



Korean School Safety Programme Guide for Teachers

Introduction to UNDRR

UNDRR (formerly UNISDR) is the United Nations focal point for disaster risk reduction. UNDRR oversees the implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030, supporting countries in its implementation, monitoring and sharing what works in reducing existing risk and preventing the creation of new risk. UNDRR brings governments, partners and communities together to reduce disaster risk and losses to ensure a safer, more sustainable future.

In 2010, the UNDRR Office in Incheon for Northeast Asia (ONEA) and Global Education and Training Institute (GETI) was established to develop a new cadre of professionals in disaster risk reduction and climate change adaptation to build disaster resilient societies. ONEA supports five countries : Republic of Korea, China, Japan, Mongolia and DPR Korea specifically to reduce disaster loss and risk and to ensure Sendai Framework for Disaster Risk Reduction 2015-2030 implementation. GETI has a global mandate to provide capacity building support to mainstream disaster risk reduction and climate change adaptation into sustainable development; convene and support inter-city learning to strengthen resilience; and to provide capacity building and best practice sharing support to national training institutions working on resilience issues. Based in Incheon, the Republic of Korea, UNDRR GETI is also the global secretariat of the Making Cities Resilient 2030 (MCR2030).

Introduction to School Safety Programme

Background to development process

This is an education program for disaster safety and prevention developed jointly in 2016 by UNDRR Office for Northeast Asia, and the Korean Ministry of the Interior and Safety and Incheon Metropolitan City, specifically designed with consideration of the Korean environment so that students may learn about disaster safety and prevention.

Teaching objectives



Students can clearly understand the meaning of a disaster.



Students can become more aware of hazards around them.



Students can learn what they can do to prevent disasters.



Students can develop their capacities to save their own lives and people in the community.

Characteristics

- Prevention-centered education

The program is centered around prevention education and focuses on what students need to know before a disaster strikes, what they are then able to do, and what measures they should undertake.

- Discussion/participation-centered education

Many diverse supplementary materials such as Riskland and Hazard Bingo games, videos, etc. are utilized to formulate discussion-based lessons that consist of student voluntary participation and which allow for an accurate understanding of the concepts (and definitions) on disaster risk reduction.

School Safety Programme contents

Lessons to proceed in the following order

Time needed	Tools utilized	Core contents	Pages
30mins.	PPT	Understanding the concepts of disaster risk reduction	4
10mins.	Tilly Smith video	The importance of disaster safety education	10
30mins.	Riskland game	Lessons on preventative disaster risk reduction measures through gamification	11
20mins.	Hazard Bingo	Review contents of lessons related to disaster risk reduction	13

Understanding the concepts of disaster risk reduction

1. Learning objectives

Be able to tell the differences between disaster and hazards, identify hazards around us, and why vulnerabilities occur.

Be able to understand how the risk level of a disaster and the magnitude of damage can be reduced through prevention, preparation and reduction measures.

2. Teaching and learning

Points to emphasize when giving instruction

Emphasize that major hazards such as typhoons, earthquakes, floods, etc. are nothing more than natural phenomena, and may be treated as such if we are well prepared, and take preventive and risk-reduction measures. (In short, a hazard does not have to lead to a disaster.)



Teaching and learning materials(need to be prepared) PPTs

3. Commentary on major instructional contents

Hazards



Definition

Hazards are caused either by natural phenomena or human-induced activities, which may result in damage to life, health, property, the environment and/or people's livelihood if proper preparations are not made.

Classification of hazards

- Natural : Earthquake, typhoon, volcanic eruption, flood, etc.
- Human-induced : Hazardous materials, Disruptions in services (water, sewer, communications, etc), Mass gatherings, Weapons, etc.



2 Optional activities

Practice question #1

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

MATCH THE NAME WITH THE PICTURES **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 shaking 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.

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 villages downstream.

PLAGUE
The rapid spread of a plant, animal or insect that causes harm to people, their crops or their animals.

FLOODS
When a river bursts its banks and the water spills out onto other places.

