

GEOMORPHIC HAZARDS

EARTHQUAKES HAITI AND CHILE

Causes, Impacts, Management

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Photograph: <http://christianals.com/wp/wp-content/uploads/2012/05/Haiti001.jpg>

INTEGRATING GENERAL CAPABILITIES

Civics and Citizenship, Difference and Diversity, and Work and Enterprise

Literacy, Numeracy, ICT, Critical and Creative Thinking, Personal and Social Capability, and Ethical Understanding

HAITIAN EARTHQUAKE JANUARY 2010

The Caribbean consists of islands surrounded by the Caribbean Sea and Atlantic Ocean. Located on the Caribbean Plate the area has experienced major earthquakes over the past 300 years. On 12 January, 2010 the Caribbean Plate moved east in relation to the North American Plate. The movement created a M7 earthquake which struck Haiti, and devastated the capital city Port-au-Prince containing a population of 2 million people.

1. Causes: map locating tectonic plates

Visual literacy, Numeracy, ICT



* The dotted lines on the map indicate fault lines

Source: <http://www.npr.org/templates/story/story.php?storyId=122531261> Alyson Hurt/NPR

Geofacts: The Caribbean Plate is moving about 6mm per year, relative to the North American Plate

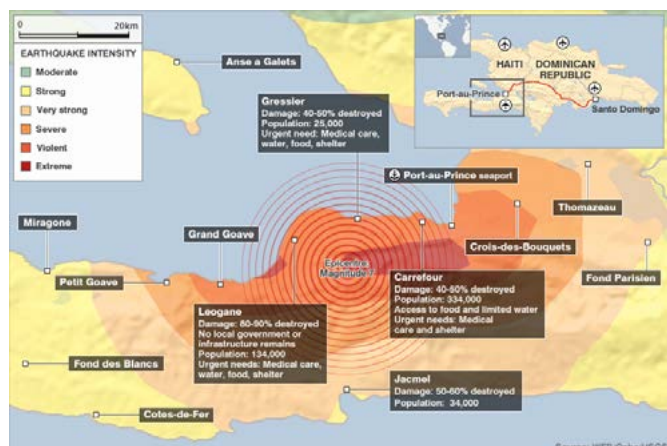
Located in the Caribbean is the Republic of Haiti. The island experiences continual natural disasters such as hurricanes, landslides, tsunamis and earthquakes. The epicentre of the earthquake that struck Haiti on 12 January, 2010, was only 20km from Port-au-Prince, and the hypocentre was shallow. The shallow earthquake located close to the large urban population, created greater shaking and damage than if located deeper and further away. It also generated a tsunami with waves over 3m sweeping boats and debris into the ocean.

By 24 January 2010, there had been at least 52 aftershocks measuring M4.5 or greater. Approximately 230,000-316,000 people were killed and over one million became homeless. This natural disaster had a cataclysmic impact on poor Haiti with a population of only 10 million people, compared to the 2004 Indian Ocean tsunami causing 282,517 deaths spread across a populous 13 countries.

Geomorphic Hazards: Earthquakes

2. Causes: map locating 2010 Haiti earthquake

Visual literacy, Numeracy, ICT



Source: <http://news.bbc.co.uk/2/hi/8466385.stm>

3. Impacts: photograph showing impacts of earthquake on people and places

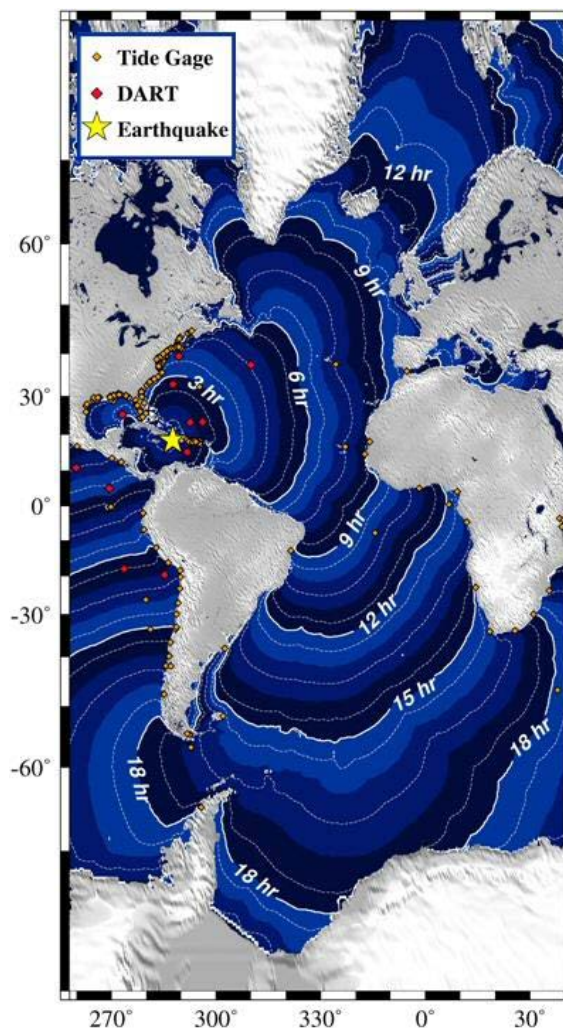
Visual literacy, Personal and Social Capability



Source: <https://i.pinimg.com/originals/58/33/9b/58339b8d0fce8f4f1896d7932a3eec.jpg>

4. Impacts: Haiti tsunami after 12 January 2010 earthquake

Numeracy, Visual Literacy, ICT



Source: http://wcatwc.arh.noaa.gov/previous.events/01-12-10_Haiti/Images/Haiti2010_TT.jpg



