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# **DIFFERENCES IN THE APPROACH TO SCHOOL DISASTER EDUCATION BETWEEN JAPAN AND THE UK**

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**Abstract:** In order to build a resilient society, it is necessary to implement the integrated disaster management in each community. Appropriate knowledge and skills are necessary to implement disaster management individually. Hence chances of disaster education should be given for community members. Each community has schools and most children can go to schools. Thus, improving school disaster education is effective to spread the appropriate knowledge of disaster management.

Some of the countries which have many natural hazards such as Japan and US usually do separated disaster education. For instance disaster education includes only education for natural hazards in Japan. Traffic safety education and anticrime education are not included in disaster education. On the other hand, British disaster education is different from this approach. Their approach to disaster education is holistic approach. It includes all type of hazards, thus it should be called not disaster education but risk education or safety education.

In this paper, a comparison between Japan and UK on school disaster education is introduced. It is based on results from the series of seminars in the UK in 2007. This paper focuses on the difference in the approach to school disaster education.

**Keywords:** School Disaster Education, Separated Approach, Holistic Approach, Japan, UK

## **1. Introduction**

This paper outlines two approaches to school disaster education namely separated and holistic. The paper draws the historical transition of Japanese school disaster education since 90s and current situation of school disaster education in the United Kingdom. Using these findings the paper explores how school disaster education can be expanded in other words how safety education can be implemented in the countries which are taking separated approach.

## **2. Japanese School Disaster Education**

### **2-1 1995 Kobe Earthquake**

In order to understand current school disaster education in Japan properly, it is inevitable to know about 1995 Kobe earthquake aka 1995 Great Hanshin- Awaji earthquake. This is because the earthquake changed Japanese school disaster education. Kobe earthquake occurred at 5.46 am, 17th January 1995 in the western part of Japan. Many buildings were collapsed by the tremor and more than 100 buildings caught fire after the tremor. In total more than 6,400 people were killed and around 10 billion USD economical loss was estimated.

In the preceding decades, there had been few catastrophic disasters in Japan. Many people had believed that Japanese disaster management is excellent before the earthquake. However, Kobe earthquake changed Japanese people's idea and Japanese disaster management system.

### **2-2 Japanese School Disaster Education After Kobe Earthquake**

Kobe earthquake occurred at 5.46 am, thus all school classes were not started when earthquake occurred. If the earthquake had occurred during school time, some children would have been injured. Some school buildings damaged seriously, hence it could have been worse. Even no one injured in schools, importance of school disaster management and school disaster education was realized by many people.

In 1995 and 1996 Ministry of Education (From 2001: Ministry of Education, Culture, Sports, Science and Technology) published 2 reports on school disaster management. These reports also mention the importance of improving school disaster education. After that Ministry of Education published a guide book for disaster education in 1998. This book is based on above 2 reports.

Both central and local governmental encouragements for disaster education and people's awareness of importance of disaster education had improved education for natural disasters since 1995.

National Diet Library (NDL) has an Online Public Access Catalogue (OPAC) of published papers. According to NDL-OPAC, 11 papers which include "disaster education" in title had been published since 1975 until 1994. Since Kobe earthquake there have been 239 published papers to date. A number of disaster education related published papers has increased drastically since Kobe earthquake. This is one of the evidences of above mentioned situation.

### **2-3 Murder Cases in Schools**

Since late 90s Japanese schools have been facing other critical issues in particular murder cases. Hino elementary school (in Kyoto city) murder occurred in 1999. One pupil was killed by a former pupil of this school. After the case the former student escaped and committed suicide. In 2001, a tragic murder occurred in Ikeda elementary school in Osaka prefecture. In this case, 8 pupils were killed and 13 pupils and 2 teachers were injured. Ikeda elementary school is an attached school of Osaka Kyoiku University (Osaka University of Education). In general people think the pupils have potentials to become elite in the future. This was a crime motivated by selfishness.

