

From question to evidence: a short scientific article

Cristhian Egoavil / September 13, 2026

Abstract

This template offers a compact structure for communicating research, technical reviews, and reproducible experiments. It combines the CREH Labs identity with a layout designed for academic reading: a single column, clear hierarchy, and room for equations, tables, figures, and references. The values and example in this document are illustrative; they do not come from an executed experiment.

Keywords: research; reproducibility; evaluation; scientific communication.

1 Introduction

A short article should present a concrete question, explain how it is studied, and define what its results allow us to conclude. This first section establishes the problem, identifies the contribution, and connects the question to verifiable sources.

As a writing example, consider evaluating a system that retrieves documents to answer queries. The illustrative question is: how does the proportion of relevant retrieved documents change as the number of requested results varies?

2 Methodology

A reproducible evaluation describes the queries, documents, relevance criteria, and system configuration. It should specify versions, execution conditions, and the procedure used to compare alternatives.

2.1 An equation in context

For a query, precision among the first k results is defined as:

$$P@k = \frac{1}{k} \sum_{i=1}^k r_i, \quad r_i \in \{0, 1\}. \quad (1)$$

Here $r_i = 1$ indicates that the result at position i is relevant under the evaluation criterion. This measure enables a local comparison; it does not, by itself, describe the quality of a generated answer. Manning and colleagues' information retrieval textbook provides background [1].

3 Results: a presentation example

Table 1 illustrates how to present figures with consistent units and precision. The numbers were chosen solely to demonstrate the editorial design.

Configuration	Results (k)	Relevant	$P@k$
Example A	5	4	0.80
Example B	10	7	0.70
Example C	20	12	0.60

Table 1: Fictitious data to demonstrate table formatting.

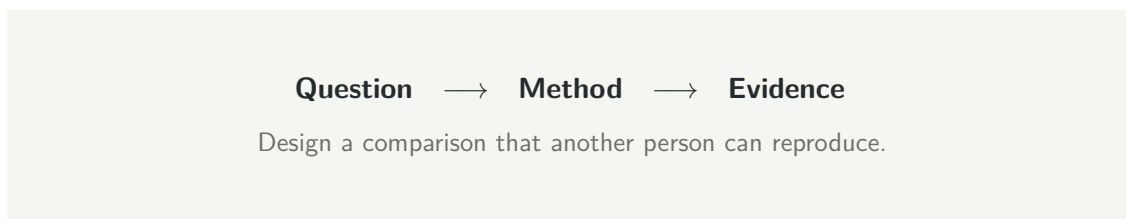


Figure 1: Author-created conceptual diagram. It does not represent a measurement.

4 Discussion and limitations

Interpreting results requires linking them to the original question. In this example, the values illustrate the calculation in Equation 1; they do not establish that one real configuration is better than another. A study would require multiple queries and a description of variability.

The discussion should also explain conditions under which conclusions might change: dataset composition, relevance criteria, sample size, or execution budget.

5 Conclusion

This template supports concise documents with a recognizable structure and consistent visual identity. For each article, replace the demonstration content with documented evidence and conclusions proportional to that evidence.

References

- [1] C. D. Manning, P. Raghavan, and H. Schütze. *Introduction to Information Retrieval*. Cambridge University Press, 2008. <https://nlp.stanford.edu/IR-book/>