Inquiries, Investigation and Immersion
Quarter 1 – Module 3:
Reading on Related Studies
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Inquiries, Investigation and Immersion
Quarter 1 – Module 3: Reading on Related Studies
**Introductory Message**

The purpose of this module is to guide the teacher as to what to do in dealing the students. This is an interactive way to test and evaluate the students’ learning process. The writer simplifies the instruction of every activity to be understood well. The importance of the module is to explore the literacy of the students. Motivating the students to use module is a great help to adapt the education for all programs.

To our dearest students let yourself be free in exploring the module made for your literacy and learning process. This module is designed to test your skills in understanding and comprehending the different activities. This module involves logical flow of ideas to spread essential context regarding the learning process. The purpose refines completely new approach in selecting topic which inclined the interests of the learners. Additional insights might investigate the implications in identifying new problems and re-conceptualize.

1. **What I Need to Do** – the part used to introduce the learning objectives in this module.
2. **What I Know** – this is an assessment as to your level of knowledge to the subject matter at hand, meant specifically to gauge previous knowledge.
3. **What’s In** – the part used to connect your previous learning with the new lesson.
4. **What’s New** – the part used to introduce new lesson through a story, an activity, a poem, song, situation or activity.
5. **What is It** – the part that will help you discover and understand the lesson.
6. **What’s More** – the part that will help enrich your learnings of the lesson.
7. **What I Have Learned** – the part that will help you process what you have learned in the lesson.
8. **What I Can Do** – the part that allows you to apply what you have learned into real life situations.
9. **Assessment** – the part that evaluates your level of mastery in achieving the learning objectives.
10. **Additional Activities** – the part that enhances your learning and improves your mastery of the lesson.
Review of Related Literature has always been an important part of a research paper. In this section, the different researches, articles, journals, and all other publications related to the chosen research topic will be identified, summarized, and acknowledged.

The most essential learning competencies covered in this module are:

A. Select, cite, and synthesize related literature
B. Use sources according to ethical standards (at least 4-6 local and international sources)

Objectives:
At the end of this module, you are expected to learn the following:

➢ define terms related to research study
➢ gather and synthesize information from different sources of information
➢ familiarize the different citation styles and formats
➢ give the characteristics and mechanism of the review of related literature;
➢ write citations correctly on the sources used in a research study
➢ appreciate the importance of following ethical standards in using sources

How to learn from this module?
To achieve the objectives of this module, do the following:

• Take your time reading the lessons
• Follow the directions and/or instructions in the activity/exercises diligently
• Answer all the given tests and exercises
What I Know

Multiple Choice. Write the letter of the correct answer on a separate sheet of paper.

1. It is a chapter of your research paper wherein it is focused on giving an overview of all the writings relative to your specific topics.
   a. Introduction
   b. Review of Related Literature
   c. Methodology
   d. Results and Discussion

2. It is a source of information that is categorized by printed publications or writings wherein a researcher reports the results of his studies.
   a. Primary Source
   b. Secondary Source
   c. Tertiary Source
   d. General references

3. It is defined as a means of informing your readers that a certain piece of information came from a specific source and you just borrowed it to widen the explanation of a certain situation or data of your research.
   a. Literature
   b. Review
   c. Citations
   d. Sources

4. It is a manner of citation that commonly refers to all of the citations that are found in all of the chapters in the research paper.
   a. In-text citation
   b. Out-text citation
   c. Bibliography
   d. Referencing List

5. This guideline in citation secures that all data and information, facts, ideas or principles from your sources are discussed or explained separately.
   a. By Topic
   b. By author
   c. Chronological
   d. Bibliography

6. This is a citation style that uses author-date format only.
   a. APA
   b. MLA
   c. CMS
   d. HARVARD

7. This is a citation style that uses notes and bibliography and author-date format.
   a. APA
   b. MLA
   c. CMS
   d. HARVARD

8. This is defined as the extraction of information and discussion from one or more relevant sources of information.
   a. Synthesis
   b. Summary
   c. Conclusion
   d. Explanation

9. It is the guideline that is used in making synthesis.
   a. Synthesis guide
   b. Synthesis Chart
   c. Synthesis matrix
   d. Synthesis graph

10. This is defined as the norms for conduct that distinguish between acceptable and unacceptable behaviors.
    a. Attitude
    b. Ethics
    c. Humor
    d. Behavior
Lesson 1

Selection of Related Literature

What’s In

What is Research?

Research is a process of systematic inquiry that entails the collection of data; documentation of critical information; and analysis and interpretation of that data/information, with suitable methodologies set by specific professional fields and academic disciplines.

What’s New

Activity: Identify Me.

Determine if the source would be a Primary Source or Secondary Source.

1. A biography about Jose Rizal.
2. The declaration of independence.
3. A TV show explaining what happened in Japan.
4. A website describing what World War II was.
5. A Filipino veteran talking about Martial Law.
6. Abraham Lincoln’s diary describing what he thought about the civil war.
8. An actor sharing his experience on a movie shooting.
10. A journal is written by Riza about her unforgettable experience
**What is It**

Review of Related Literature, as stated in the Overview, is one of the major components of a research paper. It gives an overview of all the writings relative to a specific topic (Prieto, N.G., Naval, V.C. & Carey, T.G. (2017). Practical research 1 for senior high school: Qualitative. Quezon City, Metro Manila: LORIMAR Publishing, Inc.)

