Document design — References and Word styles
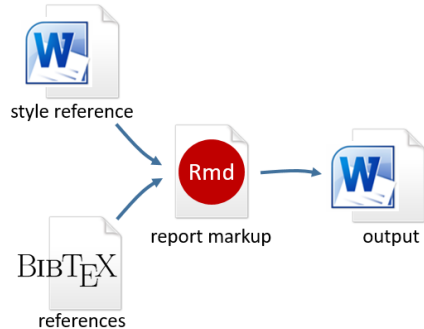
497 / 597 Reproducible Research

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style reference

report markup

output

BIBTEX

references

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

reference type

your own unique label for the citation

```
@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},
}
```

arguments depend reference type

See verbosus for BibTeX 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

style reference

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