5. Impacts: tsunami swept away buildings located on coastal Haiti

Visual Literacy, Personal and Social Capability

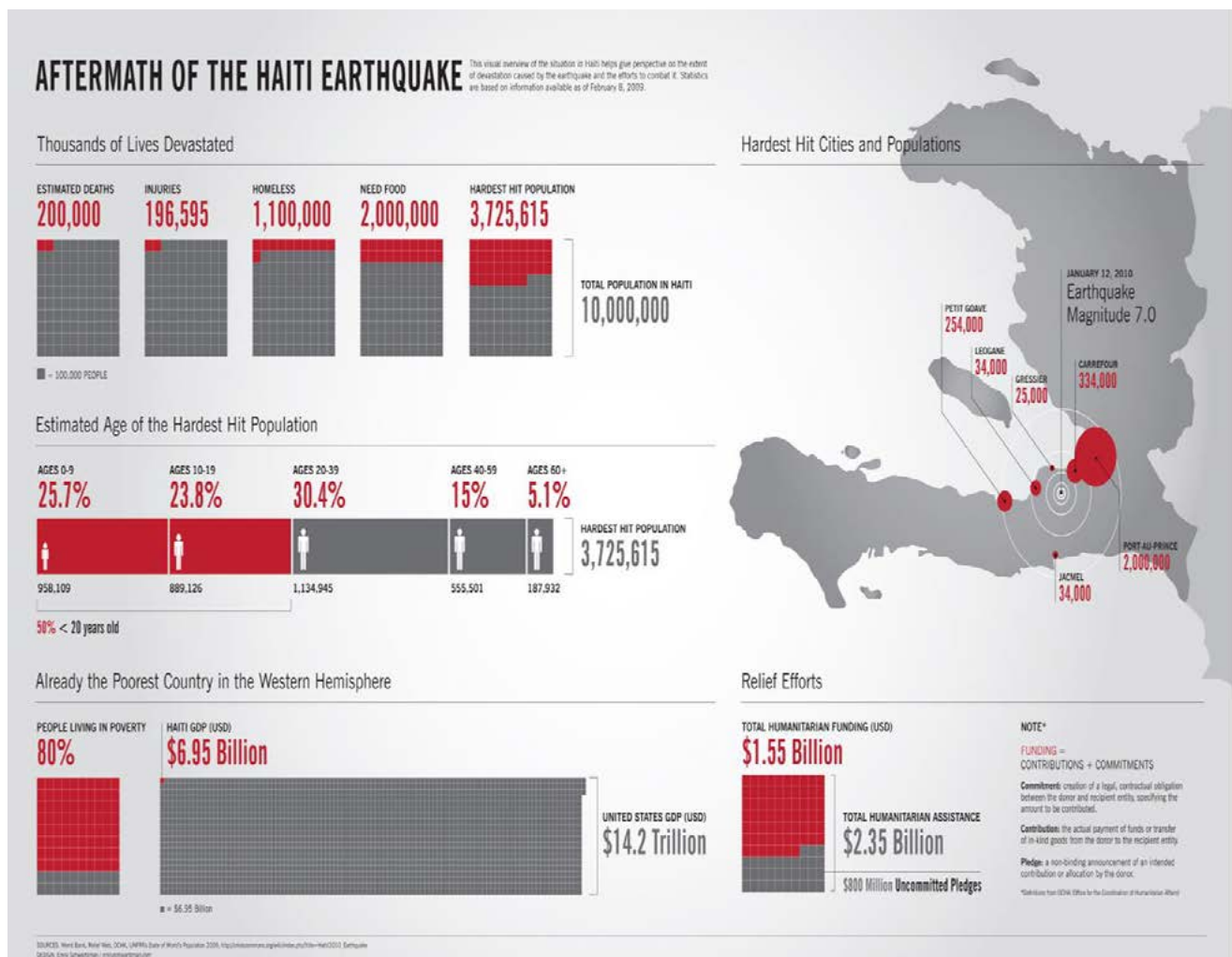
Source: <https://news.nationalgeographic.com/content/dam/news/photos/000/130/13011.ngsversion.1421958768942.adapt.1900.1.jpg>

Geomorphic Hazards: Earthquakes

LOCAL AND GLOBAL CITIZENSHIP – HAITI

6. Impacts and management: aftermath of the Haiti Earthquake infographic

Visual Literacy, Numeracy, ICT, Critical and Creative Thinking, Work and Enterprise, Civics and Citizenship



Source: http://infographiclist.files.wordpress.com/2011/10/coolinfographicsblog_4e60f4dca3121.jpg

Problems living in Haiti-before and after earthquake

Haiti is a poor developing country. Even before the earthquake only 30% of the population living in the capital city of Port-au-Prince had access to sanitation and 54% access to clean water. The country was also prone to natural disasters such as hurricanes and floods, and of course earthquakes.

As a consequence, the government had inadequate resources to manage a disaster of this magnitude. Governments, non-government organisations (NGOs), private enterprises and individuals provided aid to Haiti. Unfortunately aid was hampered by:

- number of aftershocks
- damaged infrastructure such as roads
- nonoperational airport and harbours
- cuts in power and communications
- weak government made worse by the collapse of

government buildings, such as Parliament House. This impeded the coordination of effective disaster responses in the same year, the earthquake was followed by a cholera epidemic and a hurricane.



Port-au-Prince Harbour facilities, collapsed crane. Source: https://upload.wikimedia.org/wikipedia/commons/b/b7/Port-au-Prince_harbour_crane_after_2010_earthquake.jpg

INFORMATION AND COMMUNICATIONS TECHNOLOGY AND LITERACY – HAITI

a. New media and communications technologies saves lives

Though natural disasters are common in Haiti, the humanitarian response was different. New media and communications technologies were used in unprecedented ways to aid the recovery effort. The most notable innovations were: crowdsourced data into actionable information; use of SMS message broadcasting in a crisis; and crowdsourcing of open maps for humanitarian application.

Haiti became a real world laboratory for several new applications, such as interactive maps and SMS texting platforms. These tools were used to create dialogue between citizens and relief workers, to help guide search-and-rescue teams, and find people in need of critical supplies.

<http://mediashift.org/2011/01/how-mapping-sms-platforms-saved-lives-in-haiti-earthquake011/>



Collapsed Teleco Building, Haiti. Source: https://upload.wikimedia.org/wikipedia/commons/a/af/Teleco_Building_%28Haiti_Earthquake_-_2010%29_%284322474854%29.jpg

c. BarCamp-crises camp reduces deaths

A crisis camp is a BarCamp gathering of IT professionals, software developers, and computer programmers to aid in the relief efforts of a major crisis such as those caused by earthquakes, floods, or hurricanes. Projects that crisis camps often work on include setting up social networks for people to locate missing friends and relatives, creating maps of affected areas, and creating inventories of needed items such as food and clothing.

