

# Innovations in DRR Education



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# Contents

- Issues and Challenges of Disaster Education
- Innovations in Policy Interventions
- Innovations in Enhancing Actions
- Higher Education in DRR and CCA



# Education for Sustainability

UN Decade of Education for Sustainable Development (2005-2014,  
Secretariat: UNESCO)

Education for Sustainability is a *lifelong learning process* that leads to an informed and involved citizenry having the creative problem solving skills, scientific and social literacy, and commitment to engage in responsible *individual and co-operative actions*.

Education for Sustainability has the potential to serve as a tool for building stronger *bridges between the classroom and business, and between schools and communities*.

Education for **CCA** (Climate change adaptation) and **DRR** (disaster risk reduction) as a part of education for sustainability



# Education: the Key Lessons

- It is essential, valued, welcomed and it works!
- However many governments give it a low profile
- Education and Training are costly, but yield rich dividends
- There is a lack of knowledge concerning the effectiveness of education and training



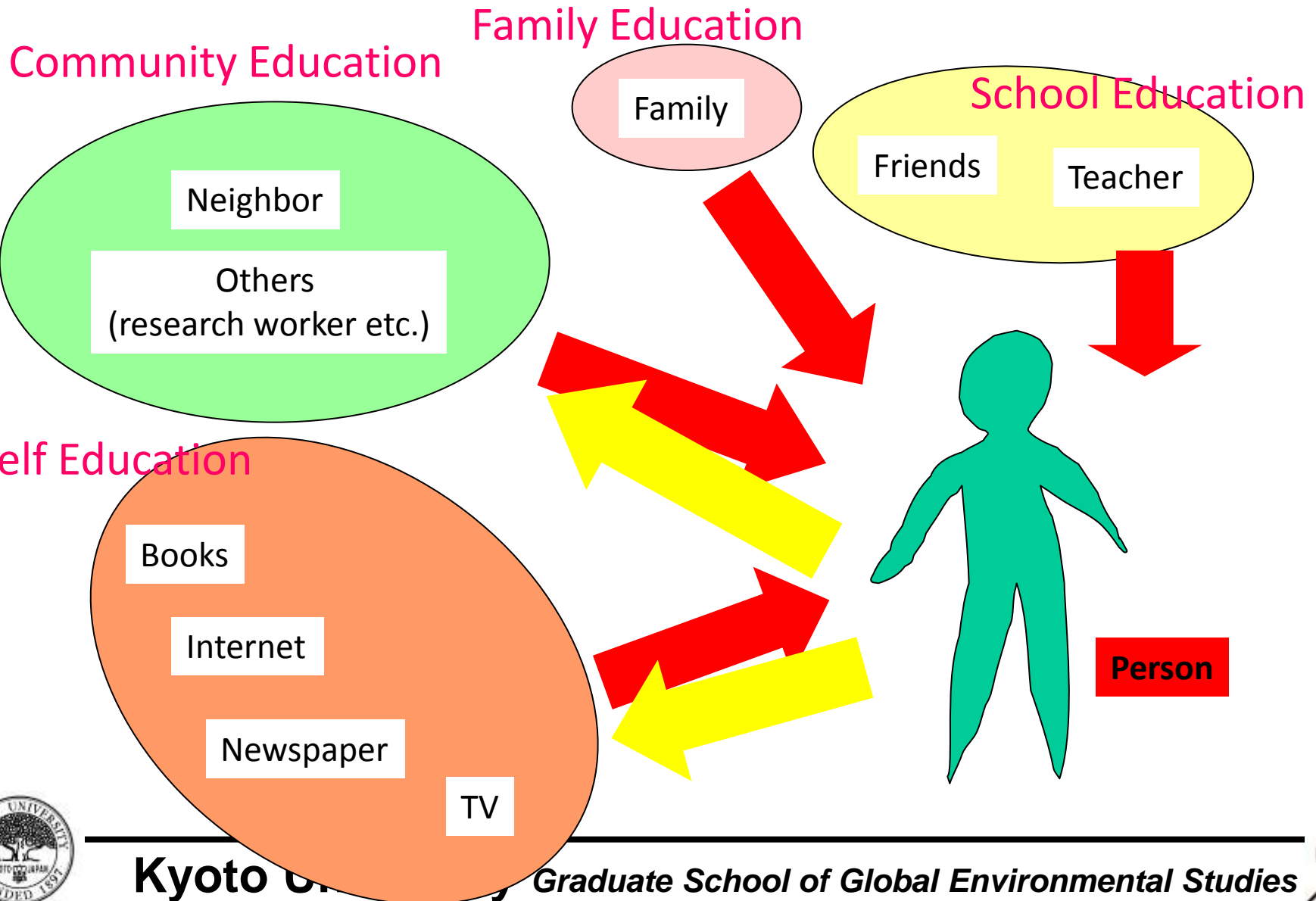
# Genuine Learning:

*“ Tell me, and I’ll forget  
Show me, and I may remember  
Involve me, and I will  
understand”*

