

Evaluation of Critiques of Scientific Articles

| | Expert | Proficient | Apprentice | Novice |
|--------------------------|--|--|--|--|
| Introduction | Clearly summarizes the aims of and methods used by the authors. | Summary is complete, but lacks clarity. | Picture communicated is not clear; connection to paper is not obvious. | No real introduction. |
| Data presentation | There is a clear understanding of experimental design, especially controls. It is also clear that you understand what was observed and how it relates to the authors' model or hypothesis. | Some parts of the experiments have not been understood. You may not have a clear grasp of the model being tested, or the relevance of the data | There are significant gaps in understanding, or inaccuracies in reporting the data. You have shown some understanding, but there are clearly large parts of the paper that you haven't mastered. | Hurriedly done, with little understanding. |
| Criticism | There is a clear understanding of the authors' interpretation, of the implications of the results for the hypothesis. Outside information is brought to bear on evaluating the design and conclusions. | Not quite as clear an understanding. Less complete evaluation of design and conclusions. | Uncritical acceptance of authors' conclusions. Or baseless objections to them. | Little or no mention of authors' intent. Little or no evaluation. |
| Cohesiveness | You have selected the data most relevant to the authors' aims. Your conclusions actually make results clearer. | Although the most relevant data are selected, your picture of the authors' aims and conclusions is not quite as clear and/or complete. | Some of the data you have selected do not seem as relevant to the overall aims of the paper. You seem to have missed some important parts. | Lack understanding of the paper or its context. Authors' aims are unclear. |
| Spelling/grammar | No spelling or grammatical errors. | Very few spelling or grammatical errors. | Errors on almost every page. | Apparently no proofreading done. |