

Zotero Software: A Means of Bibliographic Research and Data Organisation; Teaching Bibliographic Research

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Abstract

The aim of the paper is to introduce the Zotero software as a technological tool and implement it in the syllabus of the subject “Bibliographic Research” to teach master students at Bejaia University. This free, easy-to-use tool can help master students specialized in didactics and applied linguistics in Bejaia manage the great amount of the available data online. This project is suggested after diagnosing a serious problem learners face when starting data collection to accomplish their projects and research works. Needs analysis through teaching this subject since 2007 demonstrated how learners meet difficulties to find out resources and organize them. Hence, the paper suggests the integration of the Zotero software in the syllabus to help students collect, organize, cite and share resources efficiently.

Keywords: bibliographic research, data collection, EFL students, research, methodology, Zotero software

Introduction

Technology is growing intensely in this era of modernization. The demanding rapid rhythm nowadays requires the developments of a variety of means to reach advances in various fields mainly to promote a promising and successful education. In this present work, focus is not put on learning but on master students' final product, that is successful research works' achievement. Students are required to develop their research skills all along their training and manage the huge amount of reading they are expected to do as well as the huge amount of written materials they are expected to produce. Once masters are engaged in research, they are supposed to find bibliographic resources, organize and classify them. In this, (Gauthier, 2009: 104) stated that given that a variety of resources exists, this complicates new researchers' existence to create and cite their resources. This problem is world-wide for beginner researchers and many scholars estimate that new researchers struggle with referencing (Gauthier, 2009; Duchamp and 2010, Assogbadjo et al., 2011). That is why; technology does in no sense stop its progress to cope with various types of difficulties. Hence, various efficient technological tools exist to *"help you create a personal proper database"* (Assogbadjo et al., 2011). To facilitate creating a bibliography efficiently and easily, software packages are developed for this sake. Most common of which are EndNote, ISIS, Refworks and mainly **Zotero**ⁱ (Gauthier, 2009; Katz, 2009; Assogbadjo et al., 2011). This software is what makes the core of this workshop.

To begin with, Zotero is a free Open Source software and web management tool which organizes digital sources and bibliographies. It is used to collect, organize, cite, comment and share research sources. This workshop aims at introducing this software to master students in the Department of English and explain its use.

Background

University work requires from students to signal any source they use. That is why, taking note of any resource one uses when undertaking research is evident. We refer to this, bibliographic references. This is more likely helpful for the reader to verify or complete information. In this context, Assogbadjo et al. (2011: 33) refer to three types of bibliographic management software namely priority software (EndNote, Reference Manager, RefWorks, etc.), Open Source (BibTeX, JabRef, Zotero, etc.) and applications web. Such tools help researchers organize references since they suggest management functionalities that can help import and present references one can save in the computer and share even online. These software tools are also tied to a bibliographic database fed by such users as Mendeleyⁱⁱ, CiteULike (Assogbadjo et al., 2011).

In the bibliographic research subject at the master 1 level at Bejaia (c.f. Appendix 01), focus is put on how to make researches and use them as references since they are supposed to get information from a colleague, read a relevant article, find an interesting comment on the Internet, attend a useful seminar, or find a pertinent paragraph in a book, make a note in a reference record (Katz, 2009). For Katz, computerized reference records make these notes easy to organize, to search, and to reorganize and this can be achieved through a software that can put the references in the appropriate bibliographic format and sort them in the order that matches the citations in the research paper. As regards software packages, Gauthier (2009) stated that the construction of such tools permit users accumulate data, organize and classify them in order to make it easy to repair, compared to a traditional database. Data researchers should consider are related to bibliographic references, keywords, abstracts, reading notes and citations.

One of these software packages is Zotero, a Firefox add-on, that can help students and researchers collect, manage, and cite research material, edit the data saved by Zotero and attach additional data such as notes, tags, and related files so as to share them with other users (Hao Yang, 2010: 48).

However, there are such limitations of the Zotero software application as: Duplication problem, citation styles and back up. Here are the downsides to Zoteroⁱⁱⁱ:

Duplicates. Zotero is unable to prevent and remove duplicates, but one should do it manually for updates.

Citation styles. Zotero covers most basic citation styles such as Chicago Manual of Style, APA, and MLA but it has a long way to go to match the output styles available through EndNote, which has over 2,900.

Backup. Zotero may live in the web browser, but your information is stored in the computer. The positive side of this is that one can access the library from anywhere and need not be online. The negative is that it is possible to lose the library if the computer break downs or gets stolen.

