

<b>Verb or Adjective</b>	<b>Noun</b>
introduce	introduction
honest	honesty
refuse	refusal
complex	complexity
create	creation
treat	treatment
toxic	toxicity

Now consider these sentences:

The scientist introduced his speech with a specific example. This made the audience more attentive.	The introduction of the scientist's speech with a specific example gained the audience's attention.
The main character in the novel was an honest man. This was his outstanding trait.	The main character's honesty was his outstanding trait.
Washington's soldiers refused to give up hope, even under difficult conditions. As a result they won the battle.	Washington's soldiers' refusal to give up hope, even under difficult conditions, led to their victory.
The calculus problem was very complex. Even the best students became frustrated.	The complexity of the calculus problem that the teacher had assigned frustrated even the best students.
The scientist mixed these two chemicals to create a compound.	The creation of this compound was the result of mixing these two chemicals.
The soldiers treated the prisoners humanely. This was noted in the report.	The soldier's humane treatment of the prisoners was noted in the report.
The gas was toxic. The workers began gasping.	The toxicity of the gas left the workers gasping.

Nominalization in these examples results in greater lexical density. When verbs and adjectives are turned into nouns, the nouns can become part of a complex noun phrase, as is shown in the second set of sentences in the table. For example, changing the verb *introduce* into the noun *introduction* results in a noun phrase with 10 words, as

shown in the first example. The other examples are similar. These long noun phrases that are typical of academic writing are difficult for SELs and ELLs to understand or produce.

### **Teaching Nominalization**

Secondary students can learn to incorporate nominalization into their writing with focused instruction. The first step would be for the teacher to give students a list of verbs and adjectives and ask them to convert these words into nouns. To help students do this, a teacher could give students a list of suffixes that are used to change verbs and adjectives into nouns, such as *-tion* (destroy, destruction), *-ness* (happy, happiness), *-al* (dismiss, dismissal).

When students understand nominalization, they can rewrite sentences that have nominalizations as simple sentences with adjectives and verbs. Later, students could begin to write their own sentences with nominalizations. Lessons on nominalization would be for advanced level ELLs and SELs.

### **Abstraction**

Academic texts are also more abstract than conversational texts. Nominalizations make texts more abstract. Normally, speakers or writers communicate ideas in a concrete way. The syntax reflects the way we experience events. For example, when we say, “The soldiers treated the prisoners humanely,” the order of the words follows the common subject-verb-object pattern. English speakers expect sentences to follow this pattern of actor, action, and thing acted on. That is, someone does something to someone or something. However, when the verb is turned into a noun, the result is a long noun phrase, “The soldiers’ humane treatment of the prisoners” that expresses an abstract idea rather than describing an action.

In the passage about fossil fuels, nominalizations also make the text more abstract. If we write, “When people burn fossil fuels, the process releases carbon dioxide into the atmosphere.” the result is a concrete sentence. Someone does something with a certain result. However, by using the nominalized form “Burning fossil fuels,” the authors make this an abstract concept with no people involved.

The use of passives also makes academic texts abstract. The passage on fossil fuels contains several passives, such as “When

petroleum products and coal are burned, smoke is given off that contains small particles called particulates.” This is much more abstract than a sentence like, “When people burn petroleum products and coal, the process creates smoke that contains small particles called particulates.” In active sentences the grammatical subject is the person or thing that does the action, but in a passive sentence, the grammatical subject is acted upon rather than being the one acting. If we say “People burn coal and petroleum products,” the grammatical subject, “people,” is the actor, but in the passive construction, “Petroleum products and coal are burned,” the grammatical subject, “petroleum products and coal” is having something done to it. They are not acting but being acted on, and the result is a more abstract construction.

## FEATURES OF ACADEMIC TEXTS IN DIFFERENT DISCIPLINES

In addition to these general characteristics of academic language, the academic texts in each discipline have specific features that make it difficult for ELLs and SELs to comprehend or produce them. Math textbooks are difficult to read because they contain mathematical symbols and expressions, diagrams and other figures, and natural language. In addition, many common words, such as *point*, have meanings specific to math. Math also has complex expressions, such as *least common multiple* and *negative exponent*. Further, ELLs and SELs often fail to notice the difference between expressions like *divided into* and *divided by*, but the difference is important for understanding the operation to be completed. Science also contains diagrams and other figures as well as technical vocabulary. In history texts, students are required to read primary documents that contain archaic language.

Language arts contains academic language as well. The syntax of stories is often quite different from conversational syntax. For instance, consider the sentence, “Once upon a time, in a far distant land, there lived a man who had three beautiful daughters.” Conversational English would be quite different, “A man with three beautiful daughters lived in a distant land.” Even stories for young students have sentences like, “Up jumped the gingerbread man, and down the road he ran.” Here, *up* and *down* are moved to positions in front of the verbs, whereas in conversational language they would follow the verbs.