Following the 2010 Haiti earthquake, many crisis camps were set up around the world, often under the name "Crisis Camp Haiti", to help with the relief effort.

https://en.wikipedia.org/wiki/Crisis_camp

Slideshare: Mapping Haiti – OpenStreet Map Community's Response to January 2010 earthquake

<https://www.slideshare.net/sabman/haiti-qake2010-bar-camp-canberra2010>



Building transitional shelters, post earthquake. Source: https://upload.wikimedia.org/wikipedia/commons/2/2a/Building_transitional_shelter_after_the_earthquake_in_Haiti_%284776467337%29.jpg



The Haitian Presidential Palace in Port-au-Prince, Haiti. Originally a two-story structure; the second story completely collapsed. Source: https://commons.wikimedia.org/wiki/File:Haitian_national_palace_earthquake-edit.jpg

b. Communication with Disaster Affected Communities (CDAC)-effective disaster management

After the earthquake, broken communication channels led to establishing

Communication with Disaster Affected Communities (CDAC)

'CDAC Haiti was created as a short-term initiative with the purpose of providing a system-wide communication coordination mechanism. The objective was to enable humanitarian operations to distribute crucial information to affected populations and to ensure the voices of the affected population were channelled back to aid organisations.'

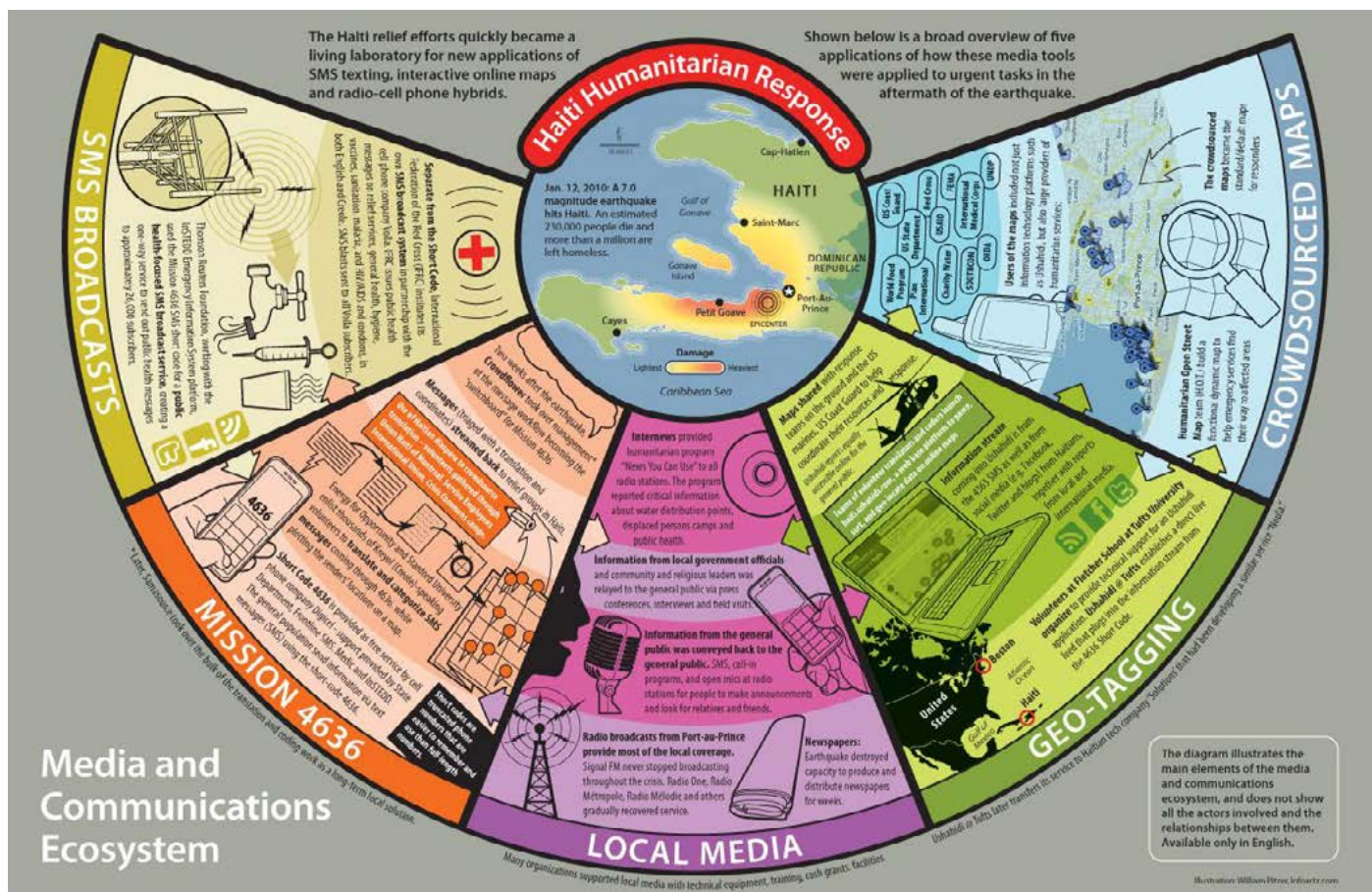
<http://www.cdacnetwork.org/tools-and-resources/i/20140610200806-nudon>

CDAC Haiti took on the role of a communication cross cluster during the hurricane season and cholera outbreak that followed the earthquake.