Description of Zotero

As mentioned earlier, Zotero is an efficient means to cope with the multiplicity of resources. Hence, to extract such references in a structured way from bibliographic databases and edit one's own bibliography, the following description of the Zotero software can help get started. Information we provide in the workshop are extracted from Zotero training (see Simonot, 2012).



In this section, an introduction of the software needs to be made clear. We need to introduce the reader to how to download the software, what are the constituent elements of the database and how to construct a bibliography. To begin with, Zotero is an extension of Mozilla Firefox^{iv}. First, download it at www.zotero.org.

Activity 01: *Follow the following steps:*

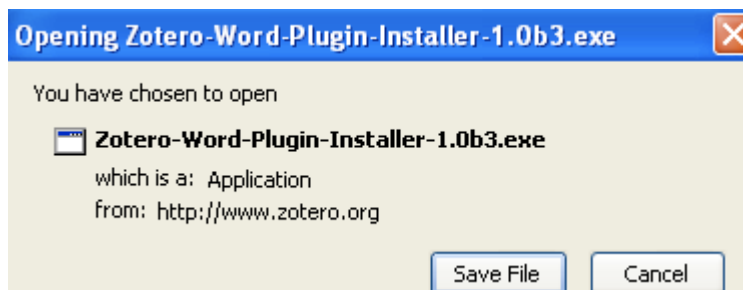
- Click on the download option

Figure 01: Zotero download icon



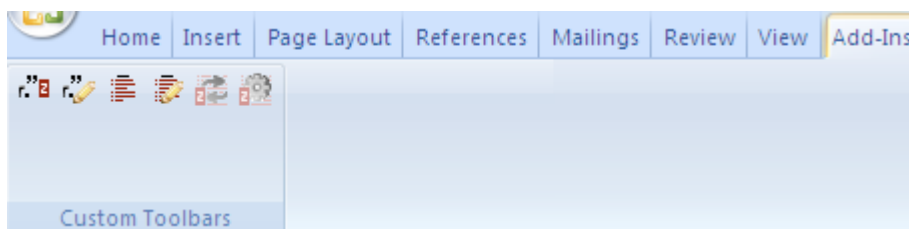
You will need to restart Firefox once installation is complete. You will know that Zotero has been installed successfully when you see either of these Zotero icons in the bottom right corner of Firefox.  or  (The following description is taken from the tutorial)

- Go to the [word processor integration page](#) and select the option for either (Microsoft) MS Word or Open Office.
- Save the Word Plug-in Installer

Figure 02: Zotero Word plug-in installer

- Run the Installer by double clicking on the Installer icon
- Follow the instructions.
- Once installation is complete, you should have a Zotero toolbar in Word.

While the Zotero toolbar itself is the same across word processors, its location in the actual program may differ from what you see below. This screenshot is from Word 2007.

Figure 03: Toolbar form in Word (“compléments” in the French version)

Citations and References in Zotero

While using Zotero, you can find all the references cited in Francis (c.f. useful links). Yet, only references published after 1970 are available since this is the beginning of the existence of the International Standard Book Number (ISBN) system. Francis contains thousands of journals and you can select resources that:

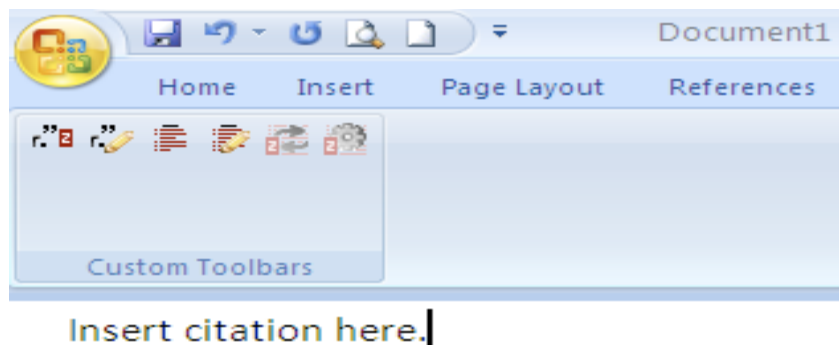
- cite journals
- cite authors
- cite titles
- cite numbers
- cite abstracts
- cite keywords
- cite translations in English

However, one of the shortcomings of this software is that it becomes slow when a big number of documents is being downloaded through Mozilla. A practical solution can be the full

text management and putting the documents in the computer folders where the “action” button is available.

In the Word processor, place the cursor in the place the citation should be added.

