-structured. At the same time, the intellectual, emotional and social needs of students must be grasped with a fresh look.

Also, high priority will be given to education and lifelong learning for all people; and they will be based on the four pillars, namely, "learning to know (something)", "learning to do (something)", "learning to become (something)", and "learning to live together"; are the foundation of national development. They will cultivate in all people the ability to be the foundation of national development, to build the foundation of economic and social development, to make personal contributions to that development, and to gain some benefit from that development. Furthermore, they will help maintain and develop personal culture as well as the comprehensive national culture, and promote mutual respect and understanding among people beyond cultural differences.

With respect to education policies and their implementation, in order to realize true lifelong education system, there must be consistency and relevance among early childhood education, secondary school education, and higher education. They must also have consistency and relevance with policies relating to employment, science, technology, information and communication and so forth. It is also stated that commitment must be made that these policies will be implemented in coordination with the society as a whole and local communities.

The areas especially expected to become more effective as a result the use of nature education include the following:

Session I: Educational Challenges in a Changing Society
  * to instill values of ethical behavior and citizenship, as well as the knowledge and skills for adult life;
  * to find new ways to engage those who lack the motivation to learn, including more individual support and better connections to the workplace;
  * to encourage parents and communities' involvement in school activities.

Session II: Lifelong Learning and Distance Learning
  * extend the opportunities for lifelong learning so that all people have access to education anywhere and anytime throughout their lives.

Session IV: Promoting International Exchange of Students, Teachers, Researchers and Administrators
  * continue to strengthen foreign language learning, area studies and intercultural education at all levels, and encourage or support programs delivered in foreign languages, particularly
in universities. 7) 
So, I hope to keep my eyes on the future movement of G8.

II. Reform in Japan and its whereabouts

At the threshold of the 21st century today, the number of children or the birth rate in Japan is decreasing rapidly, while the number of senior citizens is increasing rapidly. Meanwhile, information technology and internationalization are advancing rapidly. Furthermore, economic activities, which had been consistently on the growth trend in Japan, has been suffering from prolonged recession for some time, which resulted in some serious social problems such as bankruptcy and unemployment. 8)

Meanwhile, as we look at the world of children, as a result of decreased number of children, and the increase of nuclear family and advancement of urbanization, the power of education at home and in local communities has plummeted. Home and local communities used to be the place where children learned rules about human relationships, acquired self-discipline and cooperation with one another, and acquired traditional culture. This phenomenon of those places' losing their traditional function is considered to be closely related to the cause of children's problems such as bullying, refusing to attend schools and increasingly serious juvenile delinquency. Furthermore, because entrance examination system is still intact, too much emphasis is placed on absorption of knowledge in school education, while nurturing of the ability of deep thought and cultivating humanity is overlooked and neglected. Moreover, there was harmful influence by the postwar policy of placing too much emphasis on providing everyone with equal opportunity of education. Also, another problem of the classroom situations existed which lack consideration for each individual student's unique personality, when all children are innately very diverse, and thus they were not sufficiently responsive to the children's different abilities. 9)

In this way, Japan today is faced with a big turning point, and a drastic reform is needed by reviewing the traditional systems in various areas of society, including politics, government administration, finance, economy and education.

Under such circumstances, the Ministry of Education is pressing forward educational reform with the following four pillars:

1) To enhance emotional education
2) To realize the school system that helps children develop their individuality and gives them diverse choices
3) To reorganize the school system for promoting individual schoolaposs autonomy
4) To promote university reform and research activities 10)

Among them, the education of the heart is especially emphasized, which is reflected in the statement in "① To enhance emotional education" ⑤ "To enhance emotional education from infancy" in "the Program for Educational Reform", which says that "In elementary education, which starts from early childhood, it is important to nurture children's ability of living with deep humanity, which may be made possible by close cooperation between school, community and home, with school being at the center. For this purpose, competent teachers are necessary."

Now, in order to examine what kind of reforms are implemented in relation with the actual content of elementary education, let us look at the curriculums of 1989 and 2000 in Table 1 below.