Geomorphic Hazards: Earthquakes

7. Humanitarian responses using ICT

Civics and Citizenship, ICT, Ethical Understanding, Personal and Social Capability, Numeracy, Visual Literacy, Work and Enterprise



Infographic: <http://cdn.theatlantic.com/static/mt/assets/science/haititech.jpg>

LOCAL AND GLOBAL CITIZENSHIP – HAITI

Civics and Citizenship, ICT, Work and Enterprise, Personal and Social Capability, Ethical Understanding, Critical and Creative Thinking

International organisations rescued people, buried the dead, and provided medicine, water, food and shelter. 'Sniffer' dogs rescued people, field hospitals were established and 500 camps provided shelter for the homeless. A UN 'Food Aid Cluster' feed 2 million people. Project Ushahidi provided thousands of people with the internet, mobile phones and radio to inform organisations about structural damage to buildings, lack of water and food, and missing people. The 'Hope for Haiti Now' telethon raised more than \$57m for the victims of the earthquake.

As of 2013, ReliefWeb reported relief funding of \$3.5 billion was given, however a further \$1 billion was pledged but not given.

8. Galaxy of stars help raise money in 'Hope for Haiti now' charity telethon



Source: http://i.dailymail.co.uk/i/pix/2010/01/23/article-1245447-07FA942E000005DC-57_634x428.jpg

Geomorphic Hazards: Earthquakes

Oxfam: non-government organisation responds

The level of destruction and logistical challenges were among the worst Oxfam had ever faced.' 'By providing paid employment to people in camps; to keep camps clean, build latrines and clear destroyed neighbourhoods, we put money in the pockets of those who needed it most and helped them improve their living conditions. We reached 300,000 people with aid in the first three months.'

Vanessa Guillaume, earthquake survivor who was employed by Oxfam to promote public health in the aftermath: "Imagine your house being totally ruined after a natural disaster. In less than a minute, you lost what you've been fighting for years to keep. The little things you possessed, the little money or business you had, even your loved ones. But as you look around, you realize you're not the only victim, because hundreds of people surrounding you are in the same situation. The earthquake may have caused a lot of wreckage, but it also gave people like me a chance to help repair our country and build a better future."

Source: <https://www.oxfam.org/en/haiti-earthquake-our-response>



Source: Defense_gov_photo_essay_100118-F-1644L-088.jpg

PROBLEMS OF HUMANITARIAN RESPONSES – HAITI

Civics and Citizenship, Work and Enterprise, Personal and Social Capability, Ethical Understanding, Critical and Creative Thinking, Visual Literacy

9. Problems of humanitarian responses after 2010 Earthquake



Photograph background – <http://reiffcenterblog.cnu.edu/2016/10/learning-from-past-mistakes-humanitarian-aid-in-haiti/>

Geomorphic Hazards: Earthquakes

Long term effects of humanitarian response

As of 2015, 5 years after the earthquake, over 500,000 victims were still living in temporary shelters without electricity, plumbing or sewage. Lack of proper sanitation is thought to be the foundation upon which the ongoing cholera outbreak is based. Much of the US aid funding was hindered by US statutory restrictions limiting spending to US products, materials and employees, which had to be transported to Haiti. This not only raised the costs involved, compared to local, but also prevented the aid from stimulating the Haitian economy.

Source: https://en.wikipedia.org/wiki/Humanitarian_response_to_the_2010_Haiti_earthquake



The tsunami generated by the M8.8 earthquake carried many boats onto land – in some cases hundreds of meters inland. The tsunami wave height at this location in Concepcion Harbor (Talcahuano), Chile was about 4-5 meters

Source: https://upload.wikimedia.org/wikipedia/commons/6/61/Tsunami_Carried_Boat-Chile_2010-Talcahuano.jpg

CHILEAN EARTHQUAKE FEBRUARY 2010: COMPARATIVE STUDY

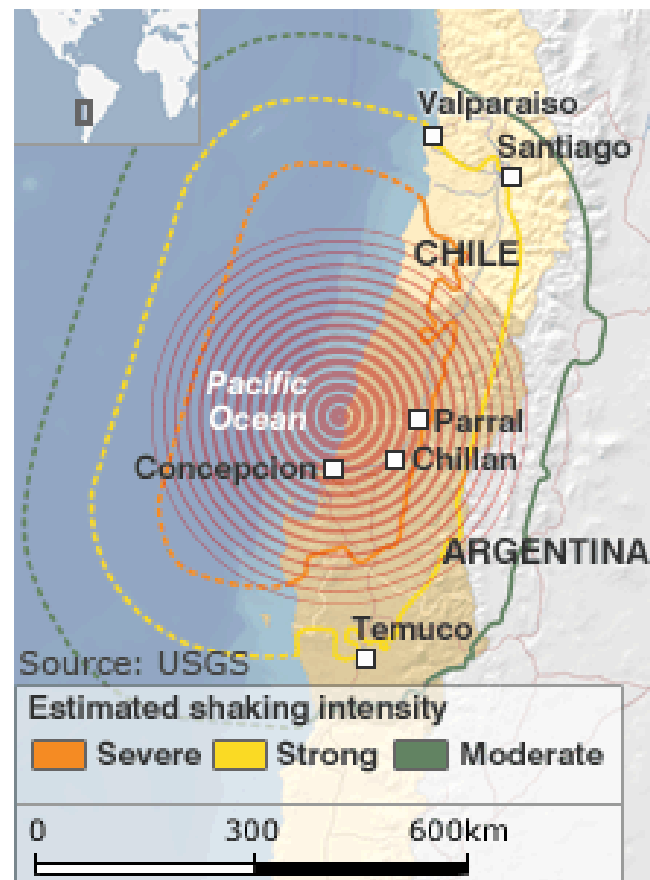
Located on the Ring of Fire, Chile suffered a larger earthquake of M8.8 triggering a tsunami, on 27 February 2010. About 280 people died and buildings were destroyed. The magnitude of the earthquake was larger than experienced at Haiti, however destruction was less severe. Fortunately, Chile's stricter building codes and less dense population, contributed to different impacts.



