



Text Complexity Analysis of

Analysis of Fossilized Antarctic Bird's 'Voice Box' Suggests Dinosaurs Couldn't Sing

(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 this text is to share new information on the fossilized voice box called a syrinx -- and its apparent absence in non-avian dinosaur fossils of the same age. This may indicate that other non-avian dinosaurs may not have been able to make noises similar to the bird calls we hear today.

Text Structure: (Briefly describe the structure, organization, and other features of the text.) The text follows a fairly logical progression as it lays out an argument for the new findings, although at times it jumps back to highlight the scientists working on the projects.

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 language is fairly sophisticated with some complex meaning. Academic vocabulary includes descendent, insight, and asymmetrical, while subject-specific terms include syrinx, avian, anatomical, paleontologist, and Cretaceous.

Knowledge Demands: (Briefly describe the knowledge demands the text requires of students.) The overall level of complexity is high. The reader will be expected to know about evolutionary theory and about changes over time. In addition, a level of sophistication is needed to make sense of the scientific problem: how researchers work together in different fields and use their expertise to discuss, change, and hypothesize new answers to long-held questions.

Text Description

Briefly describe the text: This informational text resource is intended to support reading in the content area. Scientists have presented new findings on the fossilized voice box called a syrinx -- and its apparent absence in non-avian dinosaur fossils of the same age. This may indicate that other non-avian dinosaurs were not able to make noises similar to the bird calls we hear today.

Quantitative Measures

Complexity Band Level (provide range): 9-10, 11-12

The text falls into the above grade bands according to a quantitative reading measure. It falls at the higher end of the 9-10 band and in the midrange of the 11-12 band.

Considerations for Reader and Task

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

- To follow the flow of ideas and the logical progression of the discovery, a reading outline should be used.
- Vocabulary will need to be identified and explored.

Potential Challenges this Text Poses:

Because much of the text includes findings that are still just hypotheses and inferences, the logical progression and facts used to move the argument forward will be important to identify.

Recommended Placement

Briefly explain the recommended placement of the text in a particular grade band: The text's quantitative measure, combined with qualitative factors as measured on the attached rubric, make this text recommended for 9-10 grade readers.