Early childhood education comprises five areas, and as far as the curriculums were concerned, there was no change between 1989, when large-scale reform was implemented for the last time before 2000, and 2000, when the latest reform was implemented. In elementary school education, there was no change concerning the major nine subjects, except one additional class was introduced, which is called "Period for Integrated Study". The content of this class is described as "educational activities using creativity and ingenuity by introducing interdisciplinary and comprehensive study and study based on children's interest and concerns" 13)

Now, let us examine how nature education is fit into this.

In the area of "environment" in the Guideline of Kindergarten Education, the importance of nature education mentioned in the statement which says, "the meaning of nature in early childhood is significant. Considering children can cultivate feelings of relaxation, deep emotion, curiosity, ability to think deeply, and the fundamental ability to express themselves through their experiences of having direct contact with nature with its magnificence, beauty and wonders, it is necessary to use ingenuity to create opportunities for children to deepen their relationship with nature." 14)
Table 1. The National Curriculum for Japan (1989-2000)

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Elementary school curriculum

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Also, in the general provision of the Guideline of Elementary School Education, the importance of nature education for pupils is clearly stated in such statements as "to work toward the goal of nurturing the pupils' zest for living" and "cultivate a sense of morality rooted inately within pupils' inner self through enriching experiences including volunteer activities and nature experience activities." 15)

From the above study, I find that further completion of nature experiences is included in the educational reform in Japan as one of the important agenda.

III. Reform in the U.K. and its whereabouts

The trend of the ways of the world and educational reform in the recent U.K. can be discussed by each decade.

First, during the 1970's, the U.K. was suffering severely from so-called "British Disease", represented by economic recession and generally declining vitality of the society. Especially, the drop in general status in world economy was so prevalent that the situation deteriorated to the point where social function itself was threatened due to chronic high unemployment rate, strike, and so forth.

In 1979, the Conservative Party, with Margaret Thatcher as the head of the party, regained political power by replacing the labor party as the ruling party, and embarked on drastic reforms during the 80's. With two pillars of "reduction of public involvement and introduction of market principle by deregulation" at the heart of the reform, the conservative government pressed forward with full force the reduction of government spending in the public sector, reform of bureaucratic system, privatization of the public sector, imposition of limitation in the rights of labor unions and encouragement of self-help effort of the citizens. Educational reform also became an important political agenda, in which "enhancement of school education standard and the completion of higher education and vocational training and education" were emphasized. 16)

In 1990's, as a result of such effort, such economic indicators as Unemployment rate and GDP growth rate steadily got back on their way to recovery. In 1997, the political power was regained by the Labor Party with Tony Blair as the leader. Prime Minister Blair stated that he would use the healthy recovery trend of political and economic situation as a springboard to achieve the most important political agenda of the U.K., which is for the Britain to be the winner in the knowledge-based economy in the 21st century, to achieve abundant life for British citizens and to secure superior position for the Britain in the international community. 17)

Now, as I examine the details of the educational reform for the elementary education, I find it can be broken down into the following five categories.

① Introduction of "National Curriculum" (1989-) and implementation of "National Test" (1991-)
② Expansion of school selection by parents
③ Publication of school performance tables (1992-)
④ Encouragement of LMS: Local Management of Schools, and GMS: Grant Maintained School
⑤ Reinforcement of measures to improve basic scholastic ability (1998-)

I will show the first (1988) and the latest (2000) National Curriculum in the below to examine the changes.

The major characteristics of the new curriculum are as follows. As for Core Subjects (English, Mathematics, Science), some measures were taken to help achieve steady improvement of scholastic ability. As for Non-core Foundation Subjects, in order to meet the needs of the contemporary age, and the present situation of classrooms, various ingenious ways are introduced in the names, contents and the timing of implementation. As for cultivation of whole person, such
Subjects are introduced to meet the same needs as Other requirements (Religious education, Sex education, Careers education), Learning across the National Curriculum (Promoting spiritual, moral, social and cultural development across the National Curriculum, Promoting personal, social and health education, Promoting skills across the National Curriculum, Promoting other aspects of the school curriculum).  