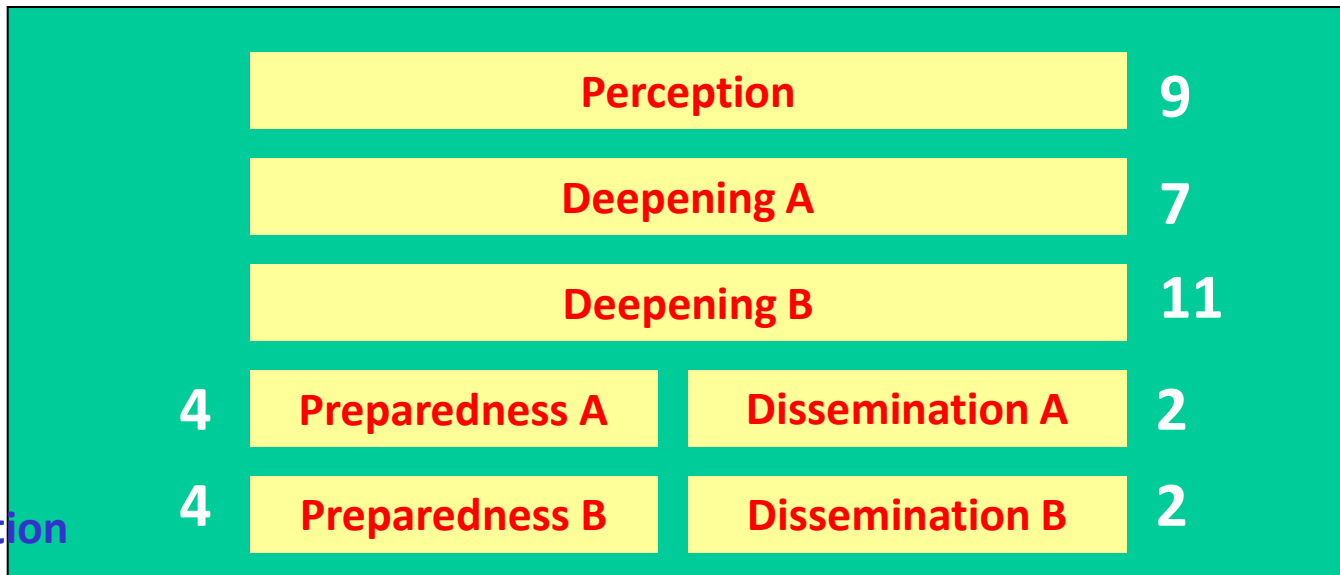
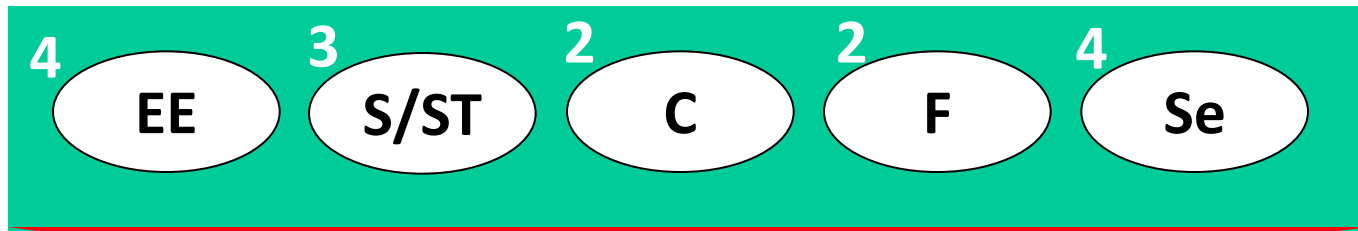
Anon



# Source and Tools of Education



# Steps of Knowledge and Education



Knowing



Realizing



Deepening



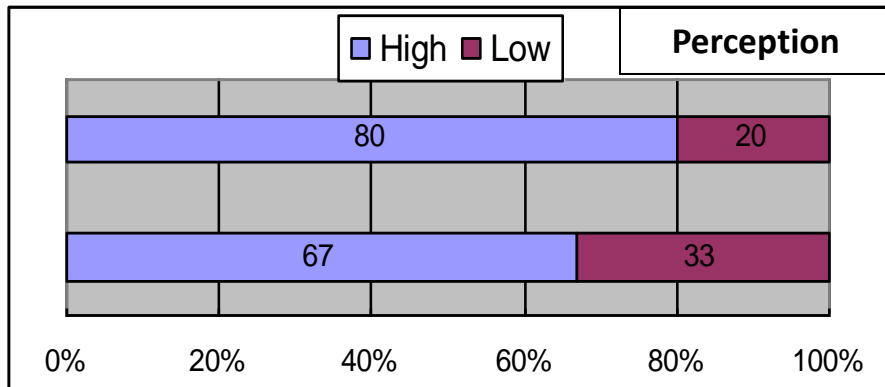
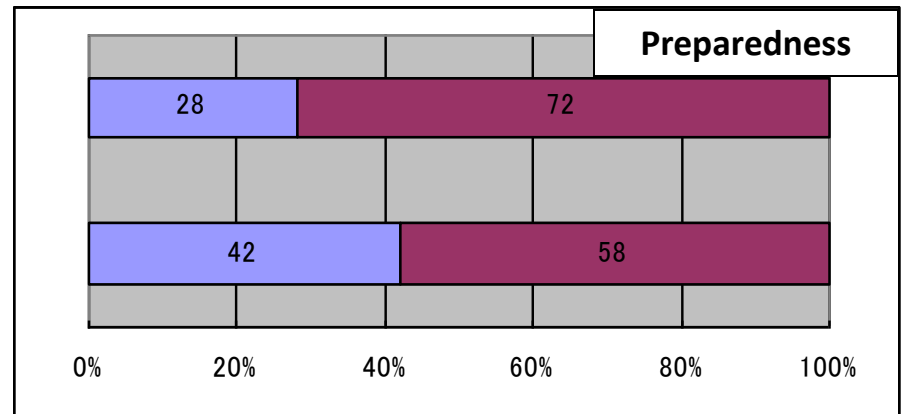
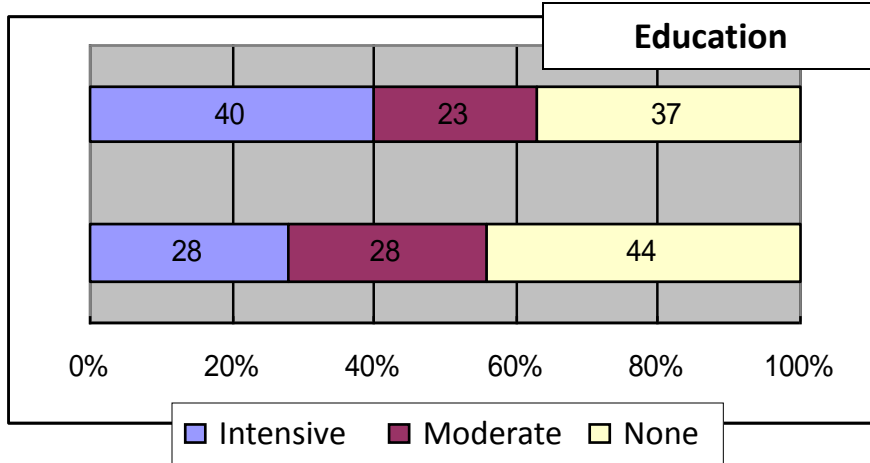
Decision



