

Addendum to Standard 1.2.2 Narrative

In [GEOG110](#), students learn to distinguish various maps with different patterns that result from different map projections and presentations derived from different types of satellite data and numerous data banks. Earth science studies contribute to student awareness of crustal changes where isostatic adjustment and tectonic plate movements interact in delicate balance. To understand this balance, students study to understand the locations and patterns of crustal plates, interplate boundaries, and how plates interact with one another through time. Maps, photos, and PowerPoint presentations illustrate both the direct and indirect consequences of these plate interactions. Students observe physiographic geomorphological features such as mountain systems, rivers, plateaus, and basins. Students also study maps and photographs of cultural consequences of plate tectonic activity as they affect locations of cities, transportation networks, and numerous cultural activities.

For atmospheric studies students utilize maps, photographs, and PowerPoint materials to develop an understanding of basic atmospheric conditions such as radiation, temperature, pressure, and changes that balance these factors through atmospheric circulation. Students also utilize similar materials to learn how present climates, soils, and vegetation types are distributed worldwide. In this dynamic system students familiarize themselves with climate changes in the past and trends that may help them understand and cope with changes in the future. They also study how human activity affects air quality and appears to be contributing to global warming. Along with this they are developing an appreciation for the differing opinions about human contribution to global warming.

Students are using maps, photos, PowerPoint, and news materials to understand population patterns and distribution in the world. This requires working with basic birth and death data along with migration patterns. To understand both present patterns and future trends, students are learning about practices and patterns in the past as they set the stage for present conditions and future developments.

Social qualities easily escape notice and it is important for students to begin paying attention to developing conscious awareness of subtleties in the local culture along with awareness of elements and practices in societies that are similar or very different from local conditions. To accomplish all of this it is necessary to encourage awareness and developing practices that are both generous and constructive. Reading, observing a broad range of images, and observing behaviors in both themselves and others helps students to experience a broader social awareness. Several aspects of social practice receive special attention. Different religions display important variations in belief and practice that vary from one area to another and from one continent to another. In addition, there are broad trends and changes that have occurred through time. Language is another important aspect of culture. Students learn about the different language families and their distributions. Along with this it is important to recognize the changes leading to language variations through dialects, pidgins, new languages, and the importance of official languages. The Andrews University campus, with one of the most internationally diversified student bodies in the United States, provides a rich opportunity to

explore and experience rich cultural variation.

Students use maps, illustrations, and PowerPoint to develop awareness of the complex political entities and relationships in the modern world. Some present political patterns reflect very old physical or cultural conditions and activities; others reflect more recent changes related to new political alignments combined with social and technological changes. These changes can lead to greater stability or to instability and students need to be aware in order to be responsible citizens.

Economic differences and changes through time become especially clear as students work with graphs, charts, and illustrations. These highlight the differences between primary through quinary activities and underscore the great international disparity that has developed. Many of these changes have occurred more recently and quickly than many broad changes in religion and language. Significant economic changes are taking place during these students' lives and may have lasting effects they should understand so they can act for positive results.

Urban developments and conditions are poorly understood by many of our students who have more rural connections. Maps, graphs, and illustrations help them to appreciate the differences between the rural and increasingly urbanized elements of society. Furthermore, U.S. cities have important differences from one part of the country to another. And cities in other parts of the world arrange cities and functions in different fashions. These differences are important and provide important insights students need to understand.

Environmental conditions are affecting everybody, everywhere. And students are using a broad range of approaches including maps, graphs, illustrations and campus practices to deal with some of the environmental issues. We are learning that local practices, such as electricity generation, affect both the local and international atmosphere and hydrosphere.