Therefore, selecting the right sources for the literature review is very important in producing a quality research paper.

After you have chosen your research topic and crafted your 1st Chapter (Introduction), the next step for the completion of your research paper is the writing of the Review of Related Literature. When writing your RRL, you must first consider the sources that you are going to use as bases for the contents of this chapter. RRL sources are commonly classified into two major types; namely:

- **Primary source**- publications or writings wherein a researcher reports the results of his studies. Example: Monthly, quarterly or annual journals.

- **Secondary source**- publications or writings wherein a certain author describes the work of another author. Example: Textbooks, encyclopedias, yearbooks as much as possible, use the primary sources to avoid tampering and miscommunications on the data.

In identifying a possible source of your RRL, you can refer to the following characteristics below:

1. The sources that you should use must be updated and reliable.
2. It must be as fair and objective as possible.
3. It must be relevant to your topic.
4. It must provide accurately and enough information on your topic.

**What’s More**

**Activity 1.1**

Directions: Visit your school library or utilize any available materials at home and look for writings or materials that can be possible sources of information for your chosen research topic. List as many sources as you can using the table below: Please follow the given example.
<table>
<thead>
<tr>
<th>Source</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example: 1. Textbook on Food Handling</td>
<td>Author: Jane C. dela Cruz Date</td>
</tr>
<tr>
<td></td>
<td>Published: 2010</td>
</tr>
<tr>
<td></td>
<td>Publisher: MCA Publishing House Place</td>
</tr>
<tr>
<td></td>
<td>of Publishing: Manila City, PHL</td>
</tr>
</tbody>
</table>

In this activity, you will be rated using the following:

- **10 pts** - listed 7 or more sources with complete details
- **9 pts** - listed 7 or more sources with incomplete details
- **8 pts** - listed 5-6 sources with complete details
- **7 pts** - listed 5-6 sources with incomplete details
- **6 pts** - listed 3-4 sources with complete details
- **5 pts** - listed 3-4 sources with incomplete details
- **4 pts** - listed less than 3 sources with complete details
- **3 pts** - listed less than 3 sources with incomplete details
After identifying your research title, crafting your Introduction, and finding your possible sources of information, the next thing that must be truly considered by a researcher is the means of citing sources used. Proper citation of a source is important for you to avoid complications and problems with the authenticity of your data once your paper is already published.

Citation, in research, is defined as a means of informing your readers that certain information came from a specific source and you just borrowed it to widen the explanation of a certain situation or data of your research. When citing sources, you must see to it that the information borrowed from other authors are properly cited.

Citing of sources comes in two (2) manners, namely: a) in-text citation and b) referencing list.

A. The In-text citation refers to all of the citations that can be found in all of the chapters in your research paper. The commonly used information in this manner of citation is the following:
   1. Author’s name
   2. Date of the publication of the source
   3. The page number where you found the information

B. Referencing list refers to the bibliography and/or references of your research paper. This holds the summary of the information of all of your sources. Information needed in making the referencing list involves the following:
   1. Author’s name
   2. Date of the publication of the source
   3. The page number where you found the information
   4. Publisher
   5. Place of Publishing
   6. Volume
   7. Edition
   8. Other relevant information

In the in-text- citation of related literature, three (3) guidelines should be considered, namely: a) by author or writer, b) by topic and c) chronological means of citation.

1) **By author or writer**
   a) In this method of citation, all your data and information, facts, ideas or principles from your sources are discussed or explained separately.
b) Example:

Cruz (2002) states that research is …

Dela Torre (2005) described the research as …

c) In this example, it is evident that by using by author or writer method, the information coming from a specific author will be discussed separately from the others.

2) **By topic**
   a) This method of citation is used when several authors or sources give the same information about a certain topic. The citation of the information will be granted to all of the authors.
   b) Example:

   Accordingly, research is … (Rio, 2000; Luna & Magsaysay, 2005)

   c) In this example, the authors (Rio, Luna & Magsaysay) shared the same idea about research. When you are going to use this information, make sure to cite ALL of the authors that published this said information.

3) **Chronological**
   a) Citing sources using the chronological method involves sequencing the information based on the year it was published.
   b) Example:

   Yu (2005) states that …
   And (2007) discussed about…
   Chu (2010) deliberated regarding …

   c) In this example, the sources are arranged chronologically from the earliest to the latest.

In citing sources, you must see to it that citations of your sources are done correctly. Citation styles are referred to as the format of the information needed during the citation. There are three (3) most common citation styles that are used to cite sources, namely: a) American Psychological Association (APA), b) Modern Language Association (MLA) and c) Chicago Manual of Style (CMS). These three citation styles will be thoroughly discussed in the proceeding discussions.

**1. American Psychological Association (APA)**

This citation is commonly used when a researcher works in social science-related researches. APA follows an author-date format, wherein, the needed information for its in-text citation is the author’s surname and the year of publishing. APA follows different formats for varying authors and their number. Citing in APA format is shown on the next page.

**I. APA Citation for works with one (1) author**

In working with APA citation style for one author source, you will need the author's surname and the year of its publication.