Implementation



# Results of Risk Perception of School Students in Japan

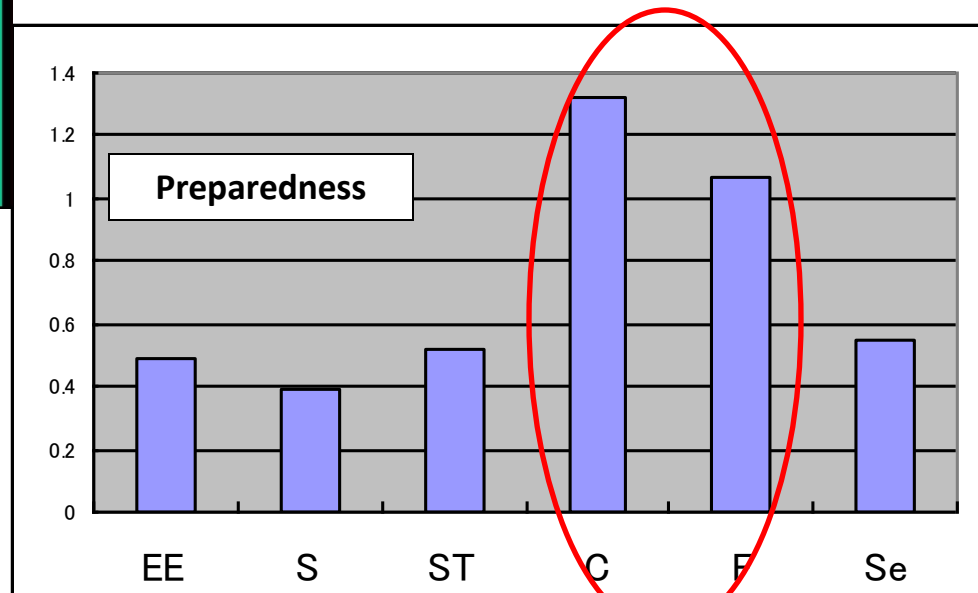
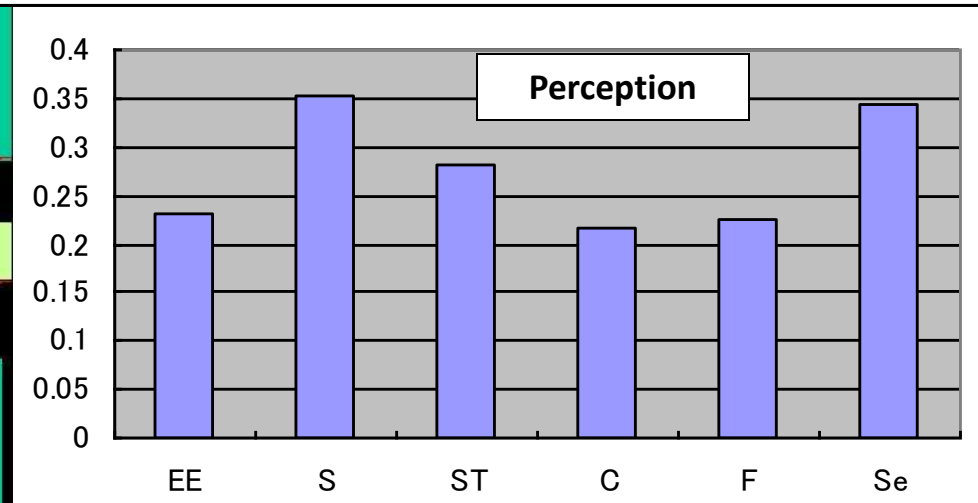
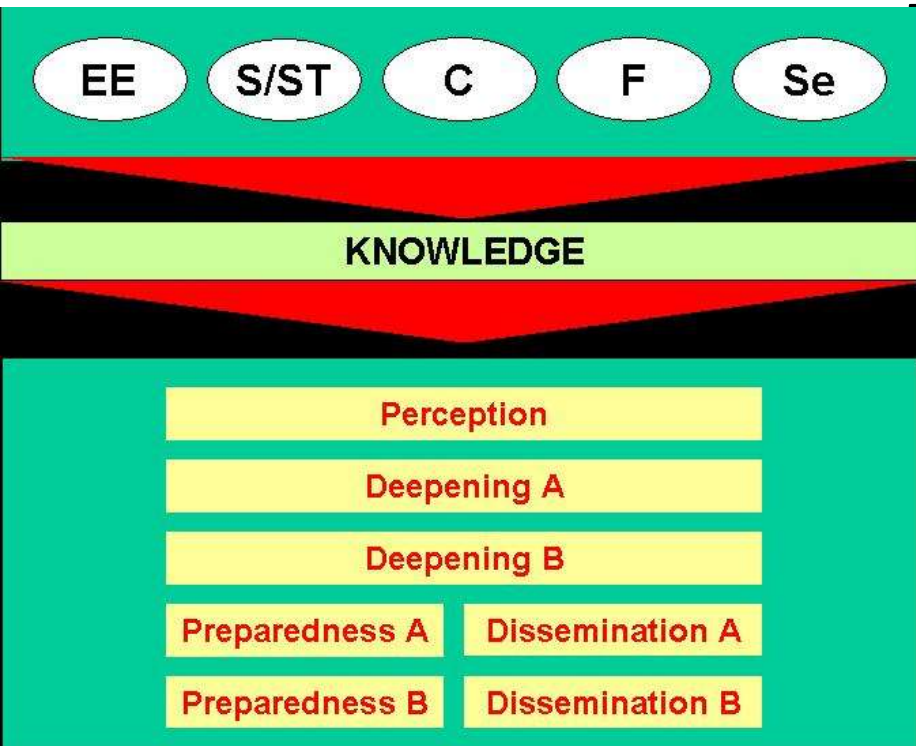


## The Problem

- 60-70% students undergone disaster education
- 70-80% students have higher risk perception
- 30-40% are prepared



# Community & family play the most important role



## The Problem

# Enhancing Action

	Listen				Watch				Do										Talk	
	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18	S19	S20
Perception					○														○	
Deepening A								○								○			○	○
Deepening B								○								○	○	○		○
Preparedness A																			○	○
Preparedness B																			○	○
Dissemination A																			○	○
Dissemination B																○	○	○	○	○

From realization to action, TALK has more impact.

