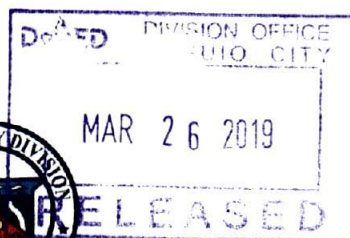




Republic of the Philippines  
Department of Education  
Cordillera Administrative Region  
**DIVISION OF BAGUIO CITY**  
#82 Military Cut-off Road, Baguio City



March 25, 2019

**DIVISION MEMORANDUM**

No. 163, s. 2019

**Questionnaire re: Enhancing the Skills of Basic Education Science Investigatory Advisers in Tools and Techniques for Biological Science via Modular Training Workshop**

**To :** All Public Schools District Supervisors  
All School Heads of Public Schools

1. This is to inform the field that the Department of Biology –School of Natural Sciences of Saint Louis University in their Extension Program will be sponsoring a program entitled "