Example:

By author: Lee (2005) states that the earth is …

By topic: The composition of Earth is … (Lee, 2005)
II. **APA Citation for works with two (2) authors**
Citing sources with two authors using APA style still needs the authors’ surnames and the year of publication. The format varies whether you want to use a by author or by the topic manner of citation.

Examples:

- **By author:** Kim and Lee (2009) state that ...
- **By topic:** Accordingly, (Kim & Lee, 2009)

In the by topic manner, the word “and” will be replaced by a symbol “&” which is known as the ampersand. The authors’ surname and the year of publishing are separated by comma (,).

III. **APA Citation for works with three (3) to five (5) authors**
The information needed in this number of authors is still the authors’ surname and the year of publication. The format varies on the manner of citation used and the frequency of its usage.

Examples:

- **By author:** Kim, Lee, Young, and Yu (2015) discussed ...
- **By topic:** Today’s generation ... (Kim, Lee, Young & Yu, 2015).

In the by topic manner, the replacement of the word “and” to “&” is still applicable. Still, the author's surname and the year of publication will be separated using a comma. If you wish to use the same source for many times, another the format will be followed.

Examples:

- **By author:** Kim et al. (2015) discussed that ...
- **By topic:** Today’s generation ... (Kim et al., 2015).

In this format, the citation will be shortened by sustaining the first author and replacing the others with the word “et al.” which means “and others”. In “et al.”, the period will be placed only after the “al.”.

IV. **APA Citation for works with six (6) to ten (10) authors**
Citing literature with this number of authors follows the following format:

Examples:

- **By author:** Lee et al. (2015) discussed that ...
- **By topic:** Today’s generation ... (Lee et al., 2015). This format will be used in all of the citations made

V. **APA Citation for works with associations, corporations, government agencies, etc., as the author**
In this case, the associations, corporations, government agencies will serve as the author. The year of publication is still needed.

Examples:

- **By author:** According to the Department of Education (2012) ...
- **By topic:** The education is ... (Department of Education, 2012)

However, if the associations, corporations, government agencies have a well-known abbreviation, the abbreviations can be added in the first citation and
will be used in proceeding citations to follow. Abbreviations shall be enclosed in a bracket [ ].

Examples:
First Citation: Department of Education [DepEd] (2012)...
Second Citation: DepEd (2012) discussed ...

VI. **APA Citation for works with indirect sources**
Indirect sources refer to sources that were mentioned in another source. In this case, the primary author is needed, the year it was published, and its page number.

Example:
Brown discussed that ... (as cited by Smith, 2002, p. 92).

The primary authors’ last name, year of publication, and page are separated by commas.

VII. **APA Citation for electronic sources**
Electronic sources refer to materials that are in an electronic form, i.e. pdf files. For this type of source, the citation follows the author-date format, varying from its number of authors.

Examples:
By author: Perry (2006) states that the ...
By topic: The ... (Perry, 2006).

VIII. **APA Citation for websites with author and year published**
In the review of related literature from this source, the author-date format is still used.

Examples:
By author: John (2010) states that the ...
By topic: The ... (John, 2010).

IX. **APA Citation for websites without author but with the year published**
In this style of citation, the title will replace the author and will follow the author-date format. The title will be enclosed in quotation marks (“).

Examples:
By author: “The Solar System” (2012) ....
By topic: It is said that ... (“The Solar System”, 2012)

X. **APA Citation for websites with an author but without year published**
To cite these sources, dates will be abbreviated by “n.d.”, which means “no date”.

Examples:
By author: Green (n.d.) stated that ...
By topic: Accordingly, ... (Green, n.d.)
XI. **APA Citation for websites without author and year published**
To cite these sources, use the title of the enclosed with quotation marks (”) in lieu of the author, and write “n.d.” to specify no date.

Examples:
- By author: “The Hydrosphere” (n.d.) ...
- By topic: Accordingly ... (“The Hydrosphere, n.d.)

2. **Modern Language Association (MLA)**
MLA is one commonly used citation style in research papers usually used in liberal arts and humanities. Unlike APA, MLA follows an author- page format, wherein authors’ surname and the page number where it could be found is needed. Formats for the MLA style are shown below.

I. Citing Print Sources
II. In the MLA format, the page number is always enclosed in parenthesis and can be found at the ending of each statement. The authors’ surname and the page number are NOT separated by a comma.

Examples:

Grey stated that .... (50).
Accordingly, (Grey 50).

3. **Chicago Manual of Style (CMS)**
CMA is a citation style that presents two basic documentation systems:

A. notes and bibliography and
B. author-date. The use of the two documentation systems differs from the subject matter and the sources cited.