10. Maps: Chile earthquake and tsunami

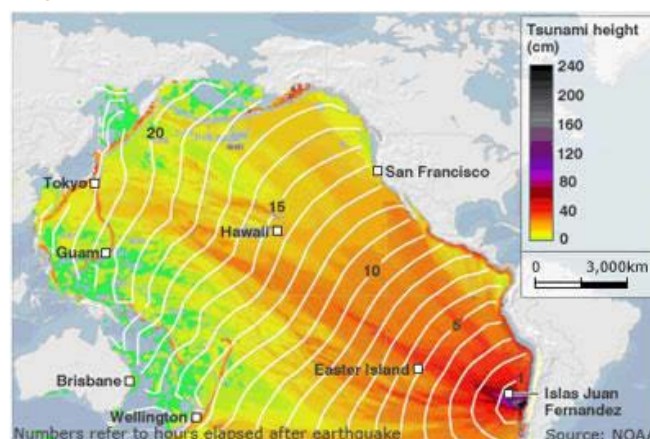
Visual literacy, Numeracy, ICT

Cause and impacts: Chile earthquake



Source: http://www.lunarplanner.com/EGM/10-02-27-Chile_Quake/chile_quake_2010-02-27.gif

Impacts: tsunami



Source: <https://www.unavco.org/highlights/2010/M8.8-Chile-earthquake-spread.jpg>

Geofacts: The first tsunami wave from Chile's earthquake in 2010 struck Hawaii about 14 hours after the tremble. It measured approximately one metre

LEFT: In Concepción, the 20-story Alto Río building collapsed as a result of the earthquake of February 27, 2010. Source: https://upload.wikimedia.org/wikipedia/commons/4/49/2010_Chile_earthquake_-_Building_destroyed_in_Concepci%C3%B3n.jpg

Earthquakes: Haiti and Chile

11. Tale of two earthquakes-Haiti and Chile

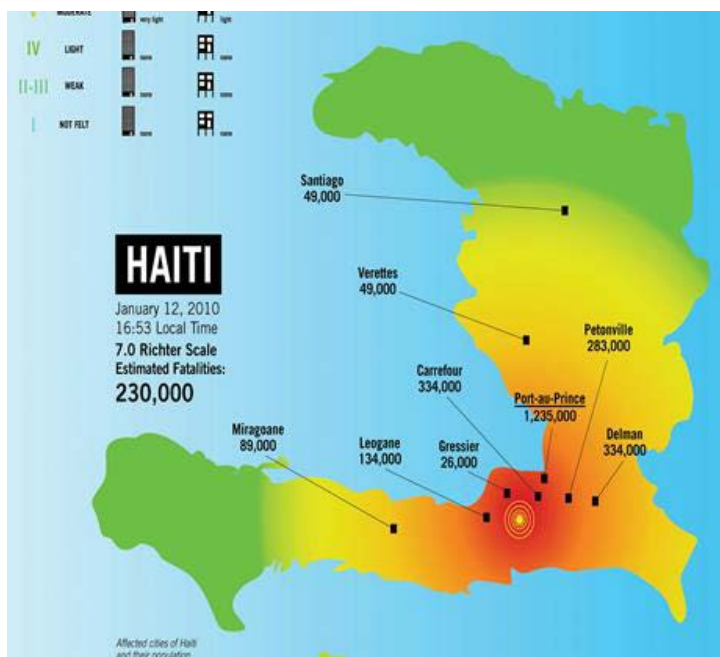
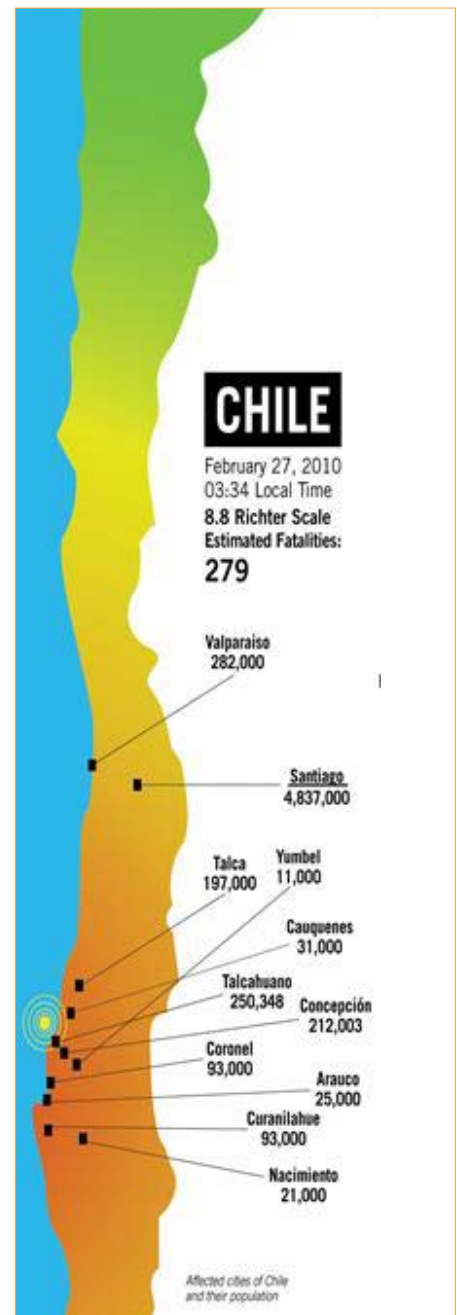
Causes, impacts, management preparedness

