

# Human Systems

In the video below, Hans Rosling looks at the factors involved in demographic changes. This presentation demonstrates massive amounts of demographic data in 4 minutes to show 200 years of changing income and life expectancy around the world.

Video 5.1: 200 Countries, 200 Years, 4 Minutes, <https://www.youtube.com/watch?v=jbkSRLYSojo>

Having the data is not enough- there needs to be an enjoyable way to communicate the data. The data is shown on a graph which indicates life expectancy and income. Within this graph, we can see where poor and sick would be located and rich and healthy would be located. The regions he is looking at is Europe, Asia, the Americas, and Africa. This video is a very engaging and enjoyable way to understand global health and wealth patterns.

Note: Income per person (GDP per capita) is adjusted for inflation and for differences in costs of living (purchasing power) across countries. You can play with the data yourself in Gapminder World.

## Introduction

The study of the Earth's Human Systems is a complex topic. Over 7 billion people inhabit Earth and each are part of multiple human systems. Human systems, simply put, are the patterns and relationships among culture, economies, politics, and demographics. It is easy to make generalizations and oversimplify these systems (and the people in them), but this often leads to misunderstandings, stereotypes, and even prejudice. Our job as geography educators is to eliminate these misunderstandings and lead our students to a deeper understanding of the rich cultural mosaic of our global population.

Demographics, or the study of population, includes the study of population density, birth and mortality rates, migration patterns, literacy rates, standard of living, and other statistics which reveal a great deal about the health and prosperity of people across the globe. Too often, our students have misconceptions about poverty and material wealth, sometimes equating a lack of material goods with poverty. Many also perceive that people living in less developed countries are all poor and uneducated. Looking at the demographics at varying scales and in regions across the world often shows a very different picture.



Figure 2 Convento at Mission San José in San Antonio, Texas

Human Systems also covers political and economic systems: how the two are related to each other, why they are distributed the way they are, and how countries with different systems interact with each other. Terms such as communism and socialism often produce very emotionally charged responses, typically the result of fear, misunderstanding and propaganda. Democracy and freedom produce equally charged responses, if for different reasons. Our students need to understand that none of the political or economic systems we study exist in actuality. Rather, they are models for understanding complex systems which are uniquely practiced to varying degrees

across multiple scales. A country with a command market economy at a national scale may have a more open or free market economy at the local level, especially if there are isolated communities not directly connected to the national economy.

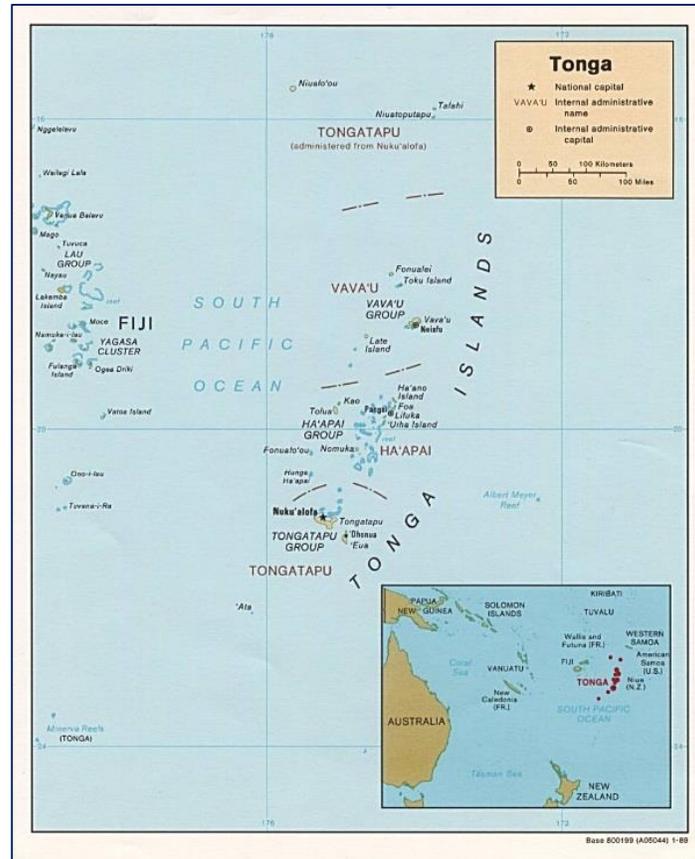
Human culture is a complex blend of traditions, food, language, religion, and more. The expression of the concept of culture changes as groups move, mix, and mingle, and as information and ideas diffuse. It is important for students to understand the multicultural world in which we live to have context for their own and other cultures. As with political and economic systems, scale significantly affects our study of culture. It is important that we teach our students the general beliefs, but at the same time, emphasize that practices at the individual, community, regional, or national level may vary greatly.

It is very important that we guide our students carefully through each of these topics. Literacy rates, political systems, birth rates, religious practices, and dietary restrictions are all shaped by cultural and societal values which can vary tremendously from our own. We must make sure that we present the information in a way that respects those values and deals with them without prejudice or bias towards our own value systems. Students are often focused on the “weird” or “wrong” rather than different and diverse. It is our goal as educators to build that bridge!

By developing a well-balanced understanding of human systems and the role they play in the world, our students will become better global citizens and be more prepared to make decisions and understand the complexities of these decisions locally and globally.

## Case Study: Tonga--The Nation, Utah, and Texas

The island nation of Tonga lies about a third of the way from Hawaii to New Zealand. This nation of great history and culture is curiously showing great influence here in the United States. Today, a vast population of Tongans live in Utah and a small town in Texas.