**3.1 Notes and Bibliography System**
This documentation system is preferred in researches concerning the field of humanities such as literature, arts, and history. In this system, bibliographic information such as notes and bibliography is needed. Footnotes or endnotes are placed in the bottom part of the paper and provide all information relative to the source.

i. CMS - Notes and Bibliography system citation for works with one author. Example:

**In-text Citation:**
Levi discussed that today’s tap water is not suitable for drinking anymore. ¹

**Endnote:**
In the example above, the information to be included in the in-text citation is the author and the number in the endnote that is categorized by the superscript. The endnote follows the format: Author’s first name, author’s last name, Title, (Place of Publication, Publisher, year published) reference page.

ii. CMS- Notes and Bibliography system citation for works with two authors The format for this system is the same as those with one author. Example:

In-text Citation:
Levi and Charles discussed that today’s tap water is not suitable for drinking anymore. ¹

Endnote:

iii. CMS- Notes and Bibliography system citation for works with four or more authors. This system follows the same format like the preceding. This system follows the same format as that of the preceding two. Only one name of the author will be presented, followed by et al. to represent the remaining authors. Example:

In-text Citation:
Levi et al. discussed that today’s tap water is not suitable for drinking anymore. ¹

Endnote:
John Levi et al., Our water of today, (New York, LMR Publishing, 2016), 305

3.2 Author-Date System
The CMS author-date system is commonly used when a researcher will pursue studies in line with physical, natural, and social sciences. Unlike the notes and bibliography system, this system uses the author’s surname and date of publication. The complete information of the source will be given in the bibliography section.

a) CMS- Author-Date system citation for works with one author
Example:
In-text: It is stated that ... (Cruz 2003, 378).

This is the format for this system: (Author’s last name year, page).

b) CMS- Author-Date system citation for works with two authors.
Example:
In-text: It is stated that ... (Cruz and Torres 2003, 378).
The format is the same as with the works with one author

c) CMS- Author-Date system citation for works with four authors
Example:
In-text: It is stated that ... (Cruz et al. 2003, 378).
A referencing list is the other means of citing sources. Commonly, this list is noted in the references/bibliography section of the paper. Each citation style follows a different format in making a referencing list. The format of the citation styles as discussed by Torneo and Clamor-Torneo (2017) are as follows:

1. **APA Citation Style**

When using the APA Citation style, referencing list is found at the end of the paper. It commonly contains all information of the literature that are cited in the paper. When following the APA format, all references are listed alphabetically according to their surnames. Some reminders when using the APA format is given below:

   a) You should use a hanging indention. All lines, except the first one, must be indented by 0.5 from the left.
   b) When writing the author’s name, the last name must come first before the given name. The given name must be represented by initials. When there are two or more authors, ellipses must be used to separate them.
   c) The first word of the title must be capitalized. Other necessary publication information and proper noun should follow the same format.

Here are the guidelines for making a referencing list using the APA format from different sources.

**BOOKS**

*Format:* Author’s last name, given name, and middle name initials, (Year of publication). Title of work: Subtitle. Location: Publisher.

*Example:* James, B.N. (2009). The history of the universe: Knowing the truth out of our existence. Los Angeles, California: LMS Publishing.

**JOURNAL ARTICLES**


**ONLINE NEWS ARTICLES**


2. MLA Citation Style

The MLA citation style commonly needs a Works Cited page on a different page at the end of the research. All cited sources in the body of the research must be cited in the Works Cited. The list of the authors must be arranged alphabetically by their surnames. Here are some considerations that you must look into when using the MLA Citation Style.

a) Hanging indentation format must also be followed. Subsequent lines of each entry must be indented by 0.5 from the left.

b) In using the MLA format, the author’s last name will be followed by the author’s complete given name. If the middle name is given, it should also be written after the given name. If the author has namesuffixes, it should be written on the last part.

c) All words in the title must be capitalized. Prepositions or conjunctions are excluded by this rule, except if it is the first word of the title.

To understand more of the MLA Citation, here are formats to be used:

**BOOKS**

*Format:* Last name, First name. Title of Book. City of Publication: Publisher, Year of Publication. Medium of Publication.


**ONLINE JOURNAL ARTICLES**

*Format:* Last name, First name. “Title of Article”. Title of Publication, volume number, and issue number, (year of publication). Date of access.

[Note: (1) If the journal is exclusively available online, write “n.pag.” to denote that there is no pagination of the publication. (2) If there is a print copy, provide a copy of the page number and the medium of publication used.]

ONLINE NEWS ARTICLES

Format: Last name, First name. “Title of the article”. Title of News Article. Date of Publication. Medium of publication. Date of access


ONLINE LECTURE NOTES AND PRESENTATION SLIDES

Format: Last name, First name. “Title of Presentation”. Date file was created. Medium


3. CMS Citation Style

In using the CMS Citation Style in making references, the sources will be arranged alphabetically, through the author's last name. Referencing lists in CMS is termed as “Bibliography”. A bibliography must include all the cited related literature in the research body.

Here are some guidelines for making a bibliography.

BOOKS

Format: Last name, First name. Title of Book. City of Publication: Publisher, Year of Publication.

Example: James, Brian. The history of the universe: Knowing the truth out of our existence. Los Angeles, California: LMS Publishing, 2009.

ONLINE JOURNAL ARTICLES

Format: Last name, First name. “Title of the article”. Title of Publication, volume number, and issue number, (year of publication). Pages. Date when accessed. URL.


ONLINE NEWS ARTICLES

Format: Last name, First name. “Title of the article”. Title of News Article, Date of publication. URL. Date of access (if necessary)

**What's More**

**Activity 2.1** Directions: Determine whether the following is using APA, MLA, or CMS Citation Styles. Write your answers in the space provided.

