

## Methodology

### Description

The methodology section of a text usually describes the research design for a study (proposed or completed), how the **results**/findings were constructed through **analysis**, and the strength of the research design. The term *methodology* refers to the overarching epistemological orientation and approach of the research, whereas *methods* signals the specific techniques used and activities conducted. Thus the scope of methodology is wider than that of methods (Hyland, 2016).

The methodology section often begins with a broad discussion of the approach, then narrows to describe the methods. It typically includes enough detail for the reader to understand specifically how the research was conducted. In some disciplines, this level of detail enables the research to be replicated by others (Lunenburg & Irby, 2008).

Writers may cite **sources** on research methodologies/methods to justify how the methods employed are appropriate for the research design. In this example from a study exploring the role of teachers in the classroom, Stevenson (2015) explains how video-stimulated recall suited the goals of his research:

Video-stimulated recall can be defined as a process by which a participant is ‘shown a video of an interaction that they have taken part in and then prompted by the researcher to reflect on their role within it’ (Haw and Hadfield 2011, 55). ... Work conducted with teachers by Reitano and Sim (2010), for example, suggests that video-stimulated recall plays a valuable role in promoting teachers’ reflective practices. Expanding upon this procedure, the research project described in this paper used video-stimulated recall to support teachers to reflect on the cultural aspects of their practice. (p. 295)

24           The methodology section of a text does not typically include **results**/findings, but it may  
25 discuss the reliability of the research findings, in order to forestall doubts, criticism, or  
26 challenges to the design, results, and interpretation (Lim, 2006).

### 27 **Variations and Tensions**

28           Descriptions of methodology may also be used in texts such as **literature reviews** that do  
29 not report on empirical research or using primary sources as data. Depending on discipline, the  
30 methodology section may be called Materials and Methods, Patients and Methods, Study Design,  
31 or Experiment (Annesley, 2010).

32           The level of detail of the methodology section varies across disciplines. For example, in  
33 the social sciences and some interdisciplinary fields, it may include detailed descriptions,  
34 whereas in some natural sciences, it may be shorter because the procedures may be standard and  
35 commonly known (Bruce, 2008).

36           In terms of language, in a **proposal**, the methodology section typically uses the future  
37 tense. In a research **report**, the methodology section generally uses past or present perfect tenses  
38 (Annesley, 2010).

### 39 **Graduate Student Voice**

40           I wrote methodology sections for papers in two qualitative research methods courses in  
41 which I carried out studies. I included details such as what time I arrived at the research site, how  
42 long I stayed there, and why I made those decisions about data collection. –Weijia Li

### 43 **Reflection Questions**

- 44           1. What common subheadings are used in methodology sections in texts in your discipline?  
45           How much detail is included in each subsection?

46 2. Looking at a number of texts and genres in your discipline, do writers usually cite sources  
47 when writing about methodology or methods?

48 **For Further Reading**

49 Glasman-Deal, H. (2010). *Science research writing: For non-native speakers of English*.  
50 Imperial College Press. Unit 2, Writing about methodology (pp. 44-90), explains the  
51 structure of the methodology section in the sciences and the use of verb tenses.

52 Lunenburg, F. C., & Irby, B. J. (2008). *Writing a successful thesis or dissertation: Tips and*  
53 *strategies for students in the social and behavioral sciences*. Corwin Press. Chapter 8,  
54 Writing the methodology chapter (pp. 165-205), describes its structure in dissertations in  
55 behavioral and social sciences.

56 **References**

57 Annesley, T. M. (2010). Who, what, when, where, how, and why: The ingredients in the recipe  
58 for a successful methods section. *Clinical Chemistry*, 56(6), 897–901.

59 <https://doi.org/10.1373/clinchem.2010.146589>

60 Bruce, I. (2008). Cognitive genre structures in Methods sections of research articles: A corpus  
61 study. *Journal of English for Academic Purposes*, 7(1), 38–54.

62 <https://doi.org/10.1016/j.jeap.2007.12.001>

63 Hyland, K. (2016). Methods and methodologies in second language writing research. *System*, 59,  
64 116–125.

65 Lim, J. M. H. (2006). Method sections of management research articles: A pedagogically  
66 motivated qualitative study. *English for Specific Purposes*, 25(3), 282–309.

67 <https://doi.org/10.1016/j.esp.2005.07.001>

68 Lunenburg, F. C., & Irby, B. J. (2008). *Writing a successful thesis or dissertation: Tips and*

69            *strategies for students in the social and behavioral sciences*. Corwin/Sage.  
70    Stevenson, B. (2015). Third spaces and video-stimulated recall: An exploration of teachers'  
71            cultural role in an Indigenous education context. *Educational Action Research*, 23(2),  
72            290–305. <https://doi.org/10.1080/09650792.2014.990986>

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