As regards coordination with nature education, the presence of nature education is prominent in "Science", which one of the Core Subjects, and the improvement scholastic ability if Core Subjects is actively sought. Science consists of four areas, namely, scientific enquiry, life processes and living things, materials and their properties, and physical processes. Under Knowledge, skills and understanding in the Key stage 1, which is directly related to early childhood education, five items are provided, namely, Life processes, Humans and other animals, Green plants, Variation and classification, Living things in their environment. All of these are closely related to nature education.

And under Environment in the educational evaluation of National Curriculum, it is stated that "We value the environment, both natural and shaped by humanity, as the basis of life and a source of wonder and inspiration", as well as "understand the place of human beings within nature: preserve balance and diversity in nature wherever possible."

Meanwhile, the importance of defining the role of nature education has become clear in the educational reform in the U.K. as well, as in the case of Japan.

IV. Early Childhood Education for 21st Century and Possibility of Nature Education for Children

1. Education in Japan and the U.K. are drawing closer to each other

During 1980's, educational reforms took place in the United States of America, European countries, and Asian countries including Japan all at the same time. Although the themes and contents of reforms varied from country to country depending on unique issues each country was involved, the overall movement of the reform which occurred in those countries was not by accident. Today, educational reform is wielding its vehement power on global scale.

As the backdrop of this movement, first, there was a very rapid socio-economic transformation on global scale, and second, there was a rapid evolution of social situations such as scientific and technological advancement, spread of information technology and globalization.

And, in the midst of such changes which has been taking place at an unprecedented speed, we are now faced with important questions of how we should update knowledge and technology to be used in our daily life, social system, economic structure and industrial structure, and what is an ideal way of living in such an age of drastic change.
In Japan, by strictly selecting the content of study, efforts are made to nurture children’s “Zest for living” in relaxed atmosphere, and to provide “to enhance emotional education”, which are important goals of the reform, in order to cultivation humanity.

On the other hand, in the case of the U. K., very clear policy of “improvement of scholastic ability” is laid down, and standardization and commonization is promoted so that the same study lesson can be received anywhere. And to achieve these goals, initiative and independence of each school is expanded. Then, the performance of each school is weighed by examining how much result was obtained by these reforms. That is to say, efficiency is sought after by introducing deregulation and market principle.

At a first glance, goals between the reforms of Japan and those of the U.K. may look different. But, by checking the original point where the two countries started their reforms, we find otherwise, because in the case of Japan, the reform basically reflects reconsiderations about imposition of too much uniformity in the past, whereas in the case of the U.K., the reform reflects reconsiderations about too much diversity in the past. This does not mean the final targets of landing point of both countries are far apart, but rather, it means education of both countries are becoming closer.26)

Furthermore, the importance of the roles represented by nature education is likely to increase in both in the U.K. and in Japan.

2. Positioning of Nature Education for Children

In this section, I would like to propose an idea of using education in Japan as an axis and adding to it some good aspects of education in the U.K.

So, the axis says, “in education, it is important to nurture ability to live in harmony with rich humanity, which is promoted by strong linkage among school, community and home, school being at the center. For this purpose, the competence of teachers is indispensable”. In addition, with respect to the scholastic ability of Core Subjects, traditional study direction must be maintained and strengthened, and furthermore, method to cultivate comprehensive humanity must be developed. This of course includes early childhood education as well. In this case, nature education plays an important role in both Science as one of Core subjects as well as a part of comprehensive study mentioned in II and III.

At the beginning of his book entitled "Die Menschenerziehung", Friedrich Froebel, who is regarded as the founder of early childhood education in the world states that, "In everything between heaven and earth, there exists one eternal law. ------ this law always expresses itself very clearly in the same way whether it is in the outer world, i.e., in nature, or in inner world, i.e., in spirit, or in life as the integration of outer and inner worlds."27) He continues that at the basis of this law, there exists "God". Furthermore, he asserts that in education of persons, "it is important to stimulate and guide them to express their divine nature purely and completely, and to instruct them the method and measures of how to express their divine nature."28) "God, nature and person" are what Froebel regarded as three elements which comprise the foundation of human education.

