



**Asia-Pacific
Economic Cooperation**

2011/EPWG/WKSP3/006

Education for Natural Disaster Preparedness in Chinese Taipei

Submitted by: Chinese Taipei



**Workshop on School Earthquake and
Tsunami Safety in APEC Economies:
Reducing Risk and Improving
Preparedness
Taipei, Chinese Taipei
17-19 October 2011**

Education for Natural Disaster Preparedness in Chinese Taipei

Ministry of Education,
Chinese Taipei

Oct. 17, 2011



Outline

Introduction

Plans for Disaster Preparedness Education

Structure

Approaches

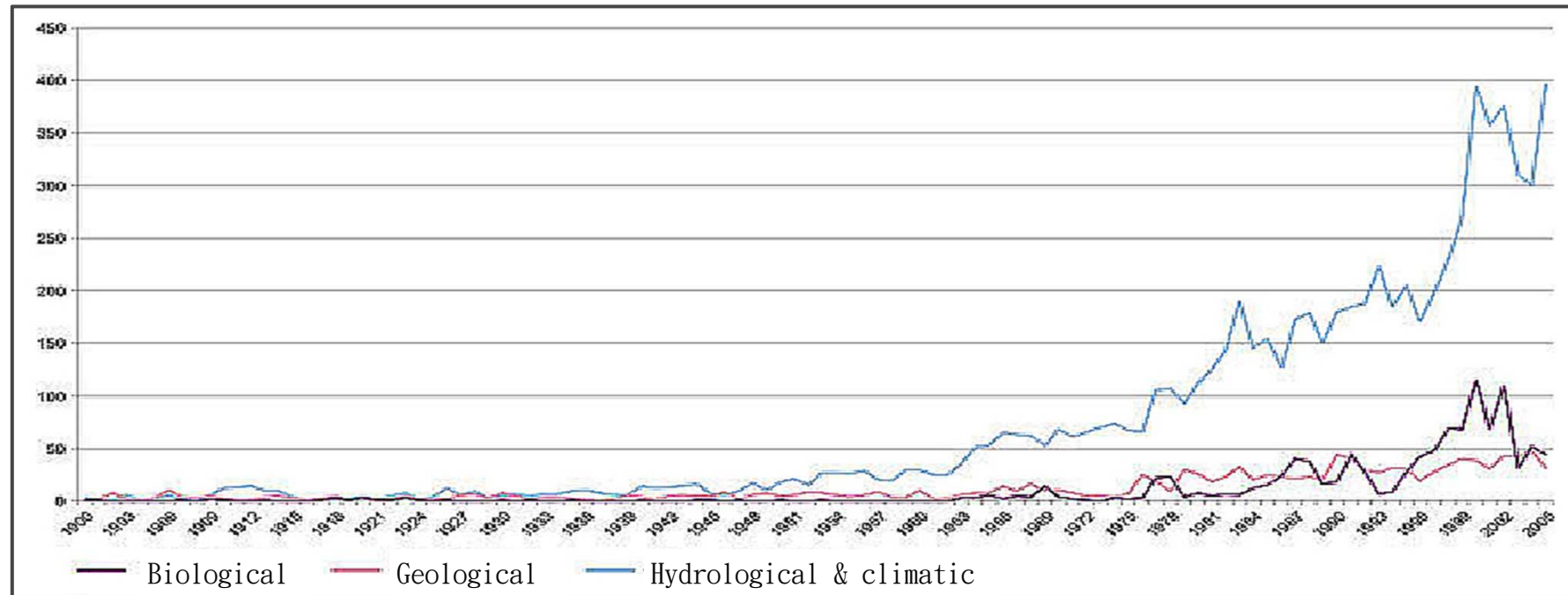
Final Remark



Introduction^(1/2) – Global Natural Disasters



Hurricane Katrina 2005 Sichuan Earthquake 2008 Typhoon Morakot 2009 Haidi Earthquake 2010 Tohoku Earthquake 2011



Introduction_(2/2)