<table>
<thead>
<tr>
<th>Item</th>
<th>Citation Style Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The earth is ……. (Robinson, 2011)</td>
<td></td>
</tr>
<tr>
<td>2. Song et al. (2012) stated that …</td>
<td></td>
</tr>
<tr>
<td>3. Lim described human beings as …. (45).</td>
<td></td>
</tr>
<tr>
<td>5. Norman explained the meaning of….</td>
<td></td>
</tr>
<tr>
<td>6. It is stated that … (White 2005, 357)</td>
<td></td>
</tr>
<tr>
<td>7. Chang (n.d.) stipulated that …</td>
<td></td>
</tr>
<tr>
<td>8. According to DepEd (2005), …</td>
<td></td>
</tr>
<tr>
<td>9. Gonzales explained that … (as cited by Brown, 2018, p. 92)</td>
<td></td>
</tr>
<tr>
<td>10. It was stated that … (dela Cruz, Medina, Gray and Yu, 2018).</td>
<td></td>
</tr>
</tbody>
</table>

**Activity 2.2** Directions: From your produced output in Activity 1.1, extract the information or details which are very relative to your research topic. Cite the sources using the three commonly used citation styles. Present your activity using this table:

<table>
<thead>
<tr>
<th>Source Details</th>
<th>Relevant information from the source</th>
<th>In-text Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>APA</td>
</tr>
<tr>
<td></td>
<td></td>
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</tbody>
</table>
What is It

Now that you have already gathered your sources for the review of related literature, the next step to accomplish Chapter II is to extract the important and relevant information that you can use to compose this chapter.

This lesson focuses on discussing the ways of how you are going to write your synthesis based on the related literature that you have gathered for the activities in the 1st and 2nd lessons of this module. This lesson will teach you how to segregate relevant and non-relevant information, extract main ideas from your sources and know-how to prepare a synthesis matrix.

LESSON 3.1. DEFINITION AND TYPES OF SYNTHESIS

Synthesis is defined as a combination of information and discussion from one or more relevant sources of information. When doing a synthesis, you need to extract the important information coming from all your sources. You have to find the similarities and differences from one source to the other and you must instill the importance of this information in your research study.

When doing your synthesis, you can present your information in two (2) ways: a.) Explanatory or b) Argument synthesis. Explanatory synthesis deals with presenting the information through explanations and presents it objectively. Argument synthesis, on the other hand, enables a researcher to present his/her point of view from a certain topic in a logical manner. Information that is written using an argument synthesis is usually debatable.

Example:

Explanatory Synthesis:

According to the Divine Creation Theory, the world was created by the Almighty. All creatures are made into life through his power. He crafted the universe in just 6 days. He made the human beings from sand and blessed them with life through his breath.

Argument Synthesis:

The world is made through evolution and scientific reactions, wherein all living creatures undergo different mutations and reactions to become what it is right
now. This statement is supported by the Theory of Evolution by Natural Selection which is published by Charles Darwin.

**LESSON 3.2. CATEGORIES OF SOURCES**

The sources for the data and information for the crafting of your Review of Related Literature are categorized into four (4).

1. **Documents** - these sources include those materials that are written or printed such as books, newspaper reports, research articles, etc. This source can come in a published or non-published state.
2. **Numerical records** - This source is considered a subcategory of documents. This source includes numerical data in written form such as census reports, school budgets, etc.
3. **Oral statements** - Stories, myths, legends, songs and other forms of oral data compose this type of source.
4. **Relics** - this source commonly composes information about the past.

**LESSON 3.3. WRITING A SYNTHESIS**

After defining what is synthesis, knowing the types and categories of its sources, you are now leading to making your synthesis for your Review of Related Literature Chapter. To write your synthesis, Prieto et al. (2017) suggested ways that you must follow.

1. You must consider your purpose in writing.
2. You must select and read carefully your sources, according to your purpose.
3. Formulate a thesis. It is the main idea that you want to present in your synthesis.
4. Decide how will you use your source materials and take down notes.
5. Develop an organizational plan according to your thesis.
6. Write the first draft of your synthesis, following your organizational plan.
7. Revise your synthesis

When you are going to write your synthesis, you can use the following techniques as your guide.

1. **Summary** - the simplest way of organizing a synthesis. When using this technique, you are going to write the most relevant information and sources you gathered.
2. **Example or illustration** - it is a technique wherein you are going to synthesize information by giving examples and illustrations of your specific information.
3. **Two (or more) Reasons** - this technique includes presenting the thesis and supporting it with reasons why it is factual.
4. **Comparison and Contrast** - In using this technique, you are going to show the similarities and differences of two or more data.

Once all data and sources are already gathered, you are now ready to synthesize your information. To make this, a synthesis matrix is suggested. This matrix will guide you on how are you going to synthesize your data and information and will help you easily craft your Review of Related Literature. Below is an example of a synthesis matrix.
In using this synthesis matrix, you must understand the important terminologies. The Topic above refers to your respective research topics and must be filled up before starting your synthesis. The Main Idea A, B, n refers to the possible sections of your RRL. You are going to write the things that can affect your research. if your topic would be focusing on the effectiveness of different teaching strategies towards the learning progress of students in VNHS, you can use teaching strategies as one of the main ideas. These main ideas can help you to find the needed and relevant information for your RRL are. You can have as many main ideas as you can, provided that this is related to your research topic. The Sources nos. 1, 2, 3, 4, n, on the other hand, refers to the sources of your information. In this area, you need to take note of all the details of your sources to be used for your citation. It would be better to have many sources because it will give you a variety of information and can help you elaborate more your main idea.