Effectiveness: **[Talk]>[Do]>[Watch]>[Listen]**

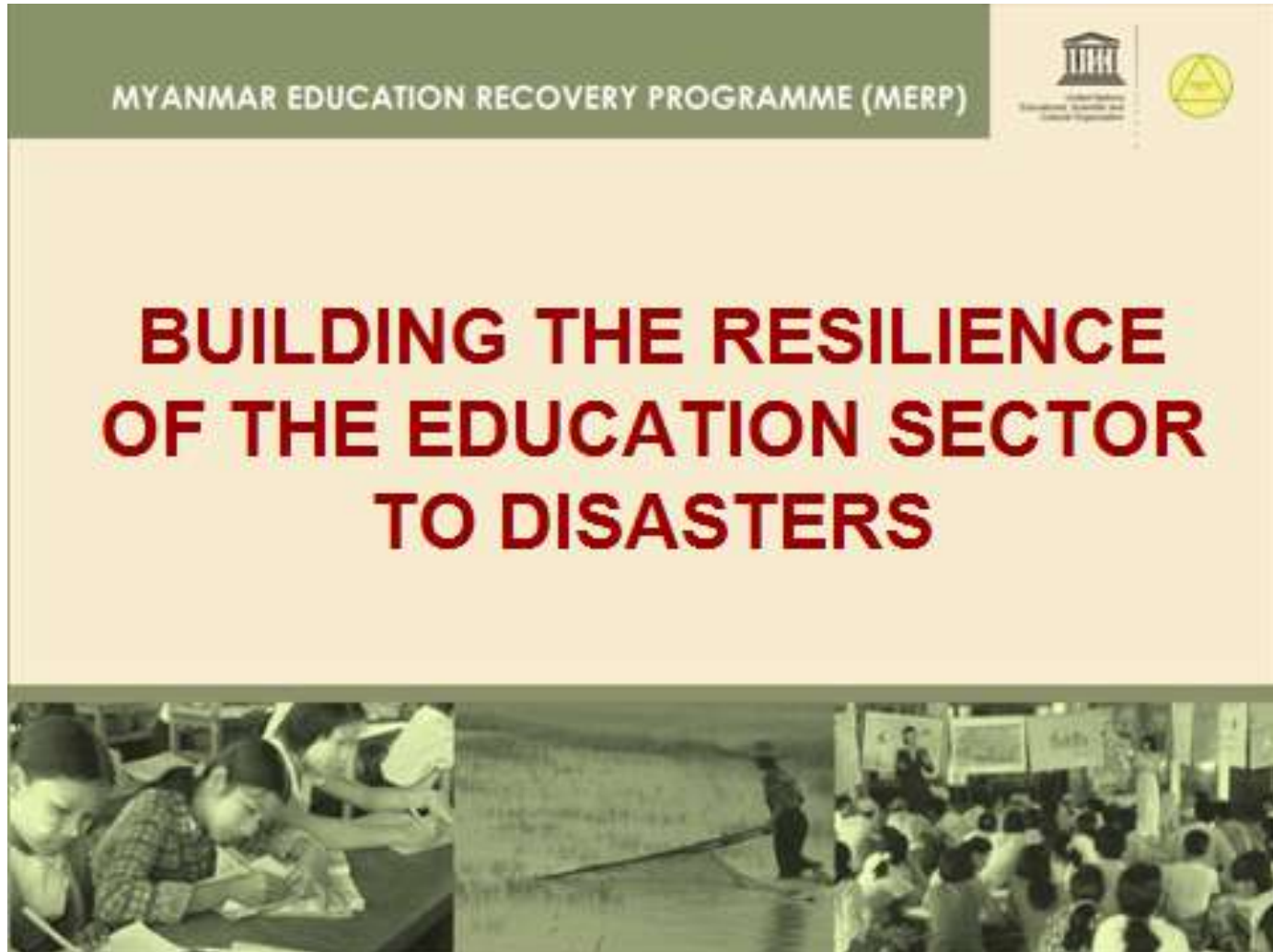


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# Customizing HFA into Education Sectors