Rational

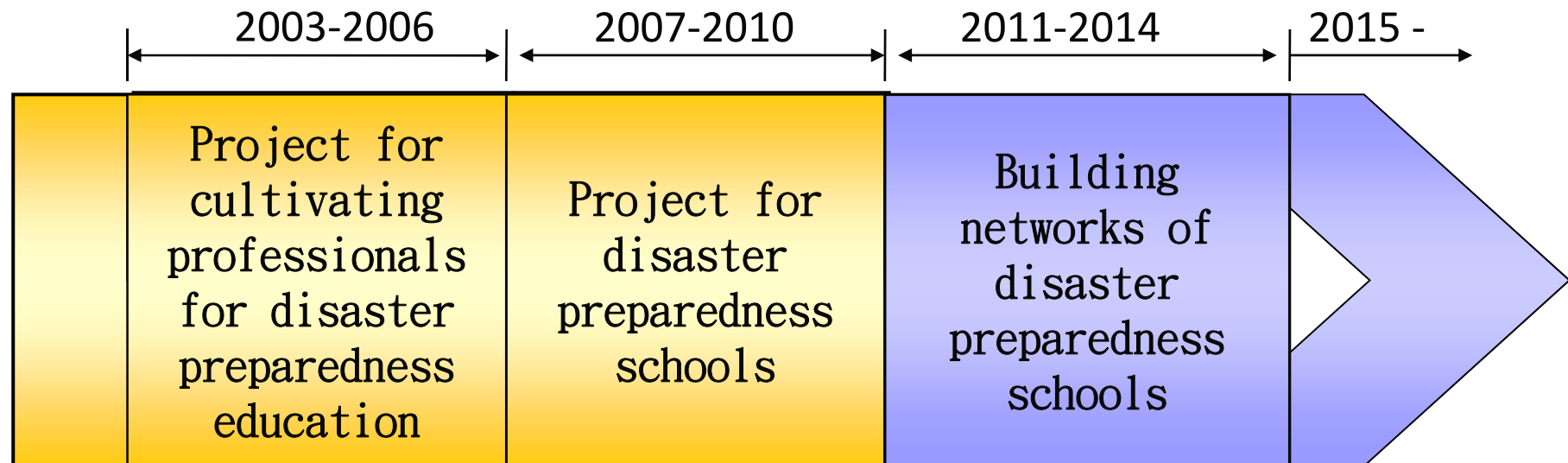
*Prevention is better than recovery;
However, away from disasters is much better.*

Aims

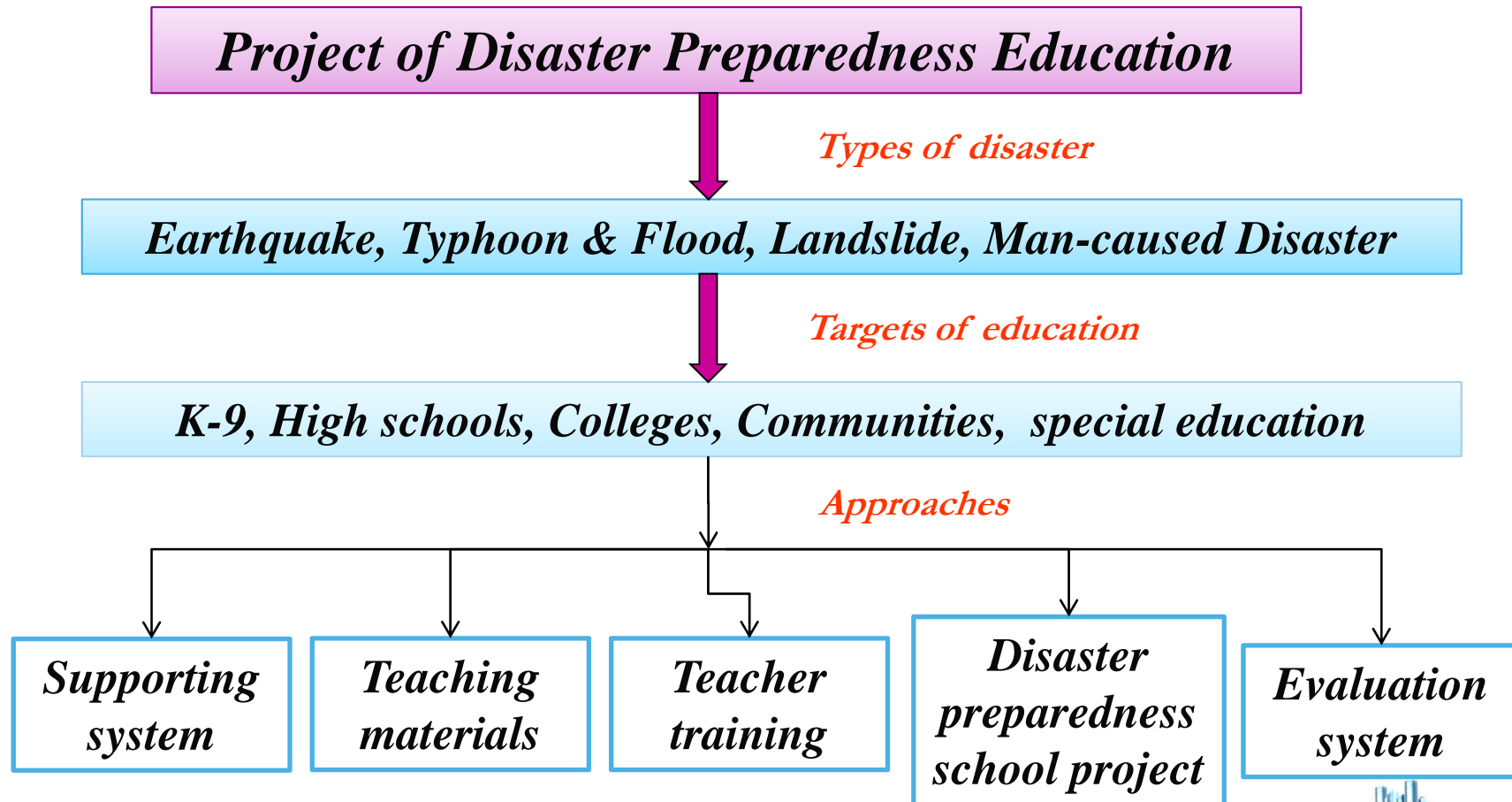
*Every school is disaster free;
Every student is with disaster preparedness.*