Now that you know the definition, types, categories, and techniques in writing a synthesis, you are now ready to make your own!

**What’s More**

**Activity 3.1**

Directions: Using the outputs from your preceding activities, make the synthesis of your research study using the matrix.

<table>
<thead>
<tr>
<th>Main Idea A</th>
<th>Source #1</th>
<th>Source #2</th>
<th>Source #3</th>
<th>Source #4</th>
<th>Source n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Idea B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Idea C</td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Main Idea D</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Main Idea E</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Main Idea F</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Main Idea G</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Idea H</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Idea n</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Rubrics for your synthesis:

<table>
<thead>
<tr>
<th></th>
<th>Exemplary (10 pts)</th>
<th>Effective (7 pts)</th>
<th>Minimal (5 pts)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Ideas</strong></td>
<td>The main ideas derived from the paper are clearly stated and effectively linked to the general topic of the research. Student clearly demonstrates a strong working knowledge of class material relative to the article.</td>
<td>The main ideas derived from the paper are not always clearly stated. Student demonstrates some working knowledge of class material relative to the article.</td>
<td>Main ideas are not been described at all, with sufficient clarity or they are offered in the words that are too close to the original source indicating little paraphrasing. There is no evidence of understanding or elaboration of knowledge from the part of the student.</td>
</tr>
<tr>
<td><strong>Grammar and Organization</strong></td>
<td>Sentences are well organized and easy to follow. There are no spelling, grammar, or punctuation errors.</td>
<td>Sentences are not well organized OR there are some grammatical errors.</td>
<td>Sentences are poorly organized and there are several grammatical errors.</td>
</tr>
<tr>
<td><strong>Citation</strong></td>
<td>Full citation is provided in APA style</td>
<td>Citation is provided in part in APA style</td>
<td>Citation is not provided.</td>
</tr>
</tbody>
</table>
What is It

The previous lessons of this module guided you on the preparation for crafting your RRL. Those lessons thoroughly discussed what Review of Related Literature is, how to select relevant sources of information, how to make citations, and how to synthesize information coming from a relevant source. At this moment, we are going to move forward to another lesson which will focus on writing a coherent review of related literature. In pursuing this lesson, you need to apply your learnings from the 1st activity of this module as we are now going to craft your Review of Related Literature.

LESSON 4.1 Review of Related Literature Structure

The review of related literature is commonly composed of three major sections: a) Introduction, b) Main Body, and c) Conclusion.

The introduction of your RRL is commonly composed of a single paragraph wherein information about the general topic of your research is presented. It also provides the overall statement of knowledge about your research topic. This section gives an overview of the contents of your RRL highlighting the points (main idea) that can be seen in this chapter.

The second section of your RRL is the body. This section focuses on presenting all the relevant information that you have gathered. Presenting your relevant information must follow a logical manner, addressing the order of your objectives of the study. The contents of this section come from your synthesis matrix. The last section of your RRL is the conclusion. As its name implies, the conclusion is a single paragraph that functions in providing a summary of the overall state of knowledge about your topic. This section must show how significant is your research study.

Always remember that when writing your Review of Related Literature, you must use the correct in-text citation.

LESSON 4.2. Guidelines in Writing Literature Review

Prieto et al. (2017) crafted the following rules that you can use to produce a quality RRL.
Rule 1. Define the topic and the audience. When defining a topic, consider factors such as interest, significance, and recency.

Rule 2. Search and research reference list.

Rule 3. Prepare a conceptual diagram of the need for the different types of literature review.

Rule 4. Take notes while reading.

Rule 5. Choose the type of review you wish to write.

Rule 6. Keep the review focused and make it of broad interest.

Rule 7. Be critical and consistent.


In presenting your review of related literature, the following states are recommended to showcase coherency.

1. There appears to be strong evidence that ...
2. The literature has shown ...
3. The foregoing literature has shown ...
4. The data supporting the hypothesis are ...

Another pointer in crafting a coherent review of related literature is to use an index card. It is one of the most convenient and effective research tools that will help you in organizing your information for this chapter. Here’s how to use your index cards.

- Make a separate card for each source.
- Give each source a racking number.
- For a book, include the author, title, date & place of publication, and publisher.
- For a periodical, also include the page numbers of the article.
- For a website, write the title, the sponsors and authors if known; the site and date when it was created or uploaded, and the date when you access the site.

In using an index card, you must see to it that you have the following information:

- Where you found the information
- Topic
- Paraphrased information found
- The Page you found the fact on
Below is an example of an index card:

Divine Creation Theory

Divine Creation is one of the commonly used theory in explaining the origin of the world. According to this theory, the Universe as a whole was crafted by the Almighty.

Source #1

Page 25

Para-phrased information found

What’s More

Activity 4.1

Directions: Make individual index cards following the format given above. Use a ½ size index card.

Rubrics for index card:

Neatness = 6pts.
Completeness of information = 9pts.
Ethical standards have been a significant subject in the research field. Ethical standards help researchers in maintaining their integrity. In research, it is defined as a means of making rights decisions relating to the conduct of the study. Some researchers consciously or unconsciously break some ethical standards leading to some complications.