### Introduction

Tonga is a multi-island nation in the southern region of the Pacific Ocean, east of Fiji. It gained its independence from Great Britain in 1970 and is currently the only kingdom island nation in existence. Tonga is a tropical archipelago that is home to over 170 different islands of primarily uplifted coral reef and volcanic rock formations. The tropical weather makes Tonga a great attraction for tourism. Tonga has shown a great influence on parts of the United States, and have the culture of this great nation is spreading.



### History

The history of Tonga goes back over 3000 years ago, originating with the some of the earliest Polynesians, the Lapita people in Southeast Asia. In 1773, Captain James Cook visited some of Tonga's islands and was amazed by the hospitality of the people, nicknaming Tonga the "Friendly Isles." In 1845, George Tupou I, King of Tonga united the islands into a kingdom and later declared Tonga a constitutional monarchy in 1875. In 1900, Tonga became a protectorate of Great Britain, but still maintained its indigenous sovereignty. When Tonga's protection status ended in 1970, it joined the Commonwealth of Nations, and later the United Nations. Tonga is a predominately Christian nation, including a very large Mormon population.



Figure 3 Nukualofa-Tonga LDS Temple

### Tongans in Utah

During WWII, Tonga housed many WWII servicemen. Among these servicemen, there were several Mormons, or members of the Church of Jesus Christ of Latter Day Saints. These men shared their faith and family-focused ideals with the native Tongans. A church and a temple were built in Tonga, and many Tongans became missionaries of the faith. Some of these missionaries moved to Salt Lake City, Utah and the surrounding areas, thus creating an enormous growth of Tongan people in the United States. In fact, one in four Tongans living in the United States resides in Utah. So, why did so many make the move to Utah? "First and foremost, they came because of religion and the LDS faith. They wanted to come to Zion,"

says Tevita E. Kinikini, president of the all-Tongan Salt Lake Utah Stake of the LDS Church, one of three such stakes in Utah.

### Tongans in Texas

In the 1970s, a large migration of Tongans to small-town Euless, Texas began. Initially, this was due to the similar strong, family-focused values Tongans found in this north Texas town near Dallas. Additionally, the search for jobs was helped by American Airlines at the Dallas-Fort Worth airport working with Tonga to provide jobs for those who came to Texas. Today there is a tight-knit community of ethnic Tongans centered on the Free Wesleyan Church, the largest Methodist denomination of Tonga. This community of over 3,000 Tongans, including the current king, is a great influence on the local traditions and community culture of the Euless area. This can be seen every Friday night during football season when players from the Trinity High School football team perform the Haka war dance before the start of the game.

To this day, most community and school events in Euless are showered with beautiful traditions and customs from the Tongan people. This cultural variety is expressed in the chants used by football players from the small town of Euless, Texas.



Figure 4 Tongan football players perform the Haka at a Trinity football game in Euless, Texas

Video 5.2: Tongans in Texas, <https://www.youtube.com/watch?v=sxB25H4yB2E>

### Resources

- The Church of Jesus Christ of Latter Day Saints: [www.lds.org](http://www.lds.org)
- The Salt Lake Tribune: [www.sltrib.com](http://www.sltrib.com)
- BBC News: [www.bbc.com/news](http://www.bbc.com/news)
- The Kingdom of Tonga: [www.thekingdomoftonga.com](http://www.thekingdomoftonga.com)
- CIA World Fact Book: [www.cia.gov/library](http://www.cia.gov/library)

## Instructional Strategy: TRAPPED Map Analysis

Help, I'm TRAPPED in a map!

Developing spatial thinking in our students is critical to their ability to analyze and interpret any visual information they encounter. Interpreting maps, such as thematic maps, allows students to analyze much more complex information than would be possible if the same information were presented in a chart or table. But, too often, students fail to spend enough time completely analyzing the map. They hit the highlights and then move on, and ultimately fail to develop sophisticated spatial thinking abilities. The “[Modes of Spatial Thinking](#)”, as outlined by Carol and Phil Gersmehl, are structured to assist students with complex map analysis. For younger students, most of the modes may be a bit too sophisticated. The TRAPPED Map Analysis technique is designed to provide a more simple structure for younger students to begin undertaking rigorous map analysis and begin sharpening their spatial thinking skills.

<b>T</b>	<b>Topic</b>	What is the topic of the map? This is usually found in the title. In addition, it is important to investigate the key in order to understand how the topic of the map is depicted.
<b>R</b>	<b>Region</b>	As you analyze the map, you may see that there are areas where places are similar and can be grouped together. These regions may very likely be defined by the topic of the map. It is important to think about WHY these areas may be grouped together. What do they have in common?
<b>A</b>	<b>Association</b>	Do some of the features on the map occur together? If so, think about WHY they occur together.
<b>P</b>	<b>Pattern</b>	Describe the distribution of the features on the map. Are some of the features clustered together? Are there strings, rings, or other patterns to describe where the features are located? Are some features clustered together, while others are spread out?
<b>P</b>	<b>Processes</b>	Once you have identified specific regions, associations and patterns, try to explain WHY the map features are arranged in the way they are. What geographic processes might be responsible for the distribution of features you see on the map?
<b>E</b>	<b>Exceptions</b>	Are there features which do not follow the pattern? Describe where they are located. Go back up to processes and explain why you think these exceptions might be where they are.
<b>D</b>	<b>Description</b>	Once you have completed your analysis, write a short description of the map. Describe the topic being shown on the map and explain the distribution of its features and the processes which might be responsible for that distribution.

## Instructional Materials

In the 4th grade Texas history lesson plan, students investigate settlement patterns in Texas over time. The 5th grade students use primary sources to investigate the founding of the US capital. In the 6th grade lesson, *Immigrant Influences in America*, students analyze a map showing the prevalent countries of birth for immigrant groups in the US and generalize how these groups will have affected regions in the US.

[Download Instructional Materials and Resources](#)