

Research and Field Skills

View Online



1.
Derry, G.N.: What is Science? (What science is and how it works: Prologue). In: What science is and how it works. Princeton University Press, Princeton, N.J. (1999).

2.
Leedy, P.D., Ormrod, J.E.: What is research? (Practical research: planning and design: Ch 1). In: Practical research: planning and design. Pearson, Boston (2015).

3.
Marder, M.P.: Curiosity and research (Research methods for science: Ch 1). In: Research methods for science. Cambridge University Press, Cambridge (2011).

4.
Hulme, M.: The performance of science (Why we disagree about climate change: understanding controversy, inaction and opportunity: Ch 3). In: Why we disagree about climate change: understanding controversy, inaction and opportunity. Cambridge University Press, Cambridge (2009).

5.
Derry, G.N.: Difficult and important questions: science, values and ethics (What science is and how it works: Ch 11). In: What science is and how it works. Princeton University Press, Princeton, N.J. (1999).

- 6.

Derry, G.N.: Nature's Jigsaw (What science is and how it works: Ch 2). In: What science is and how it works. Princeton University Press, Princeton, N.J. (1999).

7.

Derry, G.N.: Thinking straight: evidence, reason and critical evaluation (What science is and how it works: Ch 7). In: What science is and how it works. Princeton University Press, Princeton, N.J. (1999).

8.

How Science Changes - The Atlantic,
<http://www.theatlantic.com/technology/archive/2012/12/how-science-changes/266145/>.

9.

Funtowicz, S.O., Ravetz, J.R.: Science for the post-normal age. *Futures*. 25, 739–755 (1993). [https://doi.org/10.1016/0016-3287\(93\)90022-L](https://doi.org/10.1016/0016-3287(93)90022-L).

10.

Stuart Firestein: The pursuit of ignorance | TED Talk | TED.com,
https://www.ted.com/talks/stuart_firestein_the_pursuit_of_ignorance.

11.

Andrews, J.E.: An introduction to environmental chemistry. Blackwell, Malden, Mass (2004).

12.

Leedy, P.D., Ormrod, J.E.: The problem: the heart of the research process (Practical research: planning and design: Ch 3). In: Practical research: planning and design. Pearson, Boston (2015).

13.

Sutherland, W.J.: Planning a research programme (Ecological census techniques: Ch. 1). In: Ecological census techniques: a handbook. Cambridge University Press (2006).

14.

Marder, M.P.: Overview of experimental analysis and design (Research methods for science: Ch 2). In: Research methods for science. Cambridge University Press, Cambridge (2011).

15.

Watts, S., Halliwell, L.: The Good Scientist (Essential environmental science: methods & techniques: Ch. 1). In: Essential environmental science: methods & techniques. Routledge, London (1996).

16.

Goldacre, B.: Bad science. Harper Perennial, London (2009).

17.

Kneale, P.: Constructing an argument (Study skills for geography, earth and environmental science students: Ch. 11). In: Study skills for geography, earth and environmental science students. Hodder Education, London (2011).

18.

Leedy, P.D., Ormrod, J.E.: Planning your research project (Practical research: planning and design: Ch 5). In: Practical research: planning and design. Pearson, Boston (2015).

19.

Watts, S., Halliwell, L.: Sampling (Essential environmental science: methods & techniques: Ch. 2). In: Essential environmental science: methods & techniques. Routledge, London (1996).

20.

Watts, S., Halliwell, L.: Ecological fieldwork methods (Essential environmental science: methods & techniques: Ch 8). In: Essential Environmental Science: Methods & Techniques. Routledge, London (1996).

21.

Rice, S.: Sampling in Geography (Key methods in geography: Ch 17). In: Key methods in geography. SAGE, London (2016).

22.

Visionlearning | Process of Science | Data Analysis and Interpretation, <http://www.visionlearning.com/en/library/Process-of-Science/49/Data-Analysis-and-Interpretation/154>.

23.

Field, R.: Data handling & presentation (Key methods in geography: Ch 21). In: Clifford, N.J., Cope, M., Gillespie, T., and French, S. (eds.) Key methods in geography. SAGE, Los Angeles (2016).

24.

Visionlearning | Process of Science | Using Graphs and Visual Data in Science, <http://www.visionlearning.com/en/library/Process-of-Science/49/Using-Graphs-and-Visual-Data-in-Science/156>.

25.

Berinato, S.: Good charts: the HBR guide to making smarter, more persuasive data visualizations. Harvard Business Review Press, Boston, Massachusetts (2016).

26.

Few, S.: Show me the numbers: designing tables and graphs to enlighten. Analytics Press, El Dorado Hills, California (2012).

27.