This lesson focuses on educating you, as a researcher of the different ethical standards that each researcher must consider before doing a research study.

**LESSON 5.1. The Relationship of Ethics and Research**

Ethics in research can be defined as the norms for conduct that distinguish between acceptable and unacceptable behaviors. It can also be defined as a process of applying moral standards and principles in any undertaking. In general, the ethical standard in research is used so that a researcher will be able to define right from wrong.

Ethics serve a very vital role in conducting a research study. It can keep the researcher from committing misconduct while seeking knowledge and truth, and respecting and protecting the rights of the respondents—humans and animals. Ethics also promote essential values that help researchers to have a common understanding and work on a topic harmoniously. Also, ethics bind different experts together in the spirit of important values such as accountability, cooperation, coordination, mutual understanding, respect, and fairness, among others.

Ethics in research follow eight (8) principles. These principles must be taken seriously by each researcher to secure an ethical study.

1) **Honesty**- a researcher must secure honesty in producing his/her study. Transparency is the key of upholding honesty in research. Researchers must see to it that all borrowed intellectual property must be cited accurately.

2) **Objectivity**- Researchers must see to it that she/he is free from any form of bias in all aspects of his/her research paper.

3) **Integrity**- The researcher must secure that the study holds sincerity and consistency. The researchers must see to it that all of the parts promised and presented during the presentation of the proposal must be kept.

4) **Carefulness**- The researcher must see to it that the conduct of the study must be free from any carelessness and errors of negligence. All important data must be kept for future uses.

5) **Openness**- Researches must see to it that they are open-minded persons wherein they can accept suggestions from others and they can handle constructive criticism.
6) Respect for intellectual property- A good researcher must see to it that she/he practices respect for intellectual property. This principle can be executed upon proper citation of borrowed statements and giving due credit to the owner.

7) Trustworthiness- A researcher must secure that he/she is maintaining his/her trustworthiness. The researchers must see to it that any data or information in the research, especially those data from surveys and other data gathering procedures, must be used according to its proper and allotted usage only. The researchers must also keep the confidentiality of every data gathered and must protect its privacy.

8) Social and legal responsibility- A researcher must abide by the legalities, rules, policies, and regulations set by his/her partner institution or organization.

The need for ethics is very vital in research because of these reasons:

1) Norms promote the aims of research such as knowledge, truth, understanding, and avoidance of error.
2) Norms promote the values that are essential to collaborative work such as trust, accountability, mutual respect, and fairness. They also protect intellectual property interests and encourage confidentiality even in collaboration.
3) Norms ensure that researchers can be held accountable to the public. To a certain extent, they draw parameters on which ideas to write and how they should be written.
4) Norms promote a variety of other important moral and social values. Ethical lapses in research can significantly harm human and animal subjects, students, other individuals, and the public in general.
5) Norms help build public support for research. This happens when individuals and organizations believe in the integrity and credibility of the researcher/s, thus they will offer support for the project.

For you to further understand the function of ethics in research, here are some terminologies that may aid you:

1) Ethical relativism- this refers to the view that values are relative in the sense that a person feels his/her value is better than any other person's value.
2) Ethical principles- this term refers to values that are translated into rules or standards of conduct.
3) Ethical dilemma- this refers to situations where there is an evident conflict between values and principles and the choice of action needs to be decided.

Upon the absence of Ethics in conducting your research, you might be able to do some unethical deeds commonly known as scientific misconduct. The following are the possible scientific misconducts that can be done in research:

1) Fabrication and falsification of data- also known as “cooking of data”. This scientific misconduct involves producing data without actual experimentation or altering data in recording for the intention to fit them to what is expected.
2) Non-publication of data- In contrast with fabrication and falsification, non-publication of data involves choosing not to include data because they do not conform to the well-established body of knowledge or are unsupportive of the research hypothesis. Only the results that do not reject the hypothesis are reported and published.
3) Faulty data gathering procedures- It is referred to as negligence or carelessness that leads to errors in measurement or faulty research instruments. An Error may also be caused by inappropriate application of treatment to the subjects and poor data recording.

4) Plagiarism- It is a fraudulent act that involves claiming another person’s ideas, work, or publication. It is a form of intellectual property stealing and dishonesty that usually happens in scientific publications. There are four types of Plagiarism.

   a) Copy and Paste Plagiarism- this type of plagiarism involves copying information word-by-word without giving due credit to the source. Copy and paste plagiarism can be avoided upon enclosing the borrowed words with quotation marks (”) and properly citing the author.

   b) Mosaic Plagiarism- this is defined by changing only some words in the copied information. The sentence structure is still maintained.

   c) Misattribution Plagiarism- this type of plagiarism can be done if an author wrongly cited information, maybe to the wrong authors or to the non-existing authors.

   d) Self-Plagiarism- this type of plagiarism can be committed if an author republishes his/her work. Self-plagiarism comes in two forms, duplication, and replication. Duplication can be committed once a researcher copies and submits without proper citations. Replication, on the other hand, is multiple cases of duplication.