AVALANCHES
When lots of snow suddenly moves downhill.

TECHNICAL HAZARDS
A hazard caused by technological or industrial conditions. For example, a factory explosion, chemical spill or nuclear radiation.

LANDSLIDES/MUDSLIPS
When lots of land and rock suddenly move downhill.

VOLCANOES
When magma reaches the earth's surface, causing eruptions of lava and ash.

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



●● Definition

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

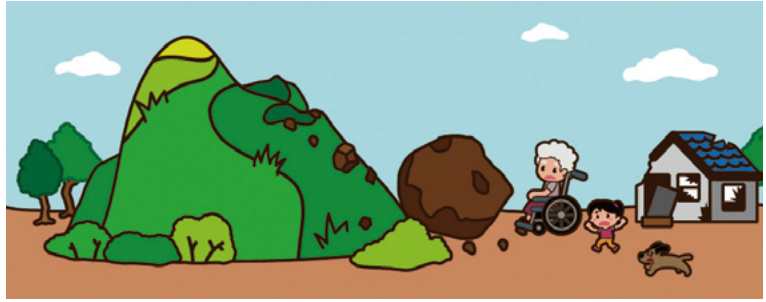
Practice question #3

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?

Disaster



Definition

When damage 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.



Points to focus on while giving instruction

In the picture, the parents have been either killed or seriously injured. The child has effectively lost the source of its care and livelihood. This is designed to show that a disaster does not only lead to a loss of life, but also has severe consequences for people's livelihoods and living space.

- ※ The expression that we often use—i.e., 'natural disaster'—is not quite accurate. Rather, it should be called a 'natural hazard'.

Difference between hazards and disasters (case study)



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

 Hazards

- 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.

 Disasters

- 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.

Disaster Resilience

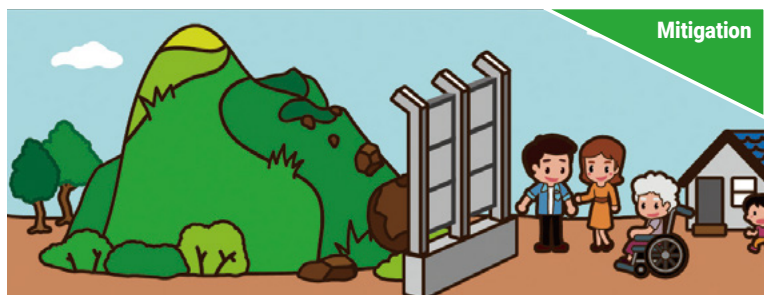
The ability to prevent a disaster or return to the state before the disaster occurred



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

Tilly Smith Video

1. Learning objectives

Students will realize why disaster safety and prevention education are important.

2. Teaching and learning

Points to emphasize while giving instruction

Remind students of the importance of disaster safety and prevention education utilizing a real-life case study, and let them know that they could also become a principal agent (like Tilly) helping those affected during a disaster, and that the very instruction they are receiving will allow them to be ready.



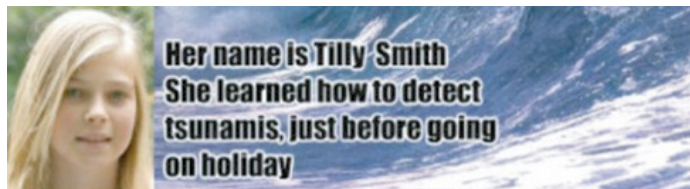
Teaching and learning materials required

Tilly video

<https://youtu.be/V0s2i7Cc7wA>



3. Commentary on main contents of the instruction



Tilly Smith was an ordinary 10-year old English girl curious about many things around her.

On December 26, 2004, the tsunami that struck in the Indian Ocean killed 270,000 people around Asia—in Thailand, Indonesia, and other countries. When the tsunami hit, Tilly and her family were vacationing in Phuket, Thailand. Most areas around Phuket were heavily damaged by the tsunami, but more than 100 people were rescued at the beach where Tilly was thanks to her quick response. At the time of this extreme emergency, what saved Tilly's family members and many others was Tilly's geography teacher, who had taught Tilly about the importance of a quick response and how to detect the signs that a tsunami is about to occur, just 2 weeks before the tsunami hit. Tilly put these instructions to practical use in Phuket.

