

Academic Writing Assessment Paper

In assessing both the textbook excerpt from Science Voyage, and the sample student text by the ninth grade student, we compared different uses of language such as technicality, abstraction, density, metaphorical realizations of logical reasoning and impersonal authoritativeness.

While both texts cover science related material, the textbook excerpt addressing characteristics of fish and the student text discussing crocodiles, the amount of technical vocabulary varies. The textbook uses technical vocabulary such as ectotherms and filaments where as the student text uses simpler words such as good, big, and tight. The student describes information in a way that readers of many ages would be able to make sense of. The student mentions that “crocodiles lived when the dinosaurs lived.” This example gives readers a long ago time period to understand the length of time that crocodiles have been around. This is much easier for readers to relate to than if the author had written that crocodiles have been around for 100 million years.

There is a big difference in the level of abstraction in the two texts. The textbook excerpt discusses specific functions of parts of a fish, explaining the exchange of oxygen and carbon dioxide, as well as the design and structure of fish scales. These are detailed explanations of different aspects of fish. The student article, on the other hand, is much simpler; composed of basic declarative statements that enlighten the reader about how long crocodiles have been around, that they have big, wide mouths which they can close down very tightly. The student did not go into an extensive explanation about how the jaws of the crocodile work and the reasons it is able to close its jaw so tightly, the student simply stated what he/she believed to be fact about crocodiles. Thus the two texts deliver their respective topics in two different ways, an

explanation based, fact filled informal excerpt meant to teach and inform its audience, and a basic, conversation-like text discussing information about what one knows about a topic.

In calculating the lexical densities of the two texts we found the textbook excerpt to be a lot denser. It included additional information that may not be as clear to a reader who is just beginning to learn the subject matter. The amount of content-carrying words in non-embedded clauses gave a larger ratio than the excerpt from the ninth grade student text. The first sentence in the textbook excerpt, “Fish are ectotherms that live in water and use gills to get oxygen.” seems to be much more complex than the student excerpt. There are unfamiliar words that need to be understood to fully grasp the content of the Science Voyage passage. The density levels between the two excerpts surely affect the amount of effort that must be exerted by the reader to comprehend the article. Many times if an article is too dense for the reader it will hinder their process of science learning.

The student passage is not as information ridden as the other text, but it is also not as reliable. The types of metaphors that the author uses are simplified and over generalized. For example, “They eat chicken like us.” describes that crocodiles eat chicken just as humans do, but not all humans eat chicken. These types of metaphors are useful though because they relay the information in a non-formal setting. Many times this helps the reader understand the purpose of the information, but at the same time makes the information presented have less of an impact, coming across as less scientific. Using metaphors that are less personable like, “Fins are fanlike structures used for steering, balancing, and moving.” from the textbook give the reader a better understanding of the science that is being addressed. This also relates to the fact that the student article is more interpersonal rather than impersonal and authoritative like the textbook article.

I believe that the ninth grade student could learn how to write a better, academically competent paper through reading articles and excerpts like the type found in Science Voyage. The student needs to have a developed understanding of the topic before writing and he/she needs to understand the language and terminology related to their topic. The student should use their content knowledge and model their writing after a formal article. Many times, simply reading information in a formal setting can influence a student's writing style when it comes to writing about science. Students always like to imitate the ways the material is presented to them because they believe that this kind of writing is appropriate for this subject matter. With experience in reading other scientific texts, students also learn how to structure their paper and what information is important and what is supplementary information. However, if students are never subjected to the formal writings of science, they won't have a model and will in turn have a much more difficult time trying to grasp the structure and conventions used in scientific writing and academic language as a whole. Students who read scientific work are more able to write scientifically. Thus we feel that exposure is a very important factor in developing competence in using academic language. When students become accustomed to reading and hearing information delivered in a scientific form, they will learn how to model the practices and begin to duplicate the techniques. Many of these actions cannot take place without the help of a teacher providing opportunities and encouraging students to read a wide variety of science materials, and equipping them with all the tools they will need to make the shift from story-like narratives that include science topics to expository material that is about science topics. The final crucial step that is necessary for teachers in helping their students to develop competence in using academic language is to provide the scaffolding needed to comprehend the material and

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make connections with their readings. With all of these abilities combined, the student would be capable of developing a more competent academic paper.