Meanwhile, in his book entitled "Nature Education Theory for Children", Shodo Yamanouchi, who implemented childcare in a camp in nature for the first time in Japan, and is regarded as the first person in nature education for children in Japan, states that "Nature education means to enrich emotion of children, have them acquire skills and techniques and make them explore nature and nurture sound awareness of nature."29)

And Margaret Mcmillan, who opened Nursery school in London for the first time in the United Kingdom, and implemented Camp school30), considered "the issue of educational environment is more important than issues of educational method", and thought "Natural environment stimulates children and satisfies their curiosity. And Natural environment promotes not only physical health of children but also development of their intellectual ability."

Thus, the importance of nature education for children rests in its twofold influences on children: one is its influence on children’s general humanity, and the other is its influence on children in scientific, intellectual and technological aspects. These two influences are exactly the same as the direction suggested by educational reform toward the 21st century.

Here, I would like to pay attention to the word of Rachel Carson, who is considered to be one of the most prominent persons representing the 20th century and was reported by mass media as the first to have tolled the warning bell to ask
public to focus their attention on the importance of environmental issues. In her book, "The Sense of Wonder", she asserts nature as the most important source of power for human beings. She says, "if I had the power to talk to a good fairy who watches over the growth of all children, I would ask the fairy to give all children in the world the sense of wonder (sensitivity to be surprised at mystery and wonder), which would never cease in their lifetime." 31 This Sense of Wonder is the key to nature education for children.

The 21st century will start on January 1, 2001. In education in the new century, warm humanity along with high-level science will be needed even more than today to assure survival and development of mankind. At that time, an era will have come in the world of early childhood education, when there will be a discussion on how much nature education can actualize its possibility by using the Sense of Wonder as the key. The possibility of nature education for children will be tested in its ability of nurturing the buds of intellectual, technical and scientific abilities of children while cultivating their total humanity, as Froebel, Yamanouchi and McMillan advocated. Nature itself is already equipped with infinite power to answer to this question. The rest is all up to how human beings will deal with it.

Acknowledgements

I am grateful to Syodo Yamanouchi and his help in this work, and also to Makito Sato and Chie Yoshimune for its advisory support.

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抄録

幼児における自然教育の検討 II
日本と英国の教育改革から学べること

大澤 力

本研究の目的は、G8教育大臣会合・フォーラムの内容から世界的な教育の潮流を概観し、さらに日本と英国の現状や未来を探りつつ、両国の教育改革の実態を考察する。そして、21世紀に向けた幼児教育の道と自然教育の可能性について検討することにある。

今や教育改革は、世界的な規模でその猛威を振るっている。日本では「生きる力」や「心の教育」が重要な目標とされ、人間性の育成が図られている。英国では「学力の向上」を目標に、規制緩和と市場原理の積極的な導入を実施している。しかし、その出発点を探ってみると、日本は過度の画一化・英国は過度の多様化からの反省が基にある。それぞれの教育は、近づいているのである。

そこで、日本の教育を軸にしながら、英国の良い面を活用するというコンセプトでまとめると、「教育は、学校を中心とした地域・家庭との強い連携の基に、人間性豊かな生活力を培うことが重要。それには、教師の努力が是非とも必要である。」といった軸に、主要教科についての学力を持続・増進させつつ、絶対的な人間性を育てる方策をさらに工夫することになる。それによりも幼児教育も含めてのことである。この時、自然教育は、主要教科の理科（Science）でも総合的な学習においても重要な位置を占めており、その位置付けの重要性は、さらに増してゆくことであろう。

フレーベル・山内・マクミラン・レチャルカースンが提唱した、人間性全体を育みつつ、知的・技能的科学性の芽を養う方向での幼児における自然教育の可能性が問われるのである。しかし、自然にはこの問いに応える無限の力が備わっている。あとは、人間側の姿勢にそのすべてが委ねられているということになる。

（62）