Riskland Game

Riskland is a board game developed by UNDRR and UNICEF together in 2004 for disaster safety and prevention instructional purpose. The game has been translated into over 20 languages. It has been distributed to schools all over the world and is widely used.

1. Learning objectives

Students will be able to simply understand disaster risk reduction while having fun. They will also learn how to prevent disasters and to reduce damage through discussion and participation.

2. Teaching and learning

An educational board game used to convey information on how to prevent various hazards and how to act when they arise. The game also offers information on actions that lead to a reduction in disaster damages and which factors lead to a heightened level of vulnerability.

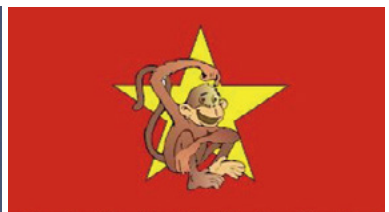


Teaching and learning materials required

Game board, 1 dice, 4 tokens, 24 question cards, 24 surprise cards

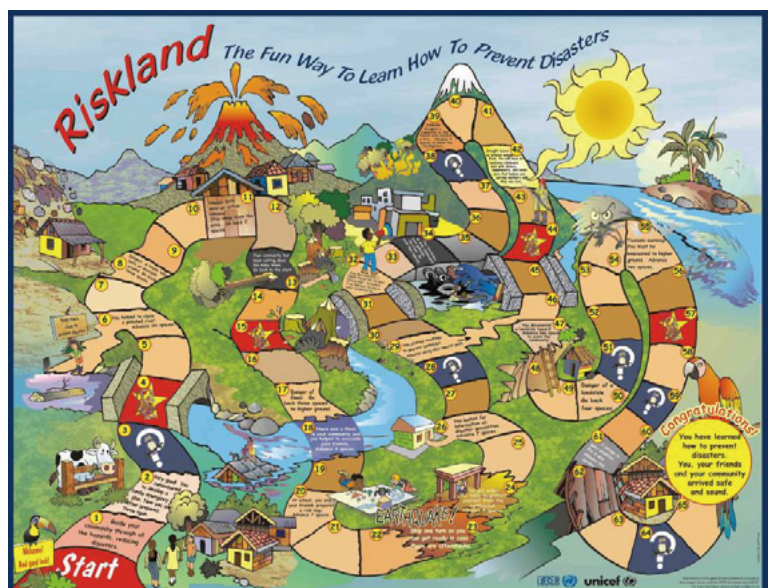


Question card (owl)




Surprise card (monkey)

3. Commentary on main contents of the instruction




- Number of players** 4 per team (recommended)
- Time** One game lasts around 30 minutes
- How to play the game**
- 1 Choose your token and determine the order.
 - 2 All tokens are placed on the starting space.
 - 3 A dice is thrown in the predetermined order and the token moved forward according to the number on the dice.
 - 4 When a token lands on a space with a command written on it, it should be read aloud and followed.

ex) 13th space “Neighbors have cut down too many trees, go back to the start.”

► The token, then, has to be placed on the starting space.
 - 5 If one lands on a question space, the person who is next flips the question card  and read its content aloud. If the question is answered correctly, the player throws the dice one more time. If not, the game proceeds and the next player throws the dice. The used card is placed at the bottom of the deck.

ex) question : Why is it necessary to keep mountain forests dense with trees?

Answer : To protect the environment, prevent landslides and soil erosion, and to preserve river water quality.
 - 6 If a player lands on the surprise space, they flip the card  and read the command aloud.

ex) I learned that one way to prevent a flood is to make sure that a river is debris-free while doing research in the school library. Move 5 spaces forward.
 - 7 The player who lands on the final destination (65th space) first wins the game.

ex) : If a player is currently on the 62nd space, for example, and throws a ‘5’, that player must move forward 3 spaces and then move backward the remaining 2 spaces to the 63rd space.