CASE STUDY: Haiti vs. Chile quake comparison

CHILE

Date and Magnitude: <ul style="list-style-type: none"> 3:34 a.m., Sat. Feb. 27th. 8.8, epicentre 35km deep. 	Date and Magnitude: <ul style="list-style-type: none"> Tues. Jan. 12th. 7.0 (with 52 aftershocks, all greater than magnitude 4), epicentre 13km deep.
Location: (Fig.2) <ul style="list-style-type: none"> Chile is an HIC with the lowest birth rate in South America and a GDP per capita of almost \$15,000. World's largest copper producer. Majority of industry based in north of country. Booming wine, fruit and forestry industries. Economic growth of around 5% per annum before quake. 90% of pop. lives in urban areas. 	Location: (Fig.1) <ul style="list-style-type: none"> Epicentre near the town of Léogâne, approximately 25 km west of Port-au-Prince, Haiti's capital. Haiti is a poor LDC with little infrastructure.
Geology: <ul style="list-style-type: none"> Chile lies on Pacific Rim's 'ring of fire' – NAZCA PLATE is subducting beneath the SOUTH AMERICAN PLATE at 80mm per year. Gives rise to the Andes Mountains. Plate boundary marked by a trench 100km offshore. Epicentre deep + far from population centres. 	Geology: <ul style="list-style-type: none"> On the ENRIQUILLO-PLANTAIN GARDEN fault zone (EDPZ) is a system of coaxial left lateral-moving strike slip faults which runs along the southern side of the island of Hispaniola, where the Dominican Republic and Haiti are located. The quake occurred in the vicinity of the northern boundary where the CARIBBEAN PLATE shifts eastwards by about 20mm per year in relation to the NORTH AMERICAN plate. The strike-slip fault system in the region has two branches in Haiti, the Septentrional-Orient fault in the north and the Enriquillo-Plantain Garden fault in the south; both its location and focal mechanism suggest that the January 2010 quake was caused by a rupture of the Enriquillo-Plantain Garden fault, which had been locked for 250 years, gathering stress.
Preparedness: <ul style="list-style-type: none"> Quake-prone region, so preparedness high. Quake awareness among public. Building codes require shake-resistant construction and rapid emergency response systems. Country withstood the global economic recession very well due to policy of saving profits from soaring copper prices. \$16bn still available, which new president Sebastián Piñera can use to rebuild roads, bridges, ports and the 1.5m homes affected. 	Preparedness: <ul style="list-style-type: none"> The Pacific Tsunami Warning Center issued a tsunami warning immediately after the initial quake, but quickly cancelled it

HAITI



Source: <https://image.sli.desharecdn.com/chilevshaitiquakecomparison-100326041353-phpapp01/95/chile-vs-haiti-quake-comparison-1>

Source: <http://huldufolks.wordpress.com/tag/urbanism/728jpg?cb=1269577168>

Geofacts: In 2017, on the Human Development Index, Haiti was ranked 163rd out of 188 countries compared to Chile 38th

Activities

Inquiry and skills

1. Refer to 1:

- What geological phenomena transpired in Haiti in January 2010?
- Where was the epicentre in the 2010 earthquake in Haiti?
- Distinguish between epicentre and hypocentre.

2. Refer to 2:

- What were the earthquake intensities at Gressier and Miragone?
- Compare the damage from the earthquake in Leogano and Jacmel.

3. Refer to 3, 4, 5 and 6:

Prepare a media report on the impacts of the Haitian earthquake on people, places and environments, using ICT.

4. Refer to 7:

- How did ICT contribute to the humanitarian response such as SMS, Crowdfunder, Facebook, Twitter and blogs?
- Explain how maps and the media became useful tools in a humanitarian crisis
- Describe the purpose of CDAC and BarCamp in the Haitian disaster

5. Refer to 8:

- Aid agencies' appeals for donations to the Haitian earthquake received massive public responses:
 - Why were so many people motivated to respond?
 - How and why was the 'Hope for Haiti now' charity telethon a success
- Explain how aid is hampered in a developing country, such as Haiti
- Discuss how international organisations, governments, NGOs and individuals worked to improve the lives of the Haitian people suffering from the adverse impacts of the earthquake.

6. Refer to 9:

In pairs present a TV report on the problems of effective aid to Haiti.

7. Refer to 10:

Explain where the Chilean earthquake occurred and its connections to the ocean.

8. Refer to 10:

- Where are Haiti and Chile located in relation to geomorphic processes (geology) – fault lines, volcanoes and plates?
- Distinguish between location, date, and Richter scale of the Haitian and Chilean earthquakes.
- Which country experienced the greatest number of fatalities? Explain the reasons for the differences.
- Compare and contrast the cause and impacts of earthquakes in 2010 in Haiti and Chile. Present as a Prezi.
- Explain why an earthquake has a greater impact on a poor country and on the poorest people.

Knowledge and understanding

9. Imagine you worked for an aid agency. What would you tackle first: rescuing survivors; providing generators; or opening the airport to bring in equipment and rescue workers? Whose help would you require? e.g. teachers, doctors, police officers, water and ICT engineers, managers, cooks, builders and people to pay for supplies. Make a list of what, and who you think, is most important. Justify your answer.

10. Civics and citizenship: How would you organise a fundraising activity in your school for natural disaster victims. The Oxfam Education Support for Fundraising booklet may help – http://www.oxfam.org.uk/education/teachersupport/fundraising_support/

11. Debate: 'Should people, organisations and countries, send aid to countries following a natural disaster.' Divide information into yes and no. Using evidence and your opinion propose or oppose the motion. Present your motion as an oral report.

12. Narrative: Write an essay on why the impact of the Haitian earthquake was catastrophic. Include: location on tectonic plate; magnitude; epicentre; hypocentre; state of infrastructure; and location to the city with two million people - the majority of these people being poor.

13. Group work: Unfortunately recovery had been slow. *The poorest country in the Americas was devastated. The world rallied, but not for long – much of the promised aid has not materialised. And while their government falters, many of the 1.5 million displaced Haitians are still sleeping rough* (The Guardian). Investigate the long-term recovery of Haiti. Suggest strategies to improve the population's wellbeing.

Geomorphic Hazards: Earthquakes

ICT activities

- **Investigation:** Refer to the article and answer the questions – <http://www.news-media-watch.com/images/UNICEF-appeal-Haiti-link.jpg>
 - a. Discuss the achievements of UNICEF in Haiti. b. Explain the problems of delivering aid.
- **Group work:** Special coverage of Haitian earthquake-Alertnet insight – <http://www.alertnet.org/thenews/newsdesk/126378336711.htm>.

This site covers numerous topics such as: Africans pledge support to devastated Haiti; Haitian girls face increased vulnerability after quake; How could Haiti aid efforts be coordinated better? Doctors perform hundreds of amputations in quake-hit Haiti daily; Q+A with OCHA on Haiti relief; Get people working and not looting says UNDP; U.N. troops guard Haiti's largest food depot; Fuel shortages, damaged infrastructure delay Haiti aid effort; and Haiti's children are the most vulnerable.

