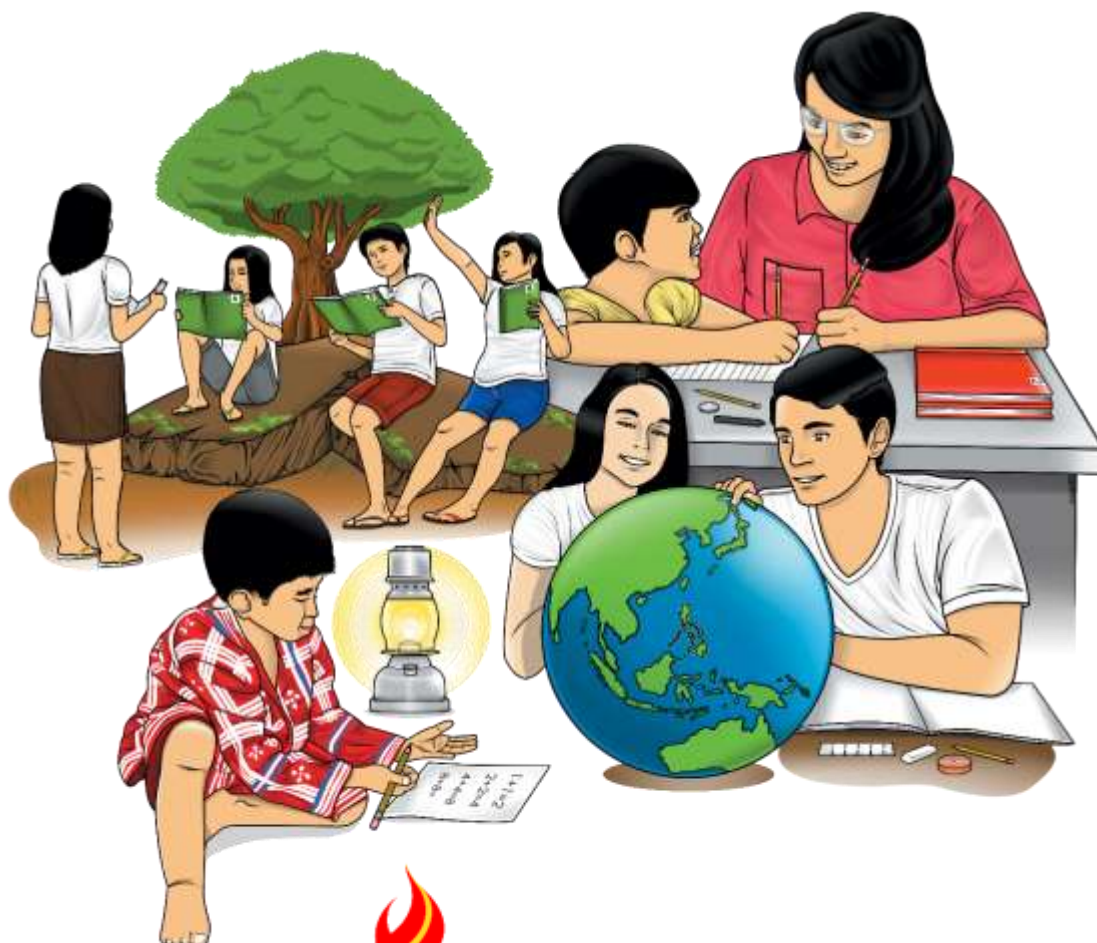


Inquiries, Investigation and Immersion

Quarter 1 – Module 1: Brainstorming for Research Topics



**Inquiries, Investigation and Immersion
Alternative Delivery Mode
Quarter 1 – Module 1: Brainstorming for Research Topics
Second Edition, 2021**

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Quarter 1 – Module 1: Brainstorming for Research Topics

Introductory Message

The purpose of this module is to guide the teacher as to what to do in dealing with the students. This is an interactive way to test and evaluate the students' learning process. Module 1 is inquiry-based research which brought about brainstorming to gather ideas before drawing a problem. 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 the 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 a logical flow of ideas to spread essential context regarding the learning process. The purpose refines a completely new approach in selecting a 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 a 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.



What I Need to Know

The 3 I's: Inquiries, Investigation and Immersion module is a way of realizations that come along their life such as the different issues which surround them. This query is the act of asking for information that leads to exploration and absorption.

This module will help the learners prepare a plan and focus on issues and ideas in their respective field after an overview of research in daily life and learning an appropriate research design for a class research agenda.