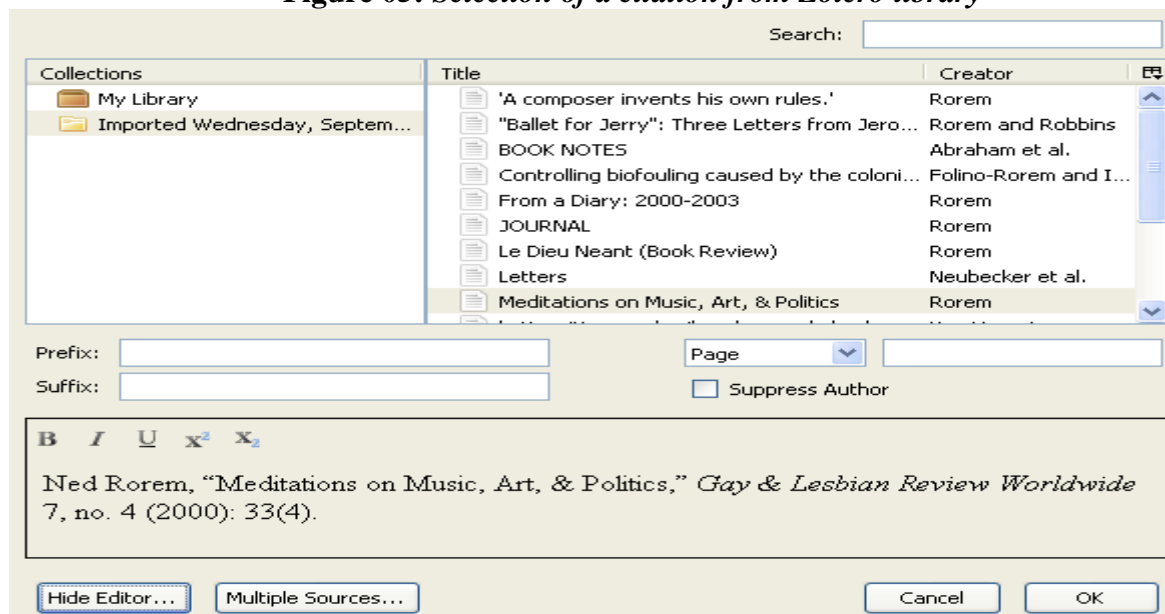
Figure 04: Citation insertion in the Word processor



- Click on the *Zotero Insert Citation* icon.

A window displaying your Zotero library will appear. Choose the appropriate citation, add any details necessary such as page number(s), prefixes, and suffixes. Clicking on *Show Editor* will give you a preview. Click *OK* like shown on **Figure 05**.

Figure 05: Selection of a citation from Zotero library



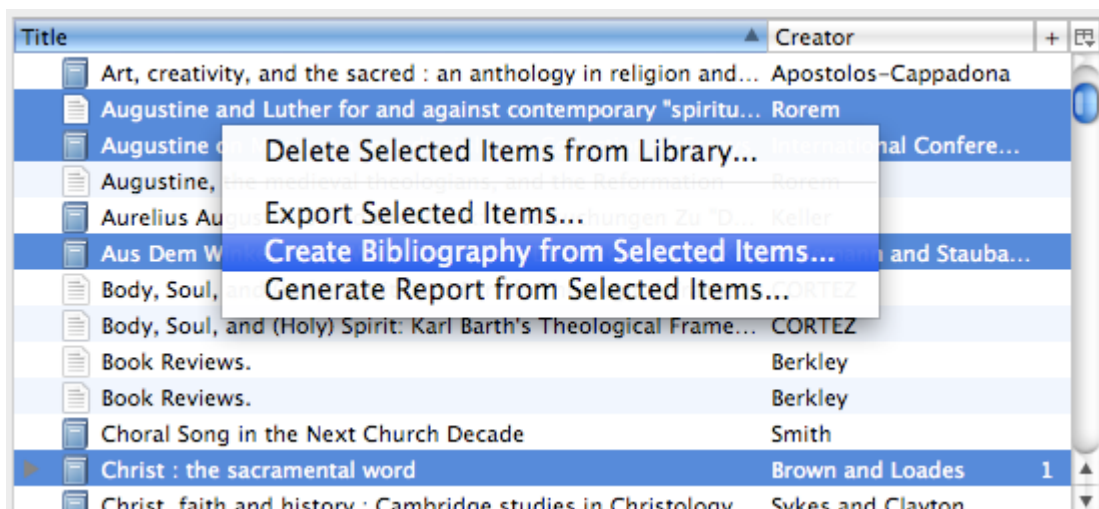
Bibliographies. For bibliographies within the word office, Zotero users can generate citations and bibliographies through word processor plugins, or directly in Zotero^{vi}. That is, the Zotero button in word office (red color) can help organize the bibliography.

To insert a bibliography, the Zotero user can select the *Zotero Insert Bibliography* icon. It will then appear at the end of the paper.