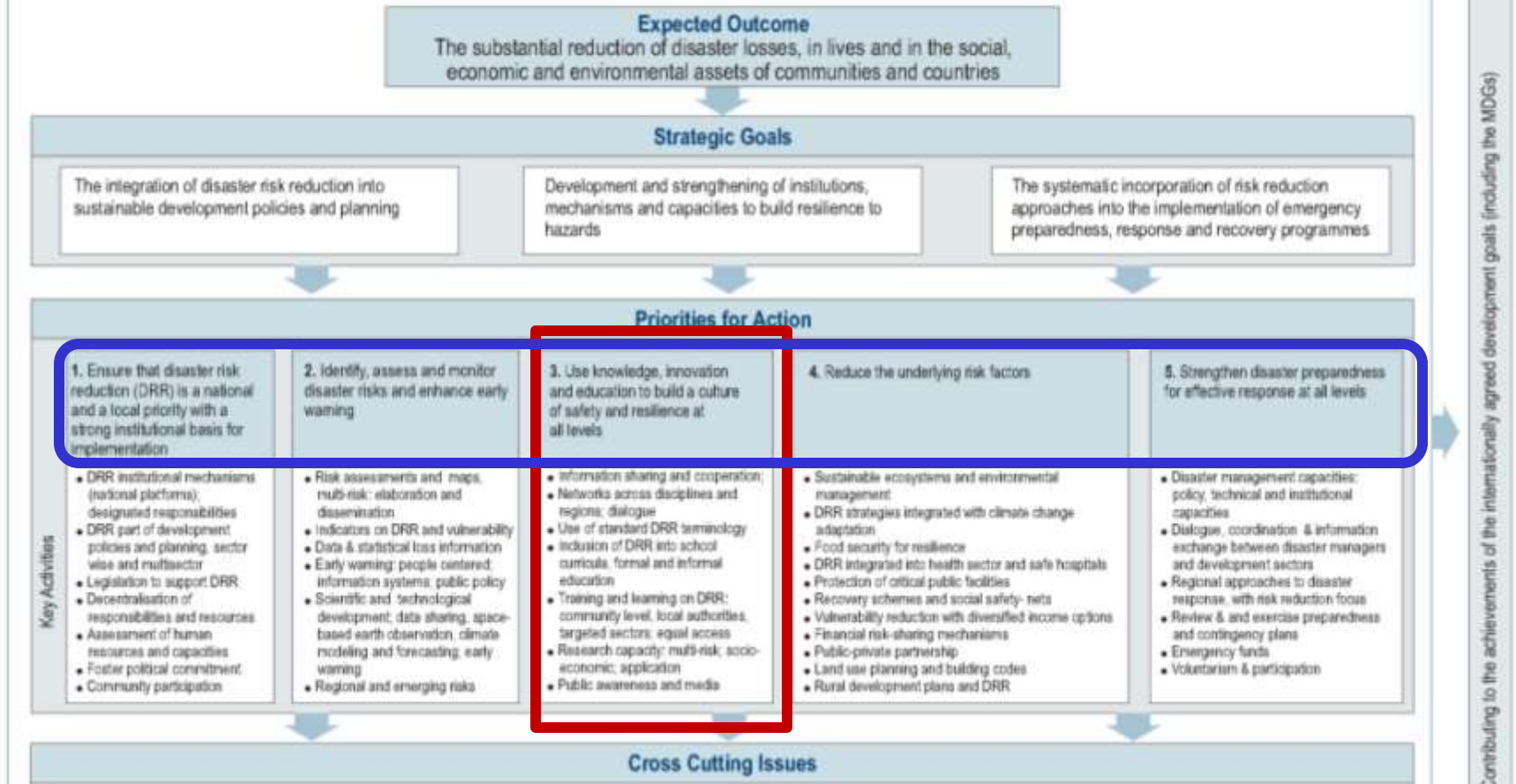


# Hyogo Framework for Action 2005-2015



## SUMMARY of the Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters (Hyogo Framework)

### Expected outcome, strategic goals and priorities for action 2005-2015



# Seeing Resilience Through an Education Lens

**PRIORITY 1:** Developing institutional base for DRR in education

**PRIORITY 2:** Identifying, assessing and monitoring disaster risks in the education sector

**PRIORITY 3:** Building a culture of safety through DRR education

**PRIORITY 4:** Reducing the underlying factors in the education sector

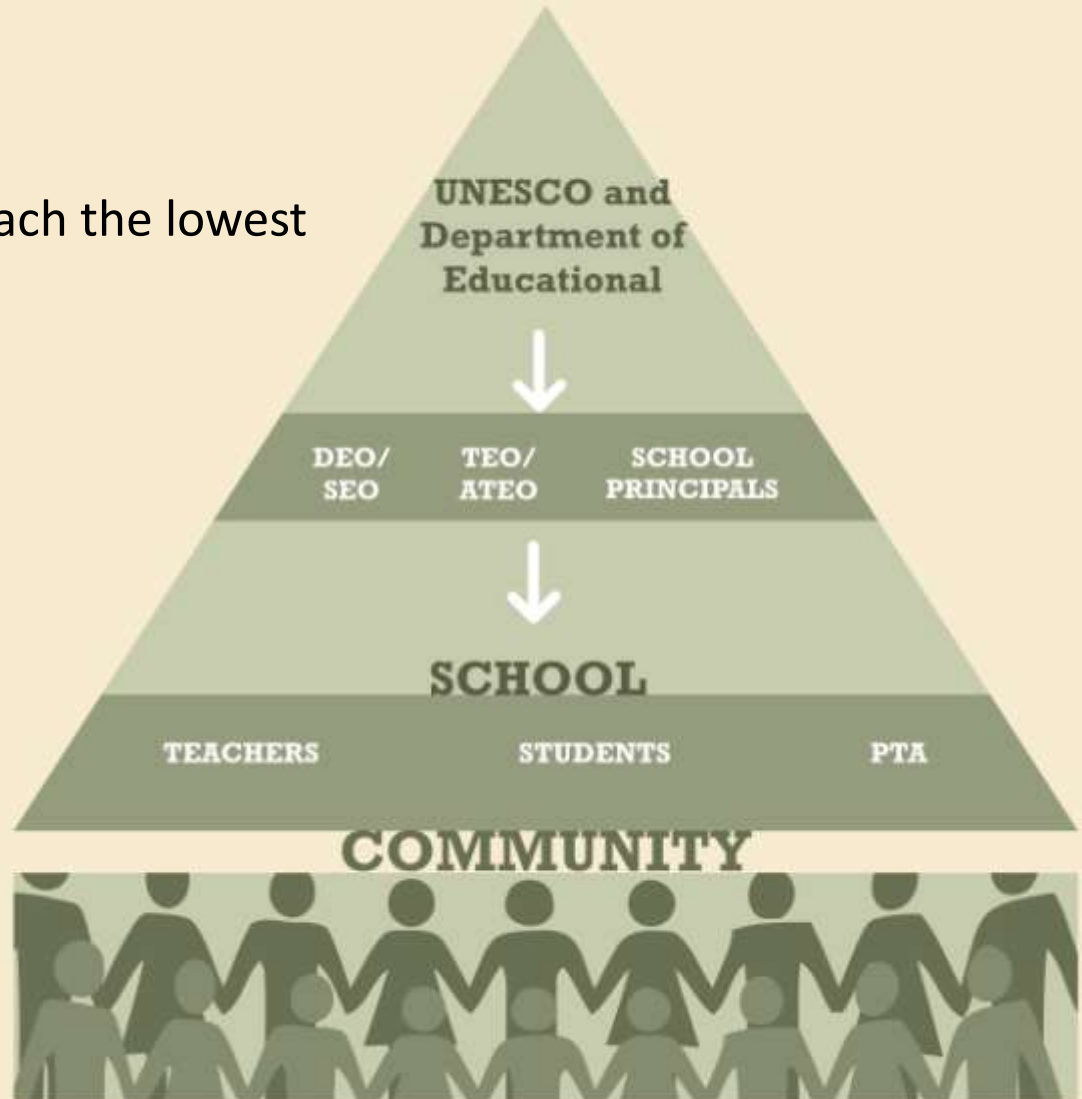
**PRIORITY 5:** Preparing for effective emergency response and recovery in education





## Approach

Cascade model adopted to reach the lowest level of the pyramid



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**Study** through

## **Lecture**

### **Purpose:**

Understand about  
**general knowledge**  
(Mechanism of disaster,  
disaster history, past  
disaster etc.)