The module has one lesson:

- Lesson 1 – Natural Inquiry

After going through this module, you are expected to:

1. Discuss among the learners the different issues and ideas in their respective fields;
2. Appreciate the importance of brainstorming to come up with the best issue to cater to; and
3. The learner prepares to plan a research agenda in preparation for possible issues or topics of a research study.

What to do:

To attain the objective of this module, do the following:

- Yield your time reading the lessons sensibly.
- Follow the directions and/or instructions in the activities and exercises diligently.
- Give a response to all the exercises.
- Familiarize yourself with the following terms:

Unlocking of Keywords

Inquiry	<ul style="list-style-type: none">- It is a question which you ask to get some information. It is the process of asking about or investigating something to find out more about it.
Investigation	<ul style="list-style-type: none">- It is a proper inquiry or efficient study.
Immersion	<ul style="list-style-type: none">- It is the process of learning a skill by using nothing else but that skill. It is the fact of becoming completely involved in something.
Research Study	<ul style="list-style-type: none">- Research is like exploring things to come up with the best idea/s to respond to the needs of society.
Concept	<ul style="list-style-type: none">- It is a conceptual representation abstract objects, or abilities that make up the fundamental building blocks of thoughts and beliefs



What I Know

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

1. What is an informal or indirect expression of knowledge?
 - a. books
 - b. gestures
 - c. sentences
 - d. words
2. What characterizes inquiry?
 - a. it is designed to generate multiple alternatives
 - b. it encourages an exchange of ideas
 - c. it is an open process absorption
 - d. all of the above
3. Which of the following are benefits of brainstorming when compared to nominal group technique?
 - a. brainstorming is more fun
 - b. brainstorming can generate a positive organizational climate
 - c. brainstorming can inspire talented and highly skilled employees to remain in an organization
 - d. all of the above
4. Which of the following statements about brainstorming is NOT correct?
 - a. brainstorming is often used for creative problem-solving
 - b. No criticism is allowed in brainstorming
 - c. Brainstorming is a vulnerable game without rules or guidelines
 - d. All participants in brainstorming should be given a chance to contribute to the process
5. Which of the following is a limitation to brainstorming?
 - a. free riders work harder in a group
 - b. only a few people can contribute
 - c. People are more willing to talk because they are part of a group
 - d. only one person can speak at a time
6. How many people should there be in a brainstorm?
 - a. 1-2
 - b. 3
 - c. 4-5
 - d. 6-10
7. What are the two phases of brainstorm?
 - a. cause and effect
 - b. projection and selection
 - c. idea generation and evaluation
 - d. problem and solution
8. What is the method used to capture ideas?
 - a. traditional method
 - b. electronic method
 - c. post – it notes
 - d. all of the above
9. Which criteria should you use to evaluate ideas?
 - a. feasible
 - b. attractive
 - c. novel
 - d. none of the above

10. Which among does not belong to ruin a brainstorm?
- a. early criticism of ideas
 - b. having no clear focus or objective
 - c. need evaluation
 - d. settling for too few ideas
11. What is a systematic investigation for information?
- a. curiosity
 - b. inquiry
 - c. questions
 - d. research
12. What is defined as seeking truth, information, or knowledge?
- a. curiosity
 - b. inquiry
 - c. questions
 - d. research
13. What is the first element of inquiry-based learning?
- a. formulation of appropriate questions
 - b. identification of key issues
 - c. search for valid and relevant evidence
 - d. selection of appropriate questions
14. What is the last element of inquiry-based learning?
- a. application of evidence to identified issues
 - b. interpretation and assessment of evidence
 - c. presentation of coherent, conclusion, final or tentative
 - d. reflection on and assessment of the learning process
15. Which of the following are the most distinguishing characteristics of inquiry-based learning?
- a. it begins with a question
 - b. students use hand-on instruction
 - c. it is student-centered
 - d. it is teacher-centered