Tufte, E.R.: The visual display of quantitative information. Graphics Press, Cheshire, Connecticut (2013).

28.

Improving your graph: a case study,
<http://baryon.be/blog/2016/08/improving-your-graph-a-case-study/>.

29.

Watts, S., Halliwell, L.: Social surveys (Essential environmental science: methods & techniques: Ch 9). In: Essential environmental science: methods & techniques. Routledge, London (1996).

30.

Parfitt, J.: Questionnaire design & sampling (Methods in Human Geography: Ch 6). In: Methods in human geography: a guide for students doing a research project. Pearson/Prentice-Hall, Harlow (2005).

31.

McLafferty, S.L.: Conducting Questionnaire Surveys (Key methods in geography: Ch 6). In: Clifford, N.J., Cope, M., Gillespie, T., and French, S. (eds.) Key methods in geography. SAGE, Los Angeles (2016).

32.

Visionlearning | Process of Science | Scientific Ethics,
<http://www.visionlearning.com/en/library/Process-of-Science/49/Scientific-Ethics/161>.

33.

Resnik, D.B.: What is Ethics in Research and Why is it Important?,
<http://www.niehs.nih.gov/research/resources/bioethics/whatis/>.

34.

Oliver, P.: The student's guide to research ethics. Open University Press, Maidenhead, Berkshire (2010).

35.

Marder, M.P.: Overview of experimental analysis and design (Research methods for science: Ch 2). In: Research methods for science. Cambridge University Press, Cambridge (2011).

36.

Leedy, P.D., Ormrod, J.E.: Planning your research project (Practical research: planning and design: Ch 5). In: Practical research: planning and design. Prentice Hall, Upper Saddle River, N.J. (2015).

37.

Risk assessments (Royal Geographical Society guidance), <https://www.rgs.org/in-the-field/fieldwork-in-schools/fieldwork-safety-and-planning/risk-assessments/>.

38.

Risk Assessment | STEM, <https://www.stem.org.uk/elibrary/resource/31202>.

39.

Jensen, J.R., Jensen, R.R.: Georeferencing (Introductory geographic information systems: Ch 2). In: Introductory geographic information systems. Pearson, Boston (2013).

40.

Kennedy, M.D.: Some concepts that underpin GIS (Introducing geographic information systems with ArcGIS: a workbook approach to learning GIS: Ch 1). In: Introducing geographic information systems with ArcGIS: a workbook approach to learning GIS. John Wiley & Sons, Hoboken, New Jersey (2013).

41.

Monmonier, M.S.: Elements of the map (How to lie with maps: Ch 2). In: How to lie with maps. University of Chicago Press, Chicago (1996).

42.

Monmonier, M.S.: Map generalization: little white lies and lots of them (How to lie with maps: Ch 3). In: How to lie with maps. University of Chicago Press, Chicago (1996).

43.

Kennedy, M.: Products of a GIS: Maps and Other Information (Introducing geographic information systems with ArcGIS: a workbook approach to learning GIS: Ch 3). In: Introducing geographic information systems with ArcGIS: a workbook approach to learning GIS. John Wiley & Sons, Hoboken, New Jersey (2013).

44.

Jones, C. (Kate) E.: Cartographic Theory and Principles. In: Interacting with geospatial technologies. pp. 37–65. John Wiley, Chichester, West Sussex, UK (2010).
<https://doi.org/10.1002/9780470689813.ch3>.

45.

Haklay, M.: Colour figures for Cartographic Theory and Principles (Interacting with Geospatial Technologies: Ch 3). In: Interacting with geospatial technologies. pp. c1–c16. John Wiley, Chichester, West Sussex, UK (2010).
<https://doi.org/10.1002/9780470689813.ins>.

46.

Wood, D., Fels, J.: The natures of maps: cartographic constructions of the natural world. University of Chicago Press, Chicago (2008).

47.

Brotton, J.: A history of the world in twelve maps. Allen Lane, London (2012).

48.

Longley, P., Goodchild, M.F., Maguire, D.J.: Georeferencing: (Geographic information science & systems: Ch 4). In: Geographic information science & systems. Wiley, Hoboken,

NJ (2015).

49.

Longley, P., Goodchild, M.F., Maguire, D.J.: Geographic information: science, systems and society (Geographic information science & systems: Ch 1). In: Geographic information science & systems. Wiley, Hoboken, NJ (2015).

50.

Jensen, J.R., Jensen, R.R.: Introduction to GIS (Introductory geographic information systems: Ch 1). In: Introductory geographic information systems. Pearson, Boston (2013).

51.

Jensen, J.R., Jensen, R.R.: Spatial data models and databases (Introductory geographic information systems: Ch 5). In: Introductory geographic information systems. Pearson, Boston (2013).

