



## Why Doesn't PEG Catch All Student Errors?

One of the most common questions about scoring is why PEG doesn't catch all student spelling and grammar errors. There are several reasons that an error might not be flagged.

### False positives

The English language is full of confusing and contradictory rules. For example, run-on sentences are particularly hard to differentiate from those that are simply longer and more complex. Word choice is another area in which confusion can arise. You may notice that PEG has suggested changing a word in the essay to another similar-sounding word. Sometimes the suggestions are appropriate, but when they are not, that is an example of a "false positive."

For example, homophone errors, like using "bare" for "bear" and vice versa, are not always easily distinguished because some of those pairs can occur in similar contexts. If you have ever used the spelling and grammar check in Microsoft Word, you will see the same kinds of false positives. In general, the PEG team tries to limit the number of false positives, which sometimes has the unfortunate effect of allowing actual errors to escape detection. The PEG team is constantly refining PEG grammar and spelling rules to give students optimal feedback.

### It's a computer

Since PEG is not human, it has to have very specific rules to follow. An "if, then, except when" is a difficult rule! An example of this is capitalization. We all know that proper nouns are capitalized. However, it is not always clear to PEG which words in an essay are proper nouns. Many common nouns are used for names or nicknames, such as "rocky," "hunter," "bear," "hope," "sugar," and even "apple," to name a few. Humans learn to apply context clues to determine what kind of noun these are, and that skill begins even before they learn to read. Since PEG does not read words in context, there is no way for the engine to ascertain which of these is a proper noun and which is the common one.

### Uncommon vocabulary

PEG recognizes words based on its lexicon, which is a list of thousands of words that are commonly used. Some words, especially scientific and technological ones, are not included in the lexicon because their usage is occasional or rare. If PEG does not recognize the word, it will be marked misspelled or another word will be suggested. Teachers can add unusual words to their prompts so that PEG does not flag them in student essays. These words are then gathered periodically and added to the lexicon.

### The nature of formative assessment

Most importantly, Utah Compose is a practice writing site, intended to help students sharpen their writing skills. The assessment aspect of PEG is to allow students and teachers to monitor growth in writing. For this reason, PEG team endeavors to give enough feedback within the essay to support student practice and learning without overwhelming students and without taking the focus away from the content of the essay.