In groups select one news item and discuss the issue as an oral report. Determine whether the article is biased or presents different perspectives.

- **Photo story:** Select 10 pictures from the United Nations photographs. Summarise the 2010 Haiti earthquake as an annotated photo story – <http://www.unmultimedia.org/photo/gallery.jsp?query=subject%3A%22Haiti%20Earthquake%22>
- **Mind map** why so many people died in Haiti's earthquake – <http://news.bbc.co.uk/2/hi/americas/8510900.stm> (comparative study)
- **Discuss the phrase** – 'It's OK to be upset by the news' – http://news.bbc.co.uk/cbbcnews/hi/newsid_2330000/newsid_2333800/2333893.stm.
- **Explain** how you can learn to understand complex world events – <http://esrnational.org/special-projects/understanding-world-events/>
- **Describe** how you contact organisations in Haiti to find out what they are doing on the ground or in the field? – http://alertnet.org/db/crisisprofiles/HT_QUAKE.htm?v=whowhatwhere
- **Summarise** Project Ushahidi and its advantages – <http://www.ushahidi.com/>



Vespucio Norte Highway, Chile 2010 Source: https://upload.wikimedia.org/wikipedia/commons/6/63/Vespucio_Norte_Highway_after_2010_earthquake.jpg

YouTube

- Oxfam's work for cash scheme in Haiti (1.16 min) – <http://www.oxfam.org.au/explore/conflict-and-natural-disasters/current-emergencies/major-earthquake-in-haiti>
- The Week in Haiti – after the earthquake (10.48 min – <http://www.youtube.com/watch?v=lfBdiFyxKOK>
- We are the World 25 for Haiti (8.32 min) – 75 artists – <http://mashable.com/2010/02/12/we-are-the-world-25-for-haiti/>
- United Nations releases Haiti relief appeal (3.57 min) – <http://news.bbc.co.uk/2/hi/americas/8462796.stm>

Interactive video

- Haiti's earthquake – <http://www.abc.net.au/news/events/haiti-earthquake/interactive-video.htm>

PowerPoint

- Haiti earthquake – assembly slides – http://www.oxfam.org.uk/education/resources/haiti_earthquake/
- Earthquake hits Haiti – http://www.nytimes.com/slideshow/2010/01/13/world/20100113-HAITI_index.html

Maps

- Haiti earthquake – <http://www.abc.net.au/news/events/haiti-earthquake/map.htm>
- Haiti earthquake affected areas outside Port-au-Prince – http://epmaps.wfp.org/maps/03655_20100122_HTI_A4_OMEP_Haiti_Earthquake_Affected_Areas_outside_Port-au-Prince_21_January_2010_HIGH_RESOLUTION.pdf
- USAid humanitarian assistance – http://www.usaid.gov/our_work/humanitarian_assistance/disaster_assistance/countries/haiti/template/maps/fy2010/haiti_01142010.pdf
- USGS earthquakes – <http://earthquake.usgs.gov/earthquakes/eqarchives/poster/2010/20100112.jpg>

LEFT: Concepcion Chile 2010. Source: https://upload.wikimedia.org/wikipedia/commons/7/7f/Destruction_in_Downtown_Concepcion%2C_Chile_%284478649113%29.jpg

Geomorphic Hazards: Earthquakes

Civics and Citizenship: Global Education

- Teaching about the Haiti disaster – <http://www.globaldimension.org.uk/index.aspx?id=1338>; <http://www.teachingcitizenship.org.uk/page?p=101>
- Talking about Haiti with children – <http://www.unicef.com.au/Unicef/SchoolRoom/ForTeachers/TalkingwithChildrenaboutHaiti/tabid/491/Default.aspx>
- Resources for Teaching and Learning about the Earthquake in Haiti – <http://learning.blogs.nytimes.com/2010/01/13/resources-for-teaching-and-learning-about-the-earthquake-in-haiti/>

Earthquakes

- Resources on earthquakes – <http://www.geography.org.uk/resources/earthquakes/resources/>
- Animated guide on earthquakes – <http://news.bbc.co.uk/2/hi/science/nature/7533950.stm>
- Interactive guide on Haiti's earthquake – <http://www.guardian.co.uk/world/interactive/2008/jan/23/earthquakes>
- Why was the Haiti earthquake so disastrous? – http://news.bbc.co.uk/cbbcnews/hi/newsid_8450000/newsid_8456900/8456976.stm

- Haiti Earthquake follows years of turmoil – <http://tv.oneworld.net/2010/01/14/earthquake-follows-years-of-turmoil/>
- More information on earthquakes – <http://earthquake.usgs.gov/earthquakes/world/?regionID=27>

Aid and Haiti earthquake

- Earthquake in Haiti – aid starts to arrive – interactive map of map with areas receiving aid – <http://www.guardian.co.uk/world/interactive/2010/jan/15/haiti-earthquake-aid-problems-map>
- Global Voices: Community of more than 200 bloggers around the world with an emphasis on voices that are not ordinarily heard in international mainstream media. – <http://globalvoicesonline.org/specialcoverage/haiti-earthquake-2010/>
- Disasters Emergency Committee – <http://www.dec.org.uk/>
- Red Cross – <http://blogs.redcross.org.uk/emergencies/2010/01/help-not-hinder-haiti/>
- UNICEF – <http://www.tagd.org.uk/Latest/CurrentEmergencies/EmergenciesHaiti.aspx>
- United Nations – <http://www.un.org/en/peacekeeping/missions/minustah/>