Lesson

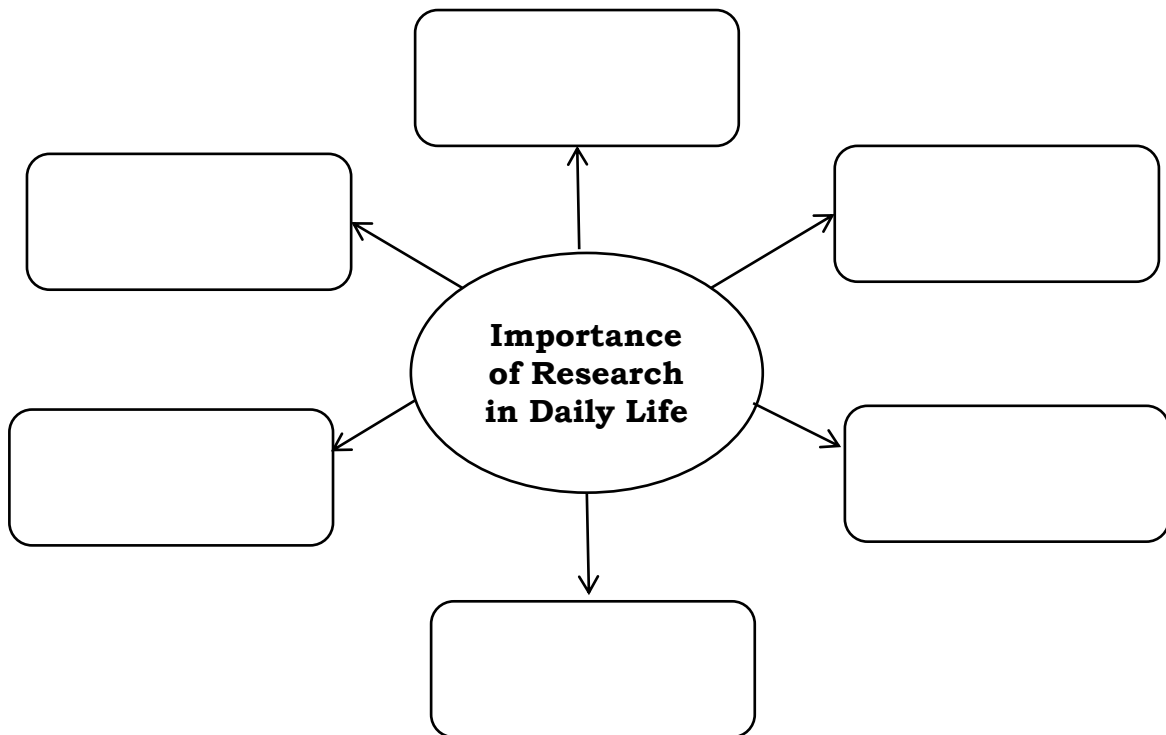
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Natural Inquiry



What's In

Write your own ideas on the importance of research based in your knowledge and experiences. Copy the graphic organizer and write your answer in a separate sheet of paper.





What's New

SHOUT OUT IDEAS

Tell the different issues in the society regarding your chosen field and write it in the meta cards. You may shout out your ideas based on the agreed issue through writing it on their notepad.

Example below:



What is It

Research is an investigation or experimentation aimed at the discovery and interpretation of facts, revision of accepted theories or laws in the light of new facts, or practical application of such new or revised theories or laws. It is also a practice of collecting information about a particular subject.

Research provides the best solution to some of the world problems and also enhance the knowledge of the researchers. It can give explanations to certain questions stated in the research problem. Through the explanations, it serves as a tool for building knowledge and for facilitating new learning.

Research also introduces new ideas, helps the researchers identify problems and appropriate solutions in new ways and provide new framework to guide thinking and action. It informs action, proves a theory and contributes to develop knowledge in a field or study. Therefore, it understands various issues and increases public awareness.

The following shall help you recall some significant details relevant to your previous understanding about the types of research namely: qualitative and quantitative researches.

Qualitative Research	Quantitative Research
Involves processes, feelings, and motives (the why's and the how's) and produce in-depth and holistic data	Aims to characterize trends and patterns
Usually concerned with generating hypothesis from data rather than testing a hypothesis	Usually starts with neither a theory nor hypothesis about the relationship between two or more variables
Uses either unstructured or semi-structured instruments	Uses structured research instruments like questionnaires or schedules
Uses small sample sizes chosen purposely	Uses large sample sizes that are representatives of the population
Has high validity	Has high output replicability
Used to gain greater understanding of individual differences in terms of feelings, motives and experiences	Used to gain greater understanding of group similarities
Uses more flexible processes	Uses structured processes
Methods include field research, case study and secondary analysis	Methods include census, survey, experiments and secondary analysis

An inquiry is a method that has the aim of extending knowledge, undertaking doubt, or solving a problem. A theory of inquiry is an interpretation of the various types of inquiry and action of the ways that each type of inquiry attains its aim.



Now, to give you an idea of how to prepare for research, you may do the inquiry-based learning using the following steps mentioned below:

- **Focus.** An ill-structured problem demands consideration of diverse perspectives.
- **Decide on a topic.** Think-aloud, asks probing questions, monitors and encourages participants to decide a topic.
- **Understanding the problem.** This will include clarifications of misconceptions and possibilities.
- **Design on the problem.** This is the final stage done to address problems within manageable scales and extend their learning pathways.

Brainstorming is a way of inquiring ideas that will help you to develop concepts and focusing techniques by asking questions and knowing the interests of the persons involved in the said issues. The potential ideas can be visualized for interpretations.