### **Tool:**

Text book, Video,  
some document.

### **Implementer:**

School teacher  
Instructor etc...

**Learn** through

## **Experience**

### **Purpose:**

Understand **local issue**,  
history and  
environment.

### **Tool:**

Town Watching  
Interview  
Visit to Museum  
Disaster drill

### **Implementer:**

Specialist  
High experience person

**Learn** through

## **Presentation**

### **Purpose:**

Understand **own  
issue**.  
Make action plan

### **Tool:**

Some WS tool

### **Implementer:**

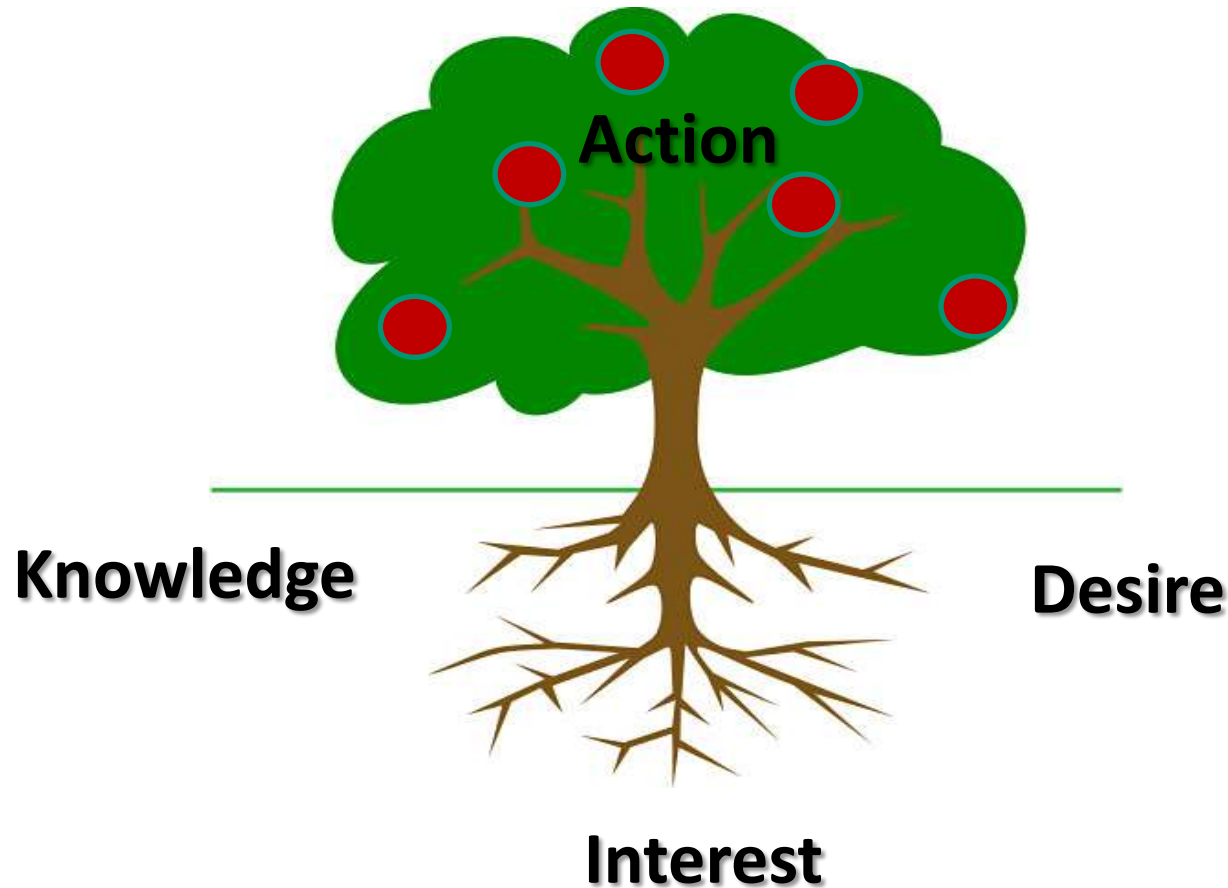
Student  
individual



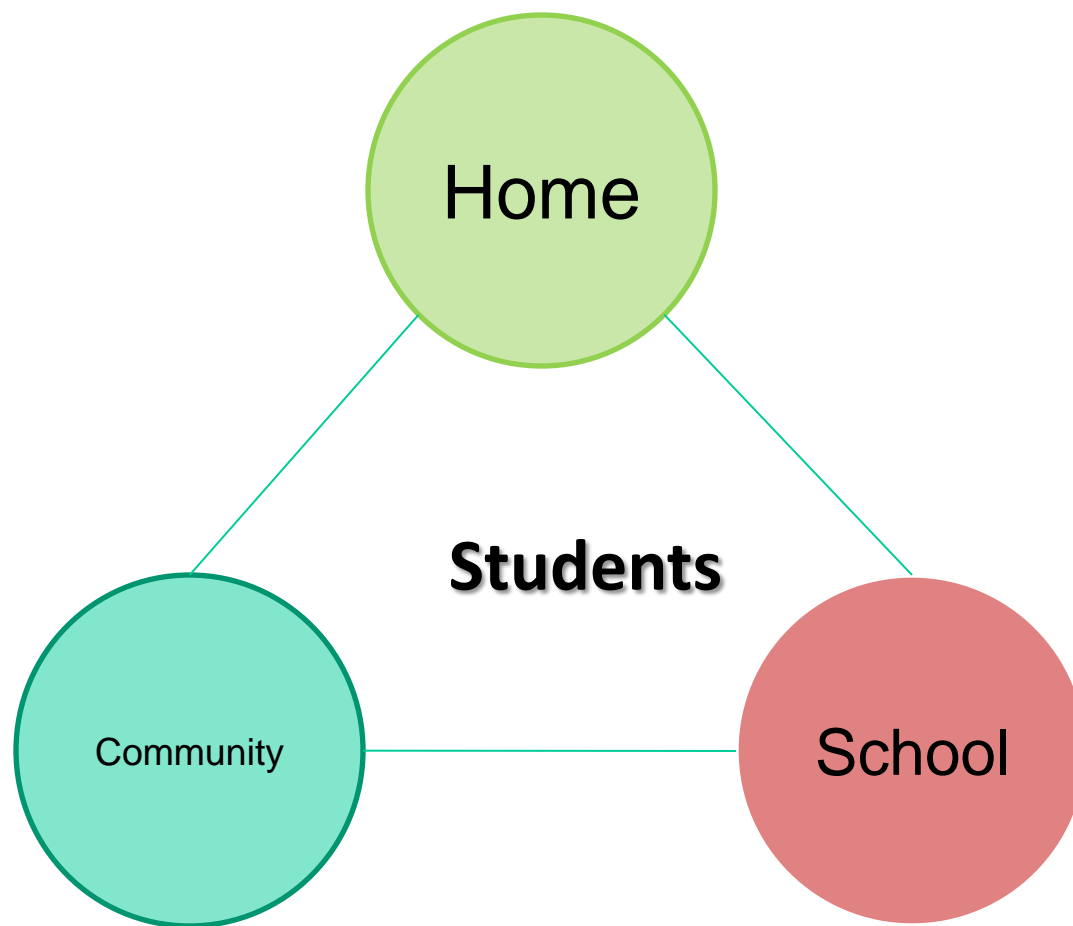


1 year program  
2 Levels  
3 types of hazards

# KIDA Model of Education



# Places of Education



# FLOOD PREPAREDNESS TREE

## LEVEL ONE

### ACTIONS

FL1-F. Creating a Checklist and Performing Monthly Checks



### KNOWLEDGE

FL1-A. Conducting First-Aid Training

FL1-B. Conducting Experiment Sessions

### INTEREST

FL1-C. Family Chats on Past Flood Experiences

### FL1-D.

Understanding the Flood Prevention Support in Your Community

### DESIRE

FL1-E. Community Interaction

# FLOOD PREPAREDNESS TREE

## LEVEL TWO

### ACTIONS

FL2-F. Ensuring that Family Members, Neighbors are Warned

FL2-G. Ensuring that Electrical Appliances are Unplugged



### KNOWLEDGE

FL2-A. Short Lecture and Video-Watching

### INTEREST

FL2-B. Participating in Post-Flood Activities such as Clearing of Debris

### DESIRE

FL2-C. Creating an Emergency Escape Plan

FL2-D. Community Mapping

FL2-E. Drawing or Photography Contest

# LEVEL ONE

		Monthly	Quarterly	Annually
<b>Priority Activities</b>	Home	FL1-F. Creating a Checklist and Performing Monthly Checks		
	Community		FL1-E. Community Interaction	
	School		FL1-D. Understanding the Flood Prevention Support In Your Community.	FL1-B. Conducting Experiment Sessions
<b>Optional Activities</b>	Home		FL1-C. Family Chats on Past Flood Experiences.	
	Community			FL1-A. Conducting First-Aid Training
	School			