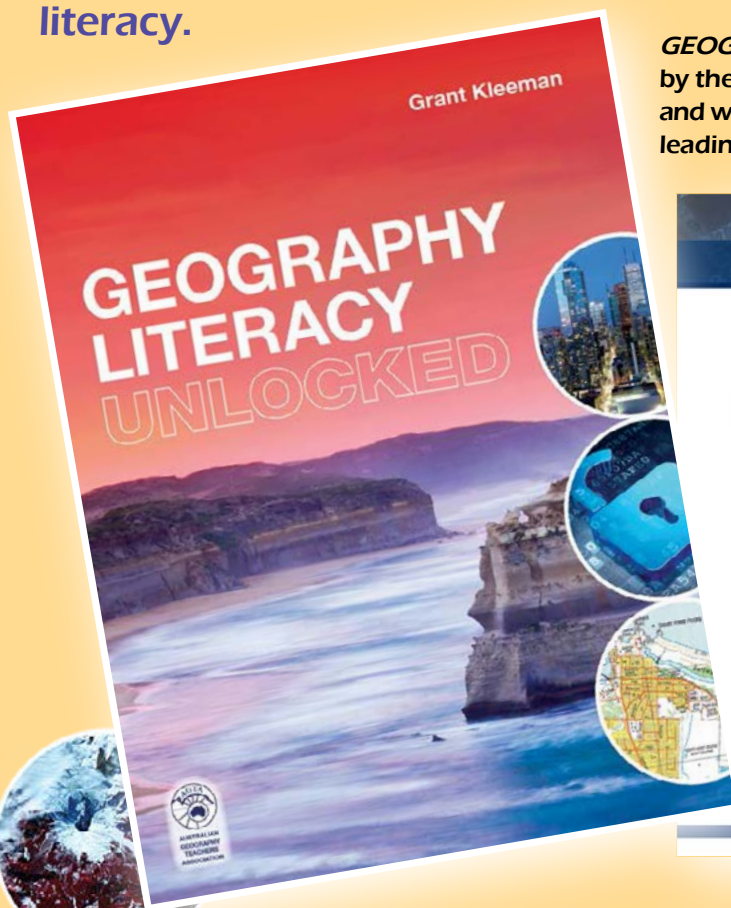


Survivor receives Red Cross humanitarian aid. Source: https://upload.wikimedia.org/wikipedia/commons/e/ec/US_Navy_100125-N-6266K-163_A_Haitian_earthquake_survivor_leaves_a_local_Red_Cross_distribution_site_after_receiving_non-perishable_items_in_Port-au-Prince.jpg

AGTA ANNOUNCES AN ESSENTIAL NEW GEOGRAPHY RESOURCE

GEOGRAPHY LITERACY UNLOCKED has been written for secondary geography students seeking to improve their literacy skills. It includes a focus on written, visual and oral literacy.

GEOGRAPHY LITERACY UNLOCKED is published by the Australian Geography Teachers Association and written by Dr Grant Kleeman. One of Australia's leading geography educators.



Introduction
Literacy in geography

Section 1: Written texts

- 1.1 Becoming a better writer
- 1.2 The secrets of good spelling: Knowing the rules
- 1.3 Using punctuation correctly
- 1.4 Getting tense correct
- 1.5 Using connectives
- 1.6 Writing a procedure
- 1.7 Writing a report
- 1.8 Writing an explanation
- 1.9 Writing a discussion
- 1.10 Writing an exposition
- 1.11 Writing a letter
- 1.12 Using social media
- 1.13 Fieldwork reports
- 1.14 Directive terms
- 1.15 Quoting, paraphrasing and summarising the work
- 1.16 Referencing

Section 2: Visual texts

- 2.1 Visual literacy
- 2.2 Photographs
- 2.3 Graphs
- 2.4 Diagrams and specialist maps
- 2.5 Infographics
- 2.6 Cartogram interpretation
- 2.7 Interpreting website content
- 2.8 Mind mapping
- 2.9 Multimedia presentations

Section 3: Oral texts

- 3.1 Oral texts
- 3.2 Oral presentations
- 3.3 Debates

About the author

Dr Grant Kleeman is one of Australia's leading geography educators. He is an experienced teacher, educator, geography teacher, author, curriculum writer and examiner. Grant has been closely involved with the development of the Australian Curriculum: Geography (VCE) and the Senior Secondary Geography Curriculum. He has also been active in professional development for more than 25 years, and is currently director and treasurer for Chair of the Australian Geography Teachers Association (AGTA) and Vice President of the Society of New South Wales (AGTA NSW). In 2007, the Geographical Society of New South Wales (AGTA NSW) awarded him the McNeill-Holmes Award for his 'Outstanding Contribution to the Teaching of Geography'.

Introduction

The information featured in this book will help you to communicate your ideas in a creative manner. Being able to communicate effectively will ensure that you gain the maximum recognition for all your hard work.

Geography, like other subjects, draws on a range of written, visual and oral texts. The outcomes of these are:

- textual texts (reports, explanation and procedures)
- persuasive texts and arguments (explanations and discussions)
- maps (print and digital)
- oral and moving images (presentations and discussions)
- diagrams
- three-dimensional models, including the globe of the world
- statistical tables, graphs and infographics
- fieldwork reports
- oral presentations and debates.

Written texts

Writing is one of the most important ways in which we communicate geographical knowledge and understanding. It is also the principal means by which your knowledge and understanding is tested in examinations and assessment tasks.

But this is only part of the story. Being able to write well is a skill that you will carry with you throughout your life. It will provide you with opportunities as the workplace and enhance the effectiveness of your interactions with government agencies, providers of goods and services, and other people in general. Good writing enables you to communicate your point of view clearly. It makes you sound intelligent and well-informed.

Visual texts

Visual literacy includes the range of skills associated with the interpretation of still and moving images, graphics, tables, maps and other forms of graphic representation. It also involves an understanding of how images and language work together to present ideas and information in the texts you encounter and the work you produce. By developing your

KEY FEATURES:

- ➔ An engaging, easy-to-navigate design
- ➔ A student-friendly approach featuring step-by-step explanations and annotated exemplars
- ➔ A focus on the basics of effective written communication – spelling, punctuation, tense and the use of connectives
- ➔ Descriptions of the principal text types used in geography, supported by annotated examples
- ➔ Guidance for writers in quoting, paraphrasing, summarising and referencing the work of others
- ➔ A focus on the responsible use of social media
- ➔ A comprehensive coverage of the principal forms of visual and oral texts students encounter in geography
- ➔ Templates or scaffolds to support the interpretative skills students are expected to demonstrate.

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