Check the relevance of information sources

Intensive examination with respect to relevance and seriousness of the sources = fundamental to quality of the own scientific work – the key questions are:

− should I trust this information?
− why do I trust this information/ source? Which reasons are there to trust? how can I verify it?
− how does the information fit in with my research topic?

Before viewing the source…   *valid for Book/journal or Websites only

1. **Author/ Publisher**
− Is the author/ publisher familiar to you? (renowned scientists?, expert in the field of research?, referred to by colleagues?)
− What background (experience, activities, etc.) has the person?
− Is he/ she quoted often? (quoted often → high relevance for the field)
− Are there many cited by's on / links to this information source / the webpage?
− Are well-respected sources (Books/journals) / webpage referenced / linked to?
− Is the Author/ the publishing institution mentioned?
− Are there contact details? (e.g. in Impressum,"About us" or Mission Statement)

2. **Up-to-dateness/ currency**
− When was the information/ the text/ the research data published?
− Is the text or the information recent enough for your research problem? Were more recent figures / studies / data etc. integrated and therefore the source updated?
− Is it clear when and by whom the given data were inquired? If the check fails, the information could already be outdated and invalid.
− Book: Were more recent editions published? (more recent editions (Book) = indicates a standard work/ well-respected manual)
− Is it clear how often or when the page was updated? Are all links working?

3. **Environment** (**Publisher, Website/ Portal**)
− Website: Ist the whole Website well organized resp. easy to navigate? in which context exists the website? (website's ending: .com=commercial, .edu=educational institution, .gov= government, .mil=military, .org =association/ NonProfit-Organization)
− Is the information source (article, Book (chapter)) published by a well-known publisher? quality standards (e.g. Peer-Reviewing)? are those met? see checklist Clues to quality of journals
− Does an abstract or review of the information source (book/ article) exist? Which information/ opinion/ rating does it offer? (Please note that the quality of reviews can differ so check it as well)

After you got the source you are able check the following aspects…

Important elements for evaluation: foreword, blurb, epilogue/ summary – usually reading up the beginning is sufficient to get an impression of the following aspects:

1. **Purpose**
− What is the purpose/ motive of this source? (commercial, entertainment, advertment etc.) Does the source try to sell you something?
− Kann zwischen Inhalt und Werbeanteil klar unterschieden werden?

2. **Target group/ audience**
− Which target group is addressed?
− Is the text appropriate for your needs? Or is it too basic/ popular/ technical/ sophisticated?
− Zeitschriften/ Website: how is the portion of text and advertising spread?
− Website: How does the purpose affect the page layout / content presentation? Is the webpage dominated by advertising? (usually much advertising = low quality)

3. Care / writing style
− Is the text constructed in a logical way, clear and concise?
− Does the author use a clear, plain language?
− Is the text created carefully or are there e.g. many grammatical or spelling errors?
− Does the author cite correctly?

4. Objectivity
− To which organisation does the author belong to or to which is he/ she connected to?
− Is the topic treated in an objective, neutral and impartial way? Are different views / positions / theories / schools of thought / methods etc. presented? Or does the author try to influence your point of view?
− Are facts presented as personal or personal opinions presented as facts? (If the views of the author might be controversial, the author should indicate the possibility of divergent interpretations)
− Is the reasoning valid?
− What is the intention of the author to publish this text?

5. Verifiability / transparency
− Does the information come from a thorough investigation and hence convincing?
− Are all used information, tables, figures and charts referenced?
− Website: Do the provided links work?
− Do all used sources appear in a bibliography or at least as a footnote?
− Are the methods of data collection and evaluation explained when reference is made to research?

6. Scientific standards
− Is the text structured according to a stringently scientific scheme? Is the author firm in scientific writing and the use of proper techniques and styles?
− Are the scientific quality criteria met?: objectivity (results independent of a person), reliability (measuring instrument reliable, same results after repeated execution) and validity (suitability of a measurement procedure/ survey question with respect to the research objective)
− Are key terms defined in order to avoid blur and to demonstrate the own positioning in relation to the school of thought?
− Plagiarism (=theft of intellectual property) was avoided?

7. Completeness
− How comprehensive is the published information with respect to the topic? Do gaps appear?
− Does the source provide new information or theories? If the author explains a new theory or method: Does he/she address the value and limitations?
− Is the information source changing your point of view on the topic?
− Is it a primary or a secondary source? → secondary sources e.g. book (chapter), journal article etc. are based on primary sources e.g. research report, research study

Further information:

Taves, Adam et al.: The web research tutorial - York university – URL: http://www.yorku.ca/webclass/module4a.html (last update: 24.04.2006)

Checkliste Bewertung von Informationsquellen – Bibliothek der Hochschule Aschaffenburg – URL: http://www.h-ab.de/fileadmin/dokumente/bibliothek/Anleitungen/Checkliste%20Bewertung%20von%20Infoquellen.pdf (last update: Sep. 2014)

Critically Analyzing Information Sources – Cornell Univ. Library – URL: http://guides.library.cornell.edu/criticallyanalyzing (last Update: 21.09.2014)

Clues to quality of journals – HZI Library – URL: http://www.bibliotheca-open.helmholtz-hzi.de/Portals/1/Clues%20to%20quality%20of%20journals.pdf (last update: 28.01.2015)

Evaluating Information found on the Internet. : Items to consider. - John Hopkins Sheridan Libraries – URL: http://guides.library.jhu.edu/content.php?pid=198142&sid=1657539 (last Update: 28.05.2013)

Leitfaden zur Wissenschaftlichkeit – Universität Bielefeld, Service Center Selbststudium – URL: http://www.uni-bielefeld.de/erziehungswissenschaft/scs/pdf/leitfaeden/studierende/wissenschaftlichkeit.pdf (last update: 06.03.2011)