In addition to these cases, some pupils kidnapped and killed while their commute to schools. Most people had thought that schools are very safe in Japan. However these cases changed people's idea on school safe. Recently teachers and parents are trying to keep their children's safe from crimes.

### **2-4 Disaster Education After Murder Cases**

In terms of disaster/ safety education, after these murder cases Ministry of Education, Culture, Sports, Science and Technology published a guide book for safety education in 2001 and also published a manual for teachers to deal with suspicious people in 2002.

It can be said that main objective of school disaster education was changed from natural to human induced disasters. In other words disaster education was expanded to "safety education".

According to the NDL-OPAC, since Kobe earthquake until June 2001 (before Ikeda elementary school murder) 10 papers which include “school safety” in title had been published. In contrast, since July to date, 102 papers have been published. People’s awareness of school safety issues has been increasing after these murder cases.

### **2-5 Japanese Disaster Education**

In terms of the relationship between disaster education and institutional aspect, current Japanese school disaster education is based on above mentioned history. However in practice Japanese school disaster education has not been improved much. For example, Shiroshita and Kawata pointed out that some people want to concentrate main subjects such as Japanese, Math and Science to pass entrance examinations of prestigious schools<sup>1)</sup>. This situation has been escalated in particular since the official announcement of the result of PISA (Programme for International Student Assessment) by OECD in 2003. Thus many schools do not allocate many time slots for disaster education.

It is difficult to say that current school disaster education in Japan is adequate. Ordinary schools are doing only evacuation drills for fire and earthquake once or twice a year. And 80.4% of schools are doing evacuation drill for suspicious people as well<sup>2)</sup>. This situation is nothing special in Japan. A few schools are doing advanced disaster education. For example students in these advanced schools are doing community exploration, community risk mapping, inspecting building safety and so on. Fortunately some organisations support these activities by funding, giving equipments, sending experts and so on.

It can be summarised that current Japanese school disaster education is “Separated Approach”. In other word each risk is taught as a separated issue in schools in Japan. For example “disaster education” covers only natural hazards and sometimes fire at most. Disaster education does not cover anticrime education, traffic safety and so on. Many natural hazards (not disasters) let people concentrate doing education for natural hazards.

## **3. School Disaster Education in the UK**

### **3-1 From a Series of Seminars in the UK**

In order to investigate current school disaster education in the UK, a series of school disaster education seminars were organised in Edinburgh, Tyne and Wear and Hounslow, London in November 2007 (Fig.1 and Fig.2). The seminars were jointly organised by the Japan- UK Disaster Risk Reduction Study Programme which is based on the link between Kyoto and Northumbria Universities and each local fire service and local authority. In these seminars so-called specialist such as fire officers, emergency officers, community disaster education centre staff were involved. These seminars are identified as the first phase of a sequential study on school disaster education in the UK. After the second phase, ordinary people and school teachers and students will be involved.

The style of the seminars was same. Firstly, each specialist gave a presentation and after that a discussion session was opened. The presentations included the answer to “How do you define school disaster education?”



**Fig.1 A speaker of the seminar in Tyne and Wear**



**Fig.2 Attendees of the seminar in London**

### **3-2 Interesting Points from the Seminars**

Almost all speakers included antisocial behaviour as one of key issues of disaster education. Each specialist tries not only to protect children from antisocial behaviour but also to prevent children for taking antisocial behaviour. They talked about “disaster education” but wide range of risks was included as hazards in disaster education. In other word various risks are covered in school disaster education in the UK.

### **3-3 The Risk Factory**

In terms of wide range of risks in school disaster education in the UK, “The Risk Factory” is one of good examples. The Risk Factory was established in Edinburgh as a community disaster education centre in 2007. Almost all primary 7 levels pupils; 11years old pupils in Edinburgh and Lothian visit to the centre and learn about risks. The concept of this centre is “Learning by Doing”. There are 11 types of risk scenario (shown in Table 1) and people can learn about various risks by following the scenarios (Fig.3).

