

Research Management and Communication Tools

Bibliography Management Tools

A. Objectives

By the end of the module, the learners will be able to

- Explain the use of bibliography management tools
- Describe how some select bibliography management tools work
- Explain how to select a bibliography management tool
- Use a bibliography management tool in research to create and manage a database of references
- Create citations using a bibliography management tool
- Create a list of references using a bibliography management tool

B. Introduction

- The tools are called Bibliography management or citation management or reference management tools
- They help researchers to keep track of articles they have read and to organize references and automatically generate citations and reference lists in a variety of referencing styles
- This is because researchers are required to reference their sources of literature and data using an appropriate referencing style.
- This is so that the reader can follow up items the researcher has referenced and see what the researcher has based his/her argument on
- Bibliography software management assists researchers to organize information sources when
 - Preparing a dissertation
 - Reviewing literature for a journal article
 - Simply trying to keep track of web sites and the articles one has read

Why use Reference Management Software

- Taking an **organized approach** with your **references**, by recording **details of your sources**, will **enable** you to:
 - **Build and maintain** **personalized, searchable databases** for bibliographic **references** and **accompanying** data
 - **Format references** within **papers** and for **bibliographies automatically**
 - **Import** references from a **variety of data sources**
 - **Conduct basic searches** in **remote databases/interfaces** like PubMed
 - **Keep track** of the **references gathered** from different **sources**
 - **Save time** in **locating** reference details
 - **Track down** the **original resource**, if necessary
- **Examples:** EndNote, ProCite, Reference Manager, Mendeley, Zotero, RefWorks, Papers
- Some of them are **open source** while others are **commercial**. They can also be **desktop** based or **web-based**

C. Uses of Bibliography Management Software --1

- They help you **organize your references**.
- Using this software, you can
 - **Collect** and **manage groups** of citations;
 - **Set up** groupings by **topic**;
 - **Sort** your references by author, publication date, type, etc;
 - **Select** the ones to cite in a particular **article**; and so on.
 - Automatically **insert citations** in text of your manuscript
 - Automatically **generate reference** list and **footnotes**
 - Automatically **update reference list** when citations change

Unlike databases, **citation management** software is **already structured** to accommodate the specific **fields associated with bibliographic** information

- The software allows one to **select** from many **standard referencing** styles e.g. APA, Chicago,...

Uses of Bibliography Management Software -2

- These packages are **compatible with Word, Open Office** and all other **standard word processing** programs.
- Hence, you can store the basic information within your **citation manager** (bibliographic database), and then **set up the references in your document**, using whatever **style** format you choose.
- **Formatting** according to the selected style is done **automatically**
- The author does **not have to check** to make sure the **footnotes** and **citations** are correctly done
- **Updates** to the database/library are **automatically** reflected in the **citations** and **references**
- Citation managers include their **own search engines** which allow the researcher to **connect to certain databases** (e.g. PubMed), **search**, **store citations**, and **format** one's bibliography, all within **one interface**.

D. How Bibliographic Management Tools Work:

Zotero



Zotero is **free** reference management tool, that allows one to:

- **Collect, organize, and analyze** research literature
- **Create and manage** your **own** systematized **resources library**
- **Create bibliographies/references** and add **in-text citations** to one's documents
- **Share documents** with other researchers
- <https://www.zotero.org/>

How Bibliographic Management Tools Work : Mendeley



Mendeley is free reference manager and academic social network, that allows one to:

- Search and sort references, documents and notes
- Generate one's own citations and bibliography/references in one's style choice
- Share reading lists, references or full-text articles
- Create groups, share feedback and write papers with one's collaborators
- Connect with colleagues, to follow their research output

<https://www.mendeley.com/>

E. Selecting and Learning a Bibliographic Management Tool

Before you begin using a reference management tool:

- Find out the **referencing style** you are required to use e.g. Havard, APA, IEE
- Take time to **master** the **referencing style** and develop your **referencing skills**.
- **Select a bibliographic tool**: If you are going to keep records of **large numbers of references** then invest **time** in **selecting a bibliographic tool**.
- You have to **evaluate** which tool might **meet your needs**. E.g. **MS Word vs open office, Windows System vs Mac OS system, web Vs Desktop** due to high frequency of travelling, **working alone vs working collaboratively on articles**
- **Tools**: some are **free web-based** tools from which to choose e.g. Zotero and Mendeley. Others are for **purchase** e.g. Endnote and Papers. Some are **basic tools** for undergraduate study e.g. RefMe and Delicious. Others are **more advanced** and suitable for **researchers** and **postgraduate students** e.g. Zotero, EndNote Basic and Mendeley.
- **Download** and **install** the bibliographic tool
- **Learn how to use** the bibliographic tool

Factors to consider when selecting a reference management software/Tool

Some of these factors are:

- Does the software **integrate with the document processing program** you are using to develop your article/manuscript
- How many **referencing styles** are supported
- Does it support the **referencing style used for your dissertation** or for your research journal article
- Does it support **several browsers** - does not restrict you to one
- Does it allow **sharing of references**
- Is it **web-based** or **desktop** based
- What is the **cost**?