Think of 2 Flood-preparedness activities that you can do.  
(Refer to FL1-G and FL1-H)

NOTE: FL1-A to H are activity codes. Students are not required to follow the activities in sequence.



## FL1-D. Understanding the Flood Prevention Support in Your Community

LEVEL	ACTIVITY SITE	FREQUENCY	ACTIVITY TYPE
LEVEL ONE	Community	Quarterly	Priority

### RATIONALE

It is important to find out if an early warning system is available in your community. If there is a warning system, are you able to recognize it?

There had been cases when warning systems are set off, however, citizens did not understand and fail to response.

Therefore, it is important and its our responsibility to find out and understand the early warning system in our community.

### DURATION

Depending on the activity, it may take 30mins to a day.

### SUGGESTED ACTIVITIES:

- Learn about the information provided in pamphlets.
- Learn about the information disseminated through the broadcast at local radio stations
- Find out what kind of information are available at the local community.
- If possible, visit the local authorities to find out more about the early warning systems.

### Example

MEMO (Date: 1 Oct, What was learnt: Visit to local authorities)

*I attended a talk given by the local authorities and learnt about the different warning sirens as well as where to go for shelter in case of emergency*

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DATE	VENUE	DETAILS OF ACTIVITIES

Date Completed	Comments	Checked By

94



# Framework of Neighborhood Watching

## Understanding of River Basin

### Mountain Watching

- Understanding about region and environment, land slide and role of forest.
- Build up network in Community



### Town Watching

- Understanding about region and environment, Flood disaster and Earthquake disaster.
- Build up network in Community



### Coastal Watching

- Understanding about region and environment, Tsunami, storm surge and role of forest.
- Build up network in Community