What’s More

Activity 5.1 Directions: Identify five (5) researchers in your local area, may it be a thesis writer, a research assistant, a teacher teaching a research subject, etc. Interview the researchers regarding their experiences in applying ethical standards in research. Ask them about the challenges that they have experienced during the conduct of their studies. Generalize the answer and write your conclusion based on the information you gathered. Follow the matrix below:

<table>
<thead>
<tr>
<th>Name of the Researcher with signatures</th>
<th>Occupation relevant to the research</th>
<th>What are the ethical challenges that they have experienced during the conduct of their studies?</th>
<th>How did they cope up with these challenges</th>
<th>Suggestions for future researchers</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Researcher #1)</td>
<td></td>
<td></td>
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<tr>
<td>(Researcher #2)</td>
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<tr>
<td>(Researcher #3)</td>
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<tr>
<td>(Researcher #4)</td>
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<tr>
<td>(Researcher #5)</td>
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</tbody>
</table>
Presenting Written Review of Related Literature

What is It

After learning about the definition, types, sources, methods of citations, and even ethics in the review of related literature, it is now time for you to present your Chapter II. The composition of your Review of Related Literature must abide by the standards and guidelines set in the previous lessons. As a researcher, you must see to it that your review of related literature must be functional and holds a big significance in explaining the future results of your study.

LESSON 6.1. Literature Review Structure

The structure of your literature review greatly depends on the type of your research and your research area. In your structure, topic areas, controversial issues, and questions with varying themes must be considered.

When combining information coming from different authors, linking words such as in addition, again, similarly, and also are commonly used. On contrary, when contrasting two or more information, you must use phrases that highlight the contrast of these data. Critical notes must be observed to deliver a good argument synthesis.

As a researcher, you must also take note that your research paper must be presented in formally and academically manner. Writing must be kept clear and concise. Objectivity must be observed and respect for other’s works should be exercised. The following are characteristics of a good literature review:

a) Focused- your RRL must be composed of information that is related to your research topic.
b) Concise- ideas must be presented economically.
c) Logical- the flow of ideas and information must be based on logic. It should be smooth-flowing.
d) Developed- your RRL must be composed of complete information.
e) Integrative- in instances of combining information, links between these ideas must be evident. The contribution of the reviewed materials on the topic must also be shown.
f) Current- researchers must only use the new and trendy information about a research topic.
LESSON 6.2. Critical Evaluation of the Literature

In evaluating your Review of Related Literature, you can use the following questions:

1. Have you organized your material according to issues?
2. Is there a logic to the way you organized your material?
3. Does the amount of detail included on an issue related to its importance?
4. Have you been sufficiently critical of design and methodological issues?
5. Have you indicated when results were conflicting or inconclusive and discussed possible reasons?
6. Have you indicated the relevance of each reference to your research?

What I Have Learned

Activity: Recall what you have learned from the discussion by completing the statements below. Write your answers on a separate sheet of paper.

1. There are _____ characteristics of sources for the literature review.
2. The two manners of citation are _______ and referencing list
3. In-text citation goes in three methods: a) by author, b) ____________ and c) chronological
4. The three citation styles are ________, _______ and _______.
5. ________________ the information from relevant sources follows two categories: Explanatory and Argument Synthesis.
6. The categories of sources for the synthesis are a) documents, b) numerical records, c) oral statements and d) _____.
7. The crafting of a coherent literature review follows _____ rules.
8. _______________ are interconnected with each other.
9. I realized that following ethical standards in research study is important because _________________________.
10. My favorite citation style is _____________ because ____________________,

27
What I Can Do

Activity: Write 5 citations on any material available at home. Use any citation style that you want. Write your answers on a separate sheet of paper.

Assessment

Multiple Choice. Read each item carefully. Choose your answer from the given options. Write the letter of the best answer.

1. It is defined as a means of informing your readers that a certain piece of information came from a specific source and you just borrowed it to widen the explanation of a certain situation or data of your research.
   a. Literatures  b. Review  c. Citations  d. Sources

2. This is defined as the extraction of information and discussion from one or more relevant literature.

3. It is a manner of citation that refers to all of the citations that are found in all of the chapters in the research paper.
   a. In-text citation  c. bibliography
   b. Out-text citation  d. referencing list

4. It is a chapter of your research paper wherein it is focused on giving an overview of all the writings relative to your specific topics.
   a. Introduction  c. Methodology
   b. Review of Related Literatures  d. Results and Discussion

5. This guideline in citation secures that all data and information, facts, ideas, or principles from your sources are discussed or explained separately.
   a. by topic  b. by author  c. chronological  d. bibliography

6. This is defined as the norms for conduct that distinguish between acceptable and unacceptable behaviors.
   a. attitude  b. ethics  c. humor  d. behavior
7. This is a citation style that uses notes and bibliography and author-date format.
   a. APA       b. MLA       c. CMS       d. HARVARD

8. It is the guideline that is used in making synthesis.
   a. Synthesis guide       c. Synthesis matrix
   b. Synthesis chart       d. Synthesis graph

9. It is a source of your literature that is categorized by printed publications or writings wherein a researcher reports the results of his studies.
   a. Primary source       c. Tertiary source
   b. Secondary source     d. General reference

10. This is a citation style that uses author-date format only.
    a. APA       b. MLA       c. CMS       d. HARVARD
References


Answer Key

1. B
2. A
3. C
4. A
5. B
6. A
7. C
8. A
9. C
10. B

What I Know
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