Points to focus on while giving instruction

- Teacher’s direct participation during the game is to be minimized—except when students are unable to determine what the answer to the question on a question card is, in which case the teacher should supply the answer. The teacher has to be aware of the contents of all cards.
- The teacher is allowed to remove cards whose contents are deemed to be too difficult. Children in different grades may have significantly different cognitive abilities.
- It is extremely important that a student read the contents of the cards aloud—such as commands, questions, surprises, etc.—so that they may be shared with others.

- It is recommended that the officiating teacher hold a review session by again asking the card questions and letting students answer. Even after a student has completed the game first by successfully landing on the 65th space, the other students may continue.
- ※ The objective of the game is to provide as much opportunity as possible to as many students as possible for learning.

Hazard Bingo

1. Learning objectives

To review terminologies and definitions related to disaster risk reduction.

2. Teaching and learning

Points to focus on while officiating the game

- Allow students to fill in the bingo card themselves based on what they learned about the School Safety Programme.
- The game is most effective in reviewing what has been learned if it is played toward the latter stage of the programme.



Teaching and learning materials required **Bingo card**
(1 per student or 1 per group), writing tools

3. Commentary on major instructional contents



Number of players Individual or group of 4

Time Around 30 minutes

- How to play the game**
- 1 Give every student a blank bingo card. A 4x4 (4 rows x 4 columns) bingo card for the students in lower grades and 5x5 (5 rows x 5 columns) bingo card for the students in upper grades are suggested to be used.
 - 2 Give 10-15 minutes to students for them to complete the bingo card with the words that they have learned from the School Safety Programme.
 - 3 Each student calls out one word at a time.
 - 4 Students must then identify the word on their bingo cards and mark the space.
 - 5 The first student who completes 4 lines (for 4x4 bingo card) or 5 lines (for 5x5 bingo card) with all words marked diagonally, across a row or vertically in a column should call "BINGO".
 - 6 If a student claims they have BINGO and they are incorrect, they are disqualified from that round.



Points to focus on while officiating the game

- The teacher must tell students if a word with a similar definition is allowed or not.
E.g.) Hazard=Risk element; Typhoon=Hurricane=Cyclone; Danger≠Hazard
- Teacher writes a word on the board whenever it appears in order to avoid repetition.

Recommendations

To ensure that students continue to use and integrate DRR concepts from this course in the long term, teachers are encouraged to:

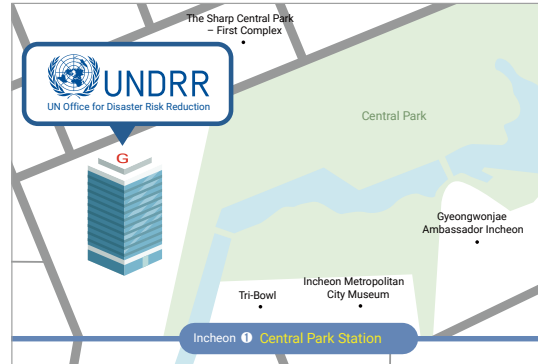
- regularly use and remind students during regular classes of the concepts learned in the KSSP lessons (in particular, when teaching such subjects as geography, natural sciences, etc.)
- conduct a quiz or a refresher session (for example, using the Riskland or Bingo game) every semester
- share with students links to useful articles or publications on DRR and the role of youth, or ask them to research such articles and examples of children's role in reducing disaster risk or assisting their community in a disaster
- encourage students to share the knowledge acquired with their families and friends, and to apply it to conduct local risk assessments around their homes

Learning objectives and lessons of the KSSP focus on prevention, therefore, it'd be synergetic and complimentary if the KSSP is implemented in conjunction with the existing disaster safety education focused on emergency response.

Reference Materials

https://drive.google.com/drive/folders/1VBjOw99V06A_-_eKTLmg7_rwHc7Umi1?usp=share_link





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