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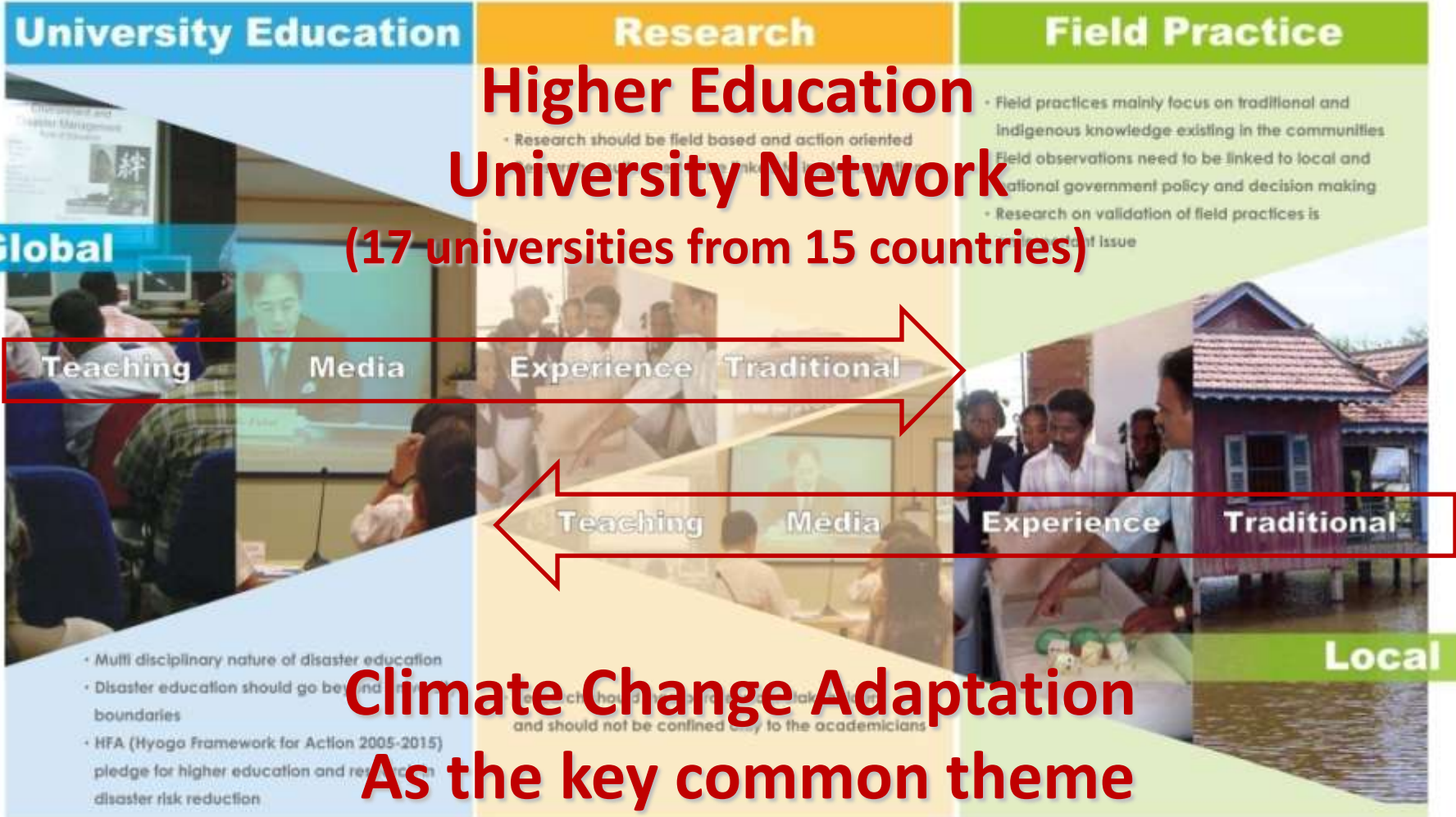
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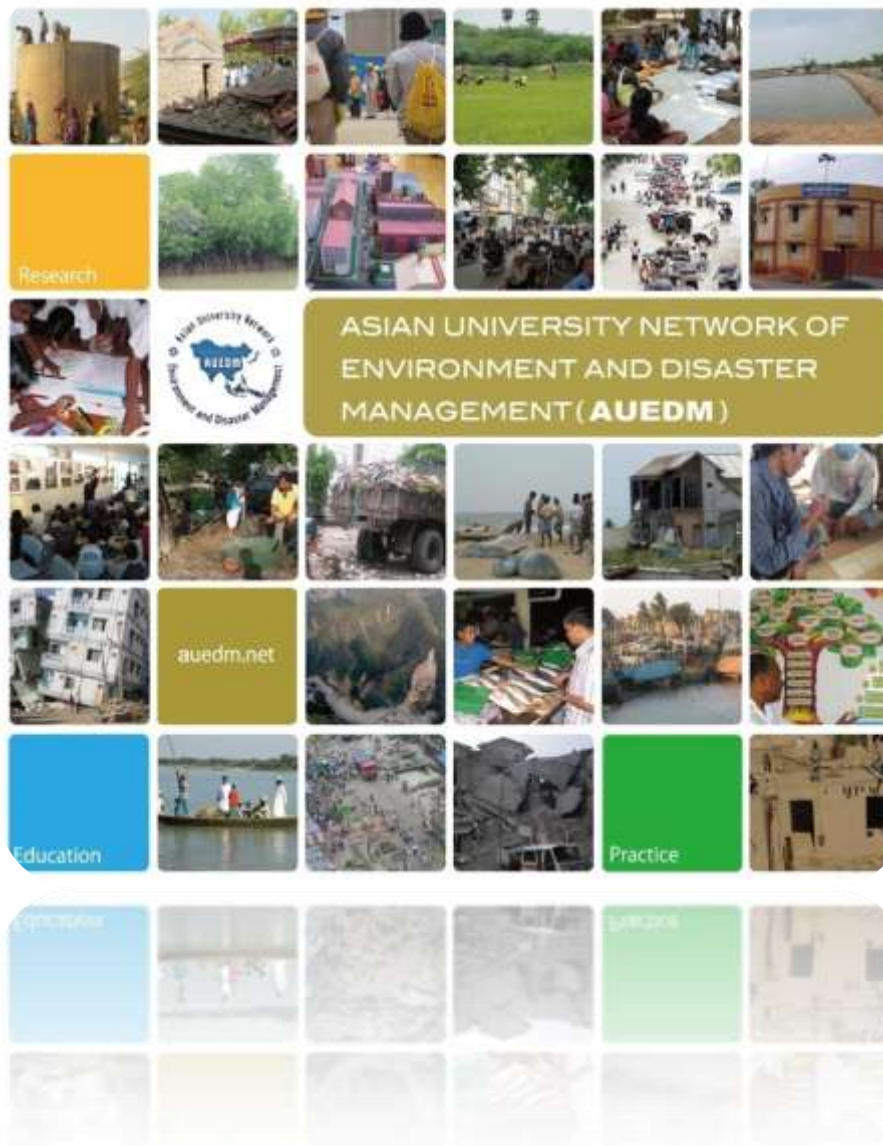


[www.auedm.net](http://www.auedm.net)

# Higher Education University Network

(17 universities from 15 countries)





[www.iedm.ges.kyoto-u.ac.jp](http://www.iedm.ges.kyoto-u.ac.jp)