52.

Longley, P., Goodchild, M.F., Maguire, D.J.: Representing geography (Geographic information science & systems: Ch 3). In: Geographic information science & systems. Wiley, Hoboken, NJ (2015).

53.

Baban, S.M.J., Flannagan, J.: Developing and Implementing GIS-assisted Constraints Criteria for Planning Landfill Sites in the UK. *Planning Practice and Research*. 13, 139–151 (1998). <https://doi.org/10.1080/02697459816157>.

54.

Thornton, L.E., Pearce, J.R., Macdonald, L., Lamb, K.E., Ellaway, A.: Does the choice of neighbourhood supermarket access measure influence associations with individual-level fruit and vegetable consumption? A case study from Glasgow. *International Journal of Health Geographics*. 11, (2012). <https://doi.org/10.1186/1476-072X-11-29>.

55.

Bagan, H., Yamagata, Y.: Landsat analysis of urban growth: How Tokyo became the world's largest megacity during the last 40 years. *Remote Sensing of Environment*. 127, 210–222 (2012). <https://doi.org/10.1016/j.rse.2012.09.011>.

56.

Comber, A., Brunsdon, C., Green, E.: Using a GIS-based network analysis to determine urban greenspace accessibility for different ethnic and religious groups. *Landscape and Urban Planning*. 86, 103–114 (2008). <https://doi.org/10.1016/j.landurbplan.2008.01.002>.

57.

Lovett, A.A., Parfitt, J.P., Brainard, J.S.: Using GIS in Risk Analysis: A Case Study of Hazardous Waste Transport. *Risk Analysis*. 17, 625–633 (1997). <https://doi.org/10.1111/j.1539-6924.1997.tb00903.x>.

58.

Brown, L.J., Lamhonwah, D., Murphy, B.L.: Projecting a spatial shift of Ontario's sugar maple habitat in response to climate change: A GIS approach. *The Canadian Geographer / Le Géographe canadien*. 59, 369–381 (2015). <https://doi.org/10.1111/cag.12197>.

59.

Liang, Y., Liu, L.: Modeling urban growth in the middle basin of the Heihe River, northwest China. *Landscape Ecology*. 29, 1725–1739 (2014). <https://doi.org/10.1007/s10980-014-0089-9>.

60.

Kneale, P.E.: Practical reports, laboratory and field notebooks (Study skills for geography, earth and environmental science students: Ch 18). In: *Study skills for geography, earth and environmental science students*. Hodder Education, London (2011).

61.

Leedy, P.D., Ormrod, J.E.: Preparing the research report (*Practical research: planning and*

design: Ch 12). In: Practical research: planning and design. Pearson, Boston (2015).

62.

Bradford, M.: Writing essays, reports and dissertations (Key methods in geography: Ch 31). In: Clifford, N.J., Cope, M., Gillespie, T., and French, S. (eds.) Key methods in geography. SAGE, Los Angeles (2016).

63.

Kneale, P.E.: Effective essay skills (Study skills for geography, earth and environmental science students: Ch 17). In: Study skills for geography, earth and environmental science students. Hodder Education, London (2011).

64.

Greetham, B.: How to write better essays. Macmillan Education, London (2018).

65.

Shields, M.: Essay writing: a student's guide. SAGE, Los Angeles, [Calif.] (2010).

66.

The most commonly misused words and phrases in scientific writing | Adams Kaul, <https://adamskaul.wordpress.com/2014/05/12/201452the-most-commonly-misused-words-and-phrases-in-scientific-writing/>.

67.

Top Ten style checks for PhDs or creative non-fiction writers, <https://medium.com/advice-and-help-in-authoring-a-phd-or-non-fiction/top-ten-style-checks-for-phds-or-creative-non-fiction-writers-9ca63542f5d#.yrmib5szu>.

68.

Lesson 3: Scientific Writing - Concision and Simplicity (Duke University), <https://cgi.duke.edu/web/sciwriting/index.php?action=lesson3>.

69.

Style Points for Scientific Writing (University of Connecticut Writing Center),
https://web2.uconn.edu/writingcenter/pdf/Style_Points_for_Scientific_Writing.pdf.

70.

Scientific Writing Resource - Duke University,
https://cgi.duke.edu/web/sciwriting/index.php?action=passive_voice.

71.

Effective Writing | Learn Science at Scitable,
<https://www.nature.com/scitable/topicpage/effective-writing-13815989>.

72.

Active vs. Passive Voice in Scientific Writing,
<https://www.acs.org/content/dam/acsorg/events/professional-development/Slides/2015-04-09-active-passive.pdf>.