Projects for Disaster Preparedness Education

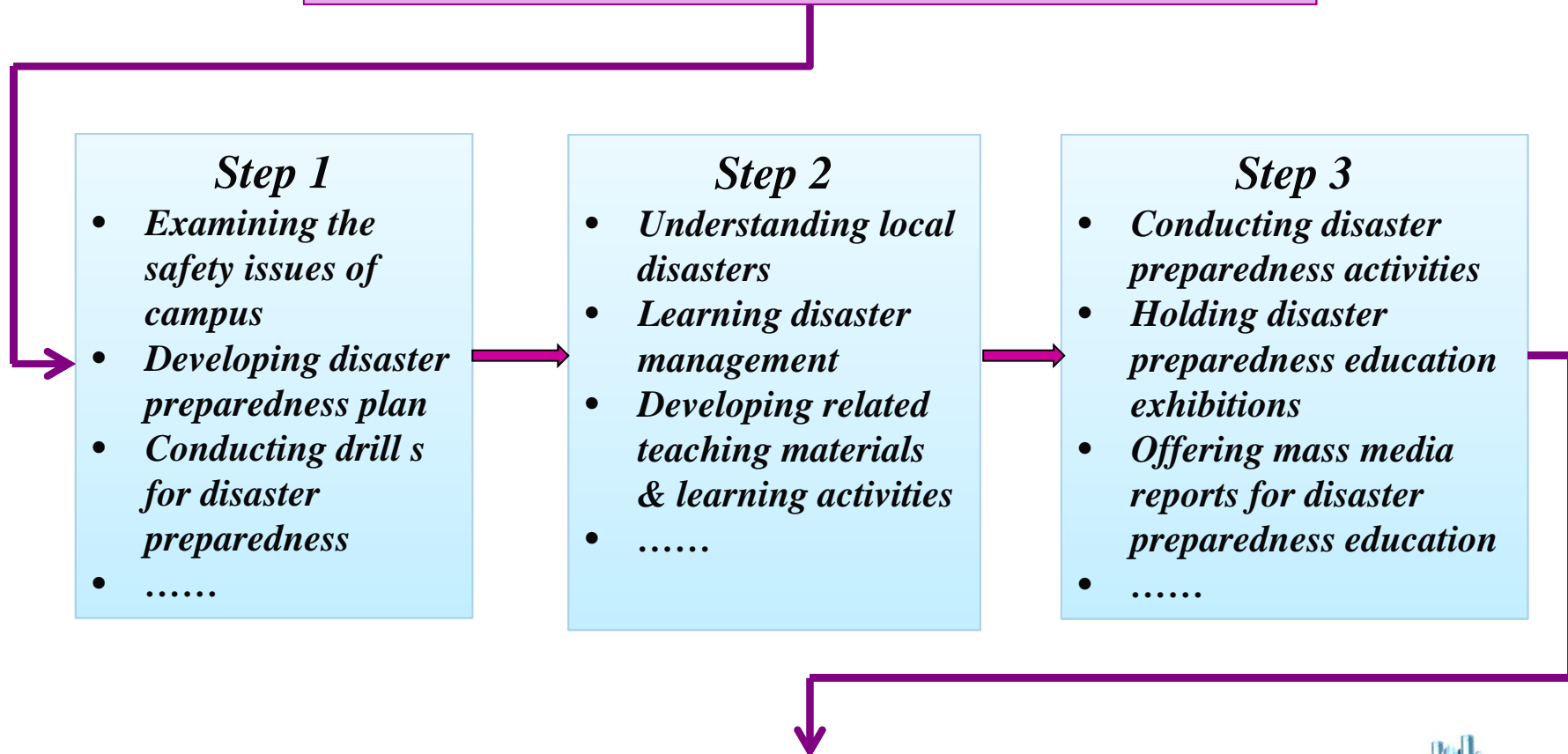


Structure of Disaster Preparedness Education



Process for Disaster Preparedness Schools

Supportive Teams (formed by MOE)



Disaster Preparedness Schools



Approach (1/8)

Establishing the information system for school susceptibility & vulnerability of disasters

- Offering the information of school susceptibility and vulnerability of earthquake, typhoon & flood, and man-caused disasters.



	2010
Number of schools	4,546
No. of schools with high susceptibility of earthquake	131
No. of schools with high susceptibility of typhoon & flood	1,063
No. of schools with high susceptibility of landslide	751
No. of schools with high susceptibility of human caused disasters	6

Approach (2/8)

Building Web-site for Natural Disaster Education

(<http://disaster.edu.tw>)

1. Offering up-date information, teaching modules and learning materials, research findings, and Q&A of Natural Disaster Education.
2. The web-site has been well received, especially during the period of March 11 Japanese earthquake. The amounts of visitors and files downloaded increased dramatically.



Approach (3/8)

Seed Teachers Training

- ❖ Establishing programs, curricula, and assessment for seed teacher training of natural hazard education
- ❖ Selecting & Cultivating seed teachers of natural hazard education

	2009	2010
Training workshops	6	12
Seed teachers	431	833



Approach (4/8)

Teacher Training

1. In-service Teacher Training in 2010

	workshops	participants
K-9 teachers	25	2600
High school teachers	13	3047

2. Pre-service Teacher Training

-- Teacher training programs in colleges are encouraged to offer disaster education credits.



Approach^(5/8)

--Incorporate Natural Hazard Concepts into National Curriculum Frameworks

	Subjects
Grade 10-12	Earth Sciences, Geography