The following are the things that may be considered before starting the research activity:

1. A problem that is most interesting to you
2. Existing problems in the class/school/campus which one may want to solve
3. Existing needs of the community or society
4. Area of interest, specialization or event from related fields
5. Prevailing theories and philosophy

Criteria in Choosing a Research Topic:

1. It should be something new or different from what has already been written about.
2. It must be original.
3. It should be significant to the field of study or discipline.
4. It must necessarily arouse intellectual curiosity.

5. It should be of researcher's interest.
6. It should be a modest one for a beginner to be carried out within a limited period of time.
7. It should be clear, not ambiguous.
8. It should be specific, not general.
9. It should consider the training and personal qualifications of the researcher.
10. It should consider the availability of data involved in the study and the methods and techniques to be employed in gathering them.
11. It should consider the availability of effective instruments for gathering the data and their treatment.
12. It should consider the financial capacity of the researcher to support the project.
13. It should consider the time factor involved in the undertaking.

Here are some examples of possible basis of issues applicable for senior high school learners. These are useful in crafting a research agenda that will lead in the writing of the title and research problem.

Topic/Issue	Causes	Effects	Interventions/ Projects/ Programs
Community Waste Problem	- improper waste disposal - inconsistent implementation of community waste program/ project	- widespread waste disposal - health problem	- Clean and Green Project - Health and Sanitation Programs

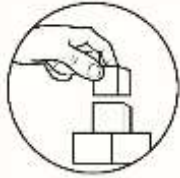
Topic/Issue	Sub-topics	Causes	Effects
Availability of Tools and Equipment in TVL - SMAW	- List of Equipment in the laboratory	- Large number of enrollees - Area for laboratory work	- 50% passing rate - dropout - absenteeism

If you already identified the possible topic in the agenda of your research study, you may think of the identity of your research either a qualitative or a quantitative research then decide on the methodology by not disregarding the importance of your research to others, to the community, to the society or to the nation as well.

Observe the given example as a guide about the mentioned concerns in your research agenda.

RESEARCH AGENDA - Academic Track	
TOPIC	Community Waste Problem
TYPES OF RESEARCH	Qualitative Research
METHODOLOGY	Interview and Survey Questionnaire
IMPORTANCE	Provide awareness and information about Clean and Green Project and Health & Sanitation Program

RESEARCH AGENDA - TVL Track	
TOPIC	Level of Effectivity of TVL - SMAW Offering
TYPES OF RESEARCH	Quantitative Research
METHODOLOGY	Interview and Survey Questionnaire
IMPORTANCE	Provide data as basis for the improvement and enhancement of the TVL- SMAW offering



What's More

List down three (3) causes and effects of the given problem or issue. Write your answer in a separate sheet.

Problem/Issue: Failed Grades

Effects: 1. _____
 2. _____
 3. _____

Causes: 1. _____
 2. _____
 3. _____



What I Have Learned

Based on the lesson, I have realized that



What I Can Do

Prepare a research agenda following the steps below. Write your answer on a separate sheet of paper.

1. Choose a topic according to your academic choice considering the criteria in the research topic.
2. Determine the type as to qualitative or quantitative research.
3. Identify the methodology to be used in the preparation of the research agenda.
4. State the importance of your research agenda in the community or society.

RESEARCH AGENDA	
TOPIC	
TYPES OF RESEARCH	
METHODOLOGY	
IMPORTANCE	



Assessment

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

1. Which of the following is a limitation to brainstorming?
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 - b. only a few people can contribute
 - c. people are more willing to talk because they are part of a group
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- a. application of evidence to identified issues
 - b. interpretation and assessment of evidence
 - c. presentation of coherent, conclusion, final or tentative
 - d. reflection on and assessment of the learning process

Additional Activities

Choose from the following topics/issues as part of the Research Agenda to develop a title and a statement of the problem. Write your answer on a separate sheet of paper.

1. Effectivity of social media and Networking Sites as Instruments for Business Promotion
2. COVID-19 Pandemic Implications in the Community
3. Relationship Between Nutrition and Family Health
4. Experiences of Depression among the Youth of Today
5. Attitudes of the Youth in the Community



Answer Key

Assessment	1. C
	2. D
	3. C
	4. A
	5. D
	6. B
	7. A
	8. C
	9. B
	10. D
	11. A
	12. A
	13. D
	14. B
	15. B

What I Know	1. A
	2. D
	3. D
	4. B
	5. C
	6. D
	7. C
	8. D
	9. A
	10. B
	11. D
	12. B
	13. A
	14. B
	15. A

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