Comparison Among Tools To Enable Selection - 1

	RefWorks	Zotero	Mendeley	EndNote
Link to web guides provided	Quick-Start Guides	Documentation	Support	Technical Support & Services
Type of software	Web-based	Both desktop software and browser add-on for Firefox, Chrome, and Safari	Both desktop software and web-based . Works with Internet Explorer, Firefox, Chrome and Safari	Both desktop client software; and web interface called EndNote Web
Cost	Requires location/site access license	Free, with 300 MB of back-up storage. Storage upgrades are available for a monthly fee . Open source. Download Zotero	Free with 2GB of web space and 100 MB shared library space. Storage upgrades available for a monthly fee . Download Mendeley	Desktop software available for a fee . Endnote Web Basic with 2GB storage is free.
Learning curve	Fairly quick to learn ; many online user guides and demos	Quick to learn ; simple design , many online user guides and demos	Quick to learn . Pretty simple interface	Takes longer to learn , but not difficult with training

Comparison Among Tools To Enable Selection - 2

	<u>RefWorks</u>	<u>Zotero</u>	<u>Mendeley</u>	<u>EndNote</u>
Strengths?	<ul style="list-style-type: none"> Allows users to share citations Good for organizing citations for papers Web-based Requires payment for location/site access license 	<ul style="list-style-type: none"> Simple download of records Good for managing a variety of formats, including web pages Offers most functionality in a free, open-source product Downloads records from several databases that don't work with EndNote and RefWorks, such as Factiva and USPTO 	<ul style="list-style-type: none"> Great for managing PDFs Has a social aspect. Can see what other users are reading and citing. Find other members with common research interests. Does an excellent job of pulling citation metadata from PDFs Possible to share citations and documents with others 	<ul style="list-style-type: none"> Excellent for organizing citations for papers and theses Best option for major research projects, because it offers the most options for customization and formatting Has the most output styles for formatting Most customizable Can handle a large amount of references

Comparison Among Tools To Enable Selection - 3

	<u>RefWorks</u>	<u>Zotero</u>	<u>Mendeley</u>	<u>EndNote</u>
How it works	You import references from compatible databases into RefWorks	Zotero can tell when you are looking at an item and shows an icon for it in the browser URL bar . Click the icon to add the item to your Zotero references	You export references from compatible databases . Mendeley will also retrieve metadata for pdfs that are brought in	You import references from compatible databases into EndNote
Many output styles and bibliographic formats?	Yes , many popular styles and formats	Yes , many popular styles and formats	Yes , many popular styles and formats	Yes , many popular styles and formats
Other important features	<ul style="list-style-type: none"> Since it's web-based, you're not limited to a single machine 	<ul style="list-style-type: none"> If you back up records, you can sync multiple computers Integrated with work on web that you do Fastest download of records Saves snapshot of web pages Allows users to highlight text and take notes on page Allows users to tag records 	<ul style="list-style-type: none"> Very good for collaborative work Has a good PDF reader that enables highlighting and comments 	PDF file management and organization features

Comparison Among Tools To Enable Selection - 4

	<u>RefWorks</u>	<u>Zotero</u>	<u>Mendeley</u>	<u>EndNote</u>
How simple is it to import records?	Simple to import records from most research databases	Very simple , as long as the resource is compatible with Zotero , but you have to verify that the records are complete after import	Very simple using the Mendeley browser plugin . However, the import doesn't work with as many databases as other products.	Simple to import records from most research databases
What kinds of records can you import and organize (PDFs, images, etc.)?	Records for articles and books	Books, articles, patents, and webpages ; Can also store PDFs, web screenshots, files, and images in records .	You can import bibliographic citations and PDFs . Can also manually add citations	Articles and books ; PDFs and other file types can also be stored in the records . .
Are records in your library viewable by others?	Yes ; Users can share references in library with other RefWorks users	Yes . Users can set up individual and group profiles and records share	Yes . Users can set up groups to share references . Users can decide whether or not to make their library viewable by others	No .

Comparison Among Tools To Enable Selection - 5

	<u>RefWorks</u>	<u>Zotero</u>	<u>Mendeley</u>	<u>EndNote</u>
Is managing and maintaining a big library (1000 records) complicated?	Not complex, but it can be cumbersome to manage large libraries	More difficult; takes time to sort out duplicates and verify that records are complete	No known problems. May need to purchase extra space.	Not complex; EndNote is best option for maintaining large libraries
Does it work with word processing software?	Works with Word and LaTeX through BibTex	Works with Word and Open Office; also works with LaTeX through BibTex and Google Docs	Works with Word and OpenOffice.	Clean integration with Word and powerful formatting and customization features; also works with Open Office and LaTeX through BibTex
Does it back up your records?	Yes	Yes, if you choose to back up or sync your Zotero library. A small amount of storage is free hence might need more for a fee.	Yes	No