



Text Complexity Analysis of

Southwest Sliding into a New Normal... (title)

National Science Foundation (author)

Recommended Complexity Band: 9-10

Qualitative Measures

Meaning/Purpose: (Briefly explain the levels of meaning (Literary Text) or purpose (Informational Text.) The purpose of the article is clearly stated in the title and subtitle. The article goes on to explain what scientists studied to reach their conclusions, explains why conducting this research is important, and briefly goes into the challenge of connecting drier conditions in the Southwest to climate change.

Text Structure: (Briefly describe the structure, organization, and other features of the text.) Text features like the title, subtitle, and headings help the reader navigate the text more easily. Graphics to support text information on weather patterns, high and low pressure systems, and precipitation trends would have been helpful but were not included. The text uses description, compare/contrast, and cause/effect structures.

Language Features: (Briefly describe the conventions and clarity of the language used in the text, including the complexity of the vocabulary and sentence structures.) The text includes numerous domain-specific vocabulary (e.g., arid, climate state, base state, climate models, climate change, high & low pressure systems, weather patterns) and academic vocabulary (e.g., prolonged, adverse, subtle, inhibit, plausible). It also includes expressions like “new normal” and “main driver.”

Knowledge Demands: (Briefly describe the knowledge demands the text requires of students.) A basic understanding of climates and weather systems would greatly increase the reader’s understanding of this text. Students should also have a basic understanding of climate change. Understanding how climate models are used by scientists would be beneficial as well.

Text Description

Briefly describe the text: This informational text is designed to support reading in the content area. The text describes a study on the climate of the southwestern United States. Using 35 years’ worth of data, scientists believe a subtle shift in weather patterns is leading to drier conditions in the Southwest. The text goes on to explain the significance of this research and the challenge of connecting drier conditions in the region to climate change.

Quantitative Measures

Complexity Band Level (provide range): Beyond 11-12

The text falls above the 11-12 grade band according to a quantitative reading measure.

Considerations for Reader and Task

Below are factors to consider with respect to the reader and task.

Potential Challenges this Text Poses:

Teachers will want to ensure they have addressed the concepts listed in the knowledge demands section with their students before beginning the article. Likely, students will have background knowledge on climate, weather, and weather systems from courses they took in middle grades science that investigated Earth systems and patterns; it will just be a matter of bringing forth that prior knowledge. Teachers may want to use the photographs and graphics that accompany the online version of the article with their students to help them with their understanding of the text. http://www.nsf.gov/news/news_images.jsp?cntn_id=137574&org=NSF

Recommended Placement

Briefly explain the recommended placement of the text in a particular grade band: Although the quantitative measure is high, many of the domain-specific terms that play a role in this high quantitative measure students will have some background knowledge on due to courses they took in middle school that dealt with Earth systems and patterns. When taking into consideration all three parts of the text complexity triangle, this text is most appropriately complex for students in grades 9-10.