Creation of Independent Bibliographies. Choose the items in the Zotero library needed to structure the bibliography.

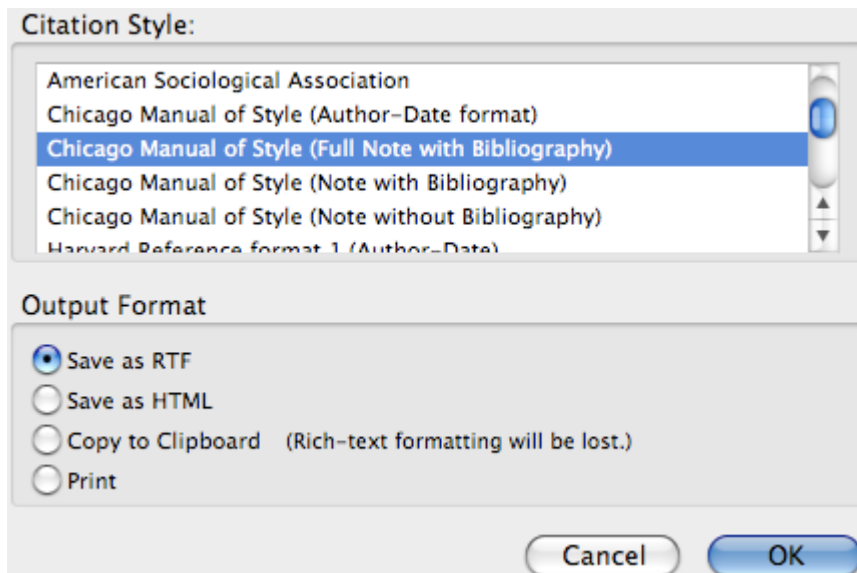
Right click and select *Create Bibliography from Selected Items* (See **Figure 6**)

Figure 6: Bibliography from selected items



- Select the appropriate Citation Style and select the Output Format as *Save as RTF*. Click *OK*.

Figure 7: Choice of citation style



- Name the file and choose a location for the file.

One can also create bibliographies of an entire collection by clicking the left column, right click on the collection to create a bibliography for.

Practical Tips to Use Zotero

Activity 02: For reminder reasons, and to get started follow the instructions below:

- Zotero is now installed in your word processor, you can notice once you open your word office the Zotero red icon.

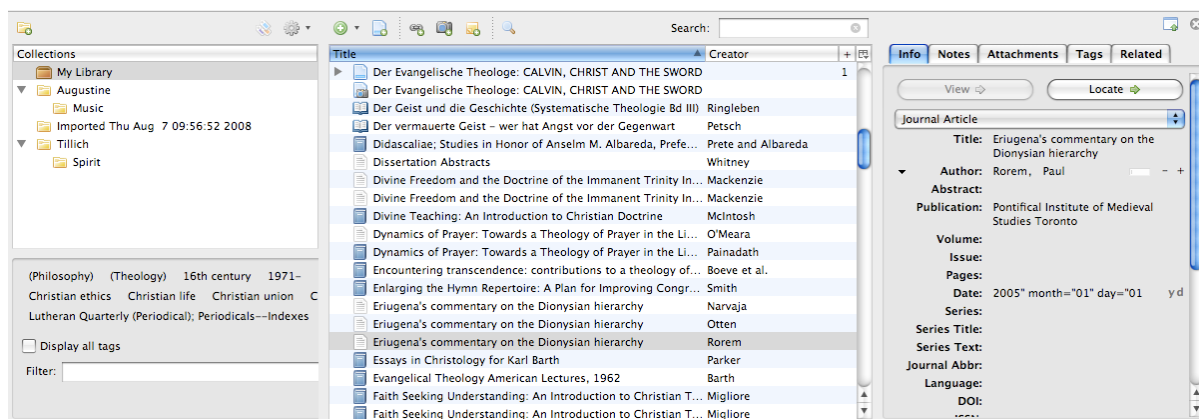
In this case, Zotero can landmark bibliographic references.

Second step has to do with creating your own bibliography, for this you need to:

- My bibliography can be created by using the right mouse side, you click and select “create a new selection).
- You click and create “a sub-selection”.
- This option can help you create a hierarchy of selections according to your keywords.
- You can change your keywords according to your needs.
- This can help use the same reference in various folders. In order to do so, just copy/paste the document from one folder to another.
- If you need to change the place of a reference, use the right button of the mouse and select “remove the document from the selection” if you need to delete it but let it in the database, or “delete from the library” if you need to delete it completely.