Grade 1-9	The awareness, knowledge, attitudes, and skills for natural hazard preparedness have been infused into Social Sciences, Health and Physical Education, Science and Technology, Activities, and Environmental Education.
Kindergarten	Safety and Self-Protection are taught in the subject of Health.



Approach (6/8)

Making Flash movies for Natural Hazard Education

- **Kindergarten** (<http://disaster.edu.tw/content/childlearn/website.html>)
- **K1-9** (<http://disaster.edu.tw/version/teacher/teacher1-1-3.asp>)



Approach (7/8)

Drills for Natural Hazard Preparedness

- In 2009, to highlight a decade after the 921 earthquake, 77 national and 3449 local school drills for natural disaster preparedness have been held to improve student's awareness and skills of disaster preparedness.
- In 2011, 9 composite disasters drills which consist of earthquake, fire, flood, tsunami, and nuclear radiation, have been conducted after Japanese 311 earthquake.



Approach (8/8)

Evaluation

--Disaster preparedness education has been included as a measure item of yearly performance evaluation of local educational bureau. Disaster preparedness education evaluation consists of administration and management, teaching and learning, activities, and drills.



Summary of the approaches

Supporting system

A Website for natural disaster education

school susceptibility & vulnerability of disasters

Teacher training

Seed teachers selecting & training

In-service & pre-service teacher training

Teaching materials

Curricula

Teaching materials

Flash movies

implementing

Drills

evaluation

Performance of local educational bureau



Final Remark

We recognize the importance of disaster preparedness of students, and educate them with awareness of, knowledge about, attitude to, and skills for dealing with both natural and man-caused disasters.



Thank You

