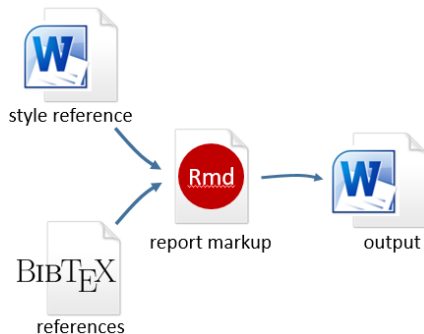


Document design — References and Word styles

497 / 597 Reproducible Research

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We will save references in bib format (from BiBTeX)

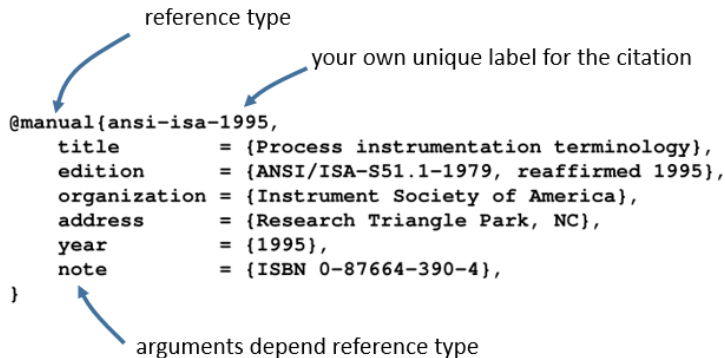
The basic steps for creating references and citations are

- ▶ create the bib file
- ▶ specify the bib file in the YAML header of the Rmd script
- ▶ add the citation to the report
- ▶ add a references heading

Create the bib file

- ▶ Open a new text file in RStudio *File > New File > Text File*
- ▶ Save As **project_name.bib** in the resources directory

Create reference entries in the bib file



The diagram illustrates the structure of a BibTeX reference entry. It shows a code snippet with three blue arrows pointing to specific parts: one to the reference type '@manual', one to the unique label 'ansi-isa-1995', and one to the closing brace '}'.

```
@manual{ansi-isa-1995,  
  title      = {Process instrumentation terminology},  
  edition    = {ANSI/ISA-S51.1-1979, reaffirmed 1995},  
  organization = {Instrument Society of America},  
  address     = {Research Triangle Park, NC},  
  year       = {1995},  
  note       = {ISBN 0-87664-390-4},  
}
```

reference type

your own unique label for the citation

arguments depend reference type

See [verbosus](#) for B_BT_EX style examples (article, proceedings, book, etc.)

Forcing capitalization in the reference

When knit, references are sometimes not capitalized the way you expect

In the bib file, place braces {} around letters you want capitalized

For example

```
@book{gandrud2015,  
  author    = {Christopher Gandrud},  
  title     = {Reproducible {R}esearch with {R} and {RS}tudio},  
  publisher = {CRC Press},  
  year      = {2015},  
  address   = {Boca Raton, FL},  
  edition   = {2},  
}
```

Specify the bib file in the YAML header

- ▶ Add the bibliography argument to the YAML header
- ▶ Include the relative path

```
---  
title: "Load-cell calibration report"  
author: "name"  
date: "date"  
output: word_document  
bibliography: "../resources/project_name.bib"  
---
```

Add the citation to the report

- ▶ Citation syntax has the form `[@ref_label]`
- ▶ `ref_label` is the reference label you assigned in the bib file
- ▶ In the Rmd file, add the citation at the appropriate location, for example,

```
The test procedure follows the ANSI/ISA standard  
[@ansi-isa-1995].
```

- ▶ When you knit the document, the citation is automatically formatted

The test procedure follows the ANSI/ISA standard (*Process Instrumentation Terminology* 1995).

Add a references heading

- ▶ At the end of the Rmd script, add a references section heading

```
# References
```

- ▶ All references cited in your report will be automatically formatted and listed at the end of the report

References

Process Instrumentation Terminology. 1995. ANSI/ISA-S51.1-1979, reaffirmed 1995. Research Triangle Park, NC: Instrument Society of America.

Citations and references are formatted automatically

- ▶ Use a CSL file to change the format to suit your audience
- ▶ Find one online and download it, for example,

```
chicago-author-date.csl  
ieee.csl
```

- ▶ Download the CSL file and save it in your resources folder
- ▶ Edit the YAML header to specify the path to the CSL file

```
---  
csl: "../resources/chicago-author-date.csl"  
---
```

Rmd document design with Word styles

The basic steps to use a style reference document to format docx output:

- ▶ Use R Markdown to create a Word document
- ▶ Save this document as your style reference docx file
- ▶ Edit the Word styles you find there, Save, and Close
- ▶ Specify the docx file in the YAML header of the Rmd script

```
---  
output:  
  word_document:  
    reference_docx: "../resources/word-styles-01.docx"  
---
```

- ▶ For all the details, see [Happy collaboration with Rmd to docx](#)

And those are the basics

