

COMMON ERRORS TO AVOID IN SCIENTIFIC WRITING*

The Cain Project in Engineering and Professional Communication

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Abstract

This handout defines and shows examples of grammar, usage, and style errors commonly seen in undergraduate writing in the sciences. During class, students might be asked to revise each example.

Name of error	What it means	Example of error
Anthropomorphism	Giving human qualities to nonhumans	"Antibodies want to bind specifically to the antigens they recognize."
Comma splice	Linking independent clauses with a comma (without a coordinating conjunction such as and , but , or , yet)	"The test was performed using bovine SSA, however human SSA has also been used successfully."
Expletive at beginning of a sentence	Starting with "there is" or "it is"	"There are many studies focusing on autoantibodies in SLE."
Incorrect word	Affect (verb) vs. effect (noun); That (restricts) vs. which (adds additional information)	"Competing antigen has a great affect on the binding." "The antibodies to SSA, which were stored at room temperature, failed to react with the sera." [Intended meaning: only those stored at RT failed to react.]
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Non-parallel construction	Failure to use grammatically equal words, phrases, or clauses	“The physician’s goals include managing the pain and better prediction of flares.”
Nominalization (wordiness)	Using noun form of a verb unnecessarily	“Purified SSA exhibited competition with the sera for binding.”
Redundant categories (wordiness)	Attaching a category to a word that implies its category	“The sample was yellow in color.”
Redundant pairs (wordiness)	Using redundant words when one word is sufficient	“Antibody was added to each individual vial.”
Unnecessary that, to, which clauses		“Methods that are quantitative are preferred.”
Weak pronoun reference	Use of it , this , that , these , those , they , and which without clear reference to a noun	“Calf thymus is a rich source of SSA, SSB, and other antigens. It is homogenized in buffer to extract proteins.”

Table 1