The following figure is an illustration to understand better:

Figure 8: Zotero’s interface



The left column displays your library and various collections and sub-collections along with tags. The center column displays the references in the specific collection you have highlighted in the left column. The right column provides the specific details about the reference highlighted in the center column including bibliographic information, notes, and any attachments.^{vii}

Further Suggestions to Implement Zotero in Bibliographic Research Teaching

At the master level in teaching English, there is a subject entitled “bibliographic research” and the suggested syllabus is presented in Appendix 01. We tend to provide a number of suggestions to better integrate technology in teaching this subject. It is urgent to consider using online databases and indexes. It is also useful to accompany such online tools with bibliographic research software programmes adjusted to fit this aim.

In the following lines, we suggest various tips and propositions to help better adjust bibliographic research teaching to modern, computerized and technological updates:

- There is an urgent need to plan for how to make use of technological tools in Algerian universities; students and teachers lack information literacy and readiness to use technology in classrooms.
- Bejaia has six multimedia labs. Accordingly, the Faculty of Arts and Languages can integrate appropriate software programmes in the computers’ labs that fit research methodology teaching (Idri, 2012) (e.g. zotero, dropbox, SPSS, Nvivo, etc.).
- We suggest integrating in the bibliographic research subject: annotated online bibliography, using computerised notebooks, using bibliographic software packages, electronic citation styles to the syllabus.
- Learn how to download and upload documents; join together other social media relative to bibliographic research.

Conclusion

Trying to design syllabi that fit modern education is one of the teachers’ main concern. Adopting the (Licence/Master/Doctorat) LMD system enquires from learners to be future professionals and future researchers as well. This cannot be achieved without excellence in teaching and updating the syllabi to assure the needed quality. However, the main problem we would like to highlight by the end of this workshop is whether both teachers and learners are

prepared and able to apply technology in and outside the classroom or not. Using technology seems to be challenging for both teachers and learners (Idri, 2012). Hence, there is a need to diagnose the teachers' readiness to use technology and learn to use software programmes in their needed subjects. This is more likely helpful to teach learners using such packages and gain time and effort. For this, equipped computers should be available to serve this need. However, we cannot expect the realization of this project immediately since we need to prepare the appropriate ground to make it practicable and feasible.

About the Author:

Nadia Idri has been teaching at Bejaia University for twelve years. Specialized in educational psychology, ELT and Applied Linguistics, she is interested in conducting research on affective factors, applied linguistics, learner autonomy, basic and higher education, technology education and LMD Reform. Nadia masters four languages and translates in three of them (English-French-Arabic). She has published in many national and international journals; she has been a member of various scientific committees and chairing sessions in national and international conferences and chaired many of them in her university and now at international levels. She has a reviewing and editing experience with many journals. Actually, she is the chair of the scientific committee in her Department and a chair of the master she created: Applied Linguistics and ELT. Nadia is also a founding member in BEST student association to develop autonomy, creativity and sense of initiative in her students. She is the founder of the Creative Writing Days event in Bejaia University in partnership with BEST

ⁱ Zotero : <http://www.zotero.org/>

ⁱⁱ Mendeley: <http://www.mendeley.com>

ⁱⁱⁱ <http://technology.ptsem.edu/assets/18B0A48A-EB6E-480B-B3B7-C77E5859CE36.pdf>

^{iv} www.firefox.com

^v <http://technology.ptsem.edu/assets/18B0A48A-EB6E-480B-B3B7-C77E5859CE36.pdf> , All the figures in this paper are extracted from the tutorials

^{vi} <http://en.wikipedia.org/wiki/Zotero>

^{vii} <http://technology.ptsem.edu/assets/18B0A48A-EB6E-480B-B3B7-C77E5859CE36.pdf>

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Appendix A

UNIVERSITY OF A_MIRA, BEJAIA
DEPARTMENT OF ENGLISH

Master I, LMD STUDENTS
LECTURER: Dr. Nadia AHOUARI-IDRI

Teaching Unit: Research Methodology
Subject: Bibliographic Research

1. Starting up your research
 - a. Identify & Refine your Topic
 - b. What information do you need?
 - c. Search Strategies
 - d. Evaluate your information
2. Bibliographic Research: Using the Library
 - a. Effective Research: the library
 - b. Bibliographic Research
 - c. Efficient and Effective Online Searching
 - d. Research Guides
 - e. Citation
 - f. Bibliographic Record
 - g. Basic Search: Key Words, subject Browse,.
 - h. Advanced search and Boolean logic
3. Databases and indexes
 - a. Periodical Indexes
 - b. Databases/Indexes
4. Identify Search Engine Features
5. Evaluate results
6. Introduction to bibliographic research software packages.