Korean School Safety Programme Guide for Teachers
What is Disaster Risk Reduction?
A hazard is an event or a process, either natural or human-induced that can cause harm to people, their belongings and their environment, if they do not take precautions.

- Natural Hazards: Earthquakes, Hurricanes, Volcanoes, Floods, Droughts, Landslides
- Human-induced Hazards: Pollution, Traffic or Factory Accidents
Practice question #1

An activity to choose which hazards around us are natural or human-induced

Match the Pictures with

The Name and the Description

and then say whether you think it’s a natural or a human-made hazard.

- Tsunami:
  A huge wave, usually caused by volcanic or earthquake activity under the ocean, which can eventually crash into the shoreline. The effects on the community can be devastating.

- Earthquakes:
  The shaking and moving of the ground due to movements of the plates that make up the surface of the earth.

- Epidemic:
  The rapid spread of an infectious disease to lots of people.

- Hurricanes:
  Also known as typhoons or cyclones, depending on where you live: the strongest tropical storms. They form in specific conditions.

- Droughts:
  When it doesn’t rain for an unusually long time and this leads to a serious water shortage. They can also be caused by human activities. For example, building a dam upstream could cause a drought for the villagers downstream.

- Floods:
  When a river bursts its banks and the water spills out onto other places.

- Avalanches:
  When lots of snow suddenly moves downhill.

- Landslides/Mudslides:
  When lots of land and mud suddenly move downhill.

- Volcanoes:
  When magma reaches the earth’s surface, causing eruptions of lava and ash.

- Technological Hazards:
  A hazard caused by technological or industrial conditions. For example, a factory explosion, chemical spill, or nuclear radiation.

- Wildfire:
  When a fire gets out of control in the forest.
Practice question #2
A simple brainstorming activity to uncover surrounding hazards

EXERCISE 2
(See Facilitators' Notes)

WHAT KINDS OF HAZARDS HAPPEN MOST FREQUENTLY IN YOUR AREA?
Vulnerability is a state, environment or condition in which hazards could lead to greater damage.
Causes of vulnerability

Climate change | There is a heightened level of vulnerability, especially to those living in coastal areas, due to damage caused by disasters such as storm surge as a result of a rise in sea levels due to global warming.

Poverty | Those living in poverty are more vulnerable since they are more likely to settle in areas with a greater number of hazards being unable to (or unable to afford to) settle in safer areas.

Educational inequality | Compared to the better educated, the less educated lack sufficient information on disasters and are thus more likely to be more vulnerable.

Disaster insurance | Those who lack proper disaster insurance are more vulnerable than the adequately insured and may not be compensated for damage suffered.

Lack of knowledge on local language and environment | Insufficient local language fluency in the region struck by disaster will impede the ability to figure out emergency disaster messages or respond to the ongoing risk. Such people will be comparatively ill equipped and at a greater level of vulnerability.
Points to focus on while giving instruction

Those who live near hazards need to know what kind of hazards they face on a daily basis. In this image, people are vulnerable because they are not looking at a rock that could wreak havoc if it started to roll. (The fact that the people are looking at the rock means that they are aware of the risk and will be able to secure enough time to make necessary preparations.)

Optional activity

Practice question #3

Find people who are vulnerable

E.g.) the elderly, pregnant, disabled, foreigners, children, etc.

Let’s assume that you have received an emergency disaster warning message. Who around us is exposed to the greatest level of risk? What could be done to help those who are vulnerable to a flood?
When damages occur influencing life, property, the environment and/or people’s livelihoods due to hazards. It is not termed a disaster if there is no damage to life, property, the environment and/or people’s livelihoods.

The expression that we often use—i.e., ‘natural disaster’—is not quite accurate. Rather, it should be called a ‘natural hazard’.
The identical natural hazard, earthquake, has occurred in both instances above, but the photograph on the left where damages to life, property and environment have occurred is a scene of a disaster. The photograph on the right side, however, shows a desert where there was an earthquake; it would not be called a disaster because there were no damages.
Practice question #3

How to differentiate hazards and disasters

- There was an unexpected deluge of rain, and the water level of the river is rising.
- An uninhabited island in the Pacific Ocean was overrun by a tsunami.
- There was an avalanche at a mountain village.
- A super-typhoon that started in the Pacific Ocean.
- Traffic on the expressway had to be restricted due to a heavy snowfall.

- Thirty thousand chickens were buried in the ground as a result of an outbreak of avian flu.
- Over 100 elderly persons who live alone were taken to the emergency room due to a heatwave, as the temperature reached over 40 degrees centigrade.
- Many people are currently living in temporary housing due to the earthquake.
The ability to prevent a disaster or return to the state before the disaster occurred.

Fundamentally remove a hazard such that it is unable to cause damage.
E.g.) Relocate residents living in the region where there is possibility of a landslide to a safe area.
The ability to anticipate the possibility of a disaster due to an existing hazard and to respond appropriately when the disaster actually strikes

E.g.) Build an early warning system, conduct evacuation drills, provide disaster prevention instructions, prepare emergency goods and first-aid kits
Minimizing damage when a hazard poses a disaster threat

E.g.) Construct a debris barrier (a structure to prevent a landslide as well as soil slide), a storm water storage basin (a temporary storage for excess sewage due to heavy rainfall), implement earthquake-resistant designs, etc
How can children and youth contribute to making our world safer?
A 10 year old saved over 100 people during the 2004 Tsunami in Asia!

Her name is Tilly Smith
She learned how to detect tsunamis, just before going on holiday

Natural Hazards

Preparedness (Capacity Development)
Thank you

UNISDR for Northeast Asia (ONEA) &
Global Education and Training Institute (GETI)

4F Songdo G-Tower,
175 Art Center-daero,
24-4 Songdo-dong, Yeonsu-gu, Incheon
Republic of Korea