**Table 1 Risk scenarios of the Risk Factory**

- Fire
- Railway
- Transport
- Road
- Internet
- Police
- Home
- Water
- Electricity
- Building Site
- Farmyard



**Fig.3 Scenario based exhibit (Road accident) in the Risk Factory**

It is noteworthy that the scenarios also include “internet security”. This is one of the evidences of how British disaster education covers wide.

### **3-4 Learning by Doing**

The Risk Factory is a good example of school disaster education in the UK. But it is not special case, UK has many these kind of centres all over the land. The Royal Society for Prevention of Accidents (RoSPA) has the LASER (Learning About Safety by Experiencing Risk) project. “Learning About Safety by Experiencing Risk (LASER) is a powerful interactive approach to safety education. Interactive safety education schemes provide opportunities for school children and other members of the community to learn about safety and the prevention of unintentional injury in realistic settings. Schemes focus primarily on Home, Travel, Leisure and Personal Safety.”<sup>3)</sup>

In association with the schemes, currently 11 leaning centres are running in the UK (Shown in Table 2).

**Table 2 Disaster Education Centres**

● Risk Factory	Edinburgh
● Child Safety Centre	Glasgow
● Flashpoint	Bodmin
● Streetwise	Bournemouth
● Lifeskills	Bristol
● Warning Zone	Leicester
● Safety Centre	Milton Keynes
● Safety Works	Newcastle
● Lifewise	Rotheham
● The Safety Zone	Pontypridd
● DangerPoint	Talacre

On the other hand Japan also has many disaster education centres. However these centres usually cover only fire and natural hazards as its scenarios. For example, Higashi Osaka Disaster Education Centre is one of the latest disaster learning centres in Japan. It includes only earthquake and fire safety in the exhibits.<sup>4)</sup>

### **3-5 British Disaster Education**

It can be said that school students in the UK are learning about wide range of risks. And as a reflection of natural hazards environment, there is not much school education for natural hazards.

In terms of school disaster education the UK is taking “Holistic Approach”. All risks which have possibility to be faced by children in the future are taught as a same kind of issues.

## **4. Conclusion**

### **4-1 Two Approaches to Disaster Education**

From the comparison between Japanese and British disaster education, it can be said that at least there 2 types of school disaster education namely “Separated Approach” and “Holistic Approach”.

The former one is taken by Japan and US. Each risk is taught in separated classes. Thus disaster education means the education for natural hazards. The latter one is taken by the UK. All risks are taught as risks in life. Disaster education includes not only education for natural hazards but also education for traffic safety, internet security etc. When applying disaster education in schools this difference in approaches should be considered.

### **4-2 What are Disasters?**

In order to choose approaches to disaster education, it is necessary to consider what disasters are. Generally, disasters are caused by hazards. And there are 2 types of hazard; Natural and Non-natural hazards. Natural hazards include

earthquake, flood, typhoon, volcano, tsunami and so on. Non-natural hazards include nuclear accident, traffic accident, terrorism, pollution, harassment, cyber crime and so on. Japan and the UK have BOTH types of hazard. Hence safety education i.e. holistic approach suits for the both countries.

#### **4-3 How Can We Implement Safety Education in Japan?**

Disaster education is not same as safety education in Japan. In terms of Japanese language the meaning of disaster education (Bousai Kyoiku) is narrow. On the other hand the meaning of safety education (Anzen Kyoiku) is wide; Safety education covers the both types of hazard. Hence safety education should be implemented in schools in Japan. It is easy to say that safety education is needed in schools. However to implement safety education is hard work. This is because current disaster education is based on each society. Differences in society such as socio-economic aspect, educational system aspect, people's idea and so on should be considered when approach to disaster education is changed. For example in terms of people's idea of safety education, as above mentioned some people do not want to use time slots for disaster (safety) education. And current Japanese national curriculum covers few disaster related topics. Thus relation with other subjects such as Japanese, Math and Science is also considerable issue.

These surrounding factors of disaster education should be considered in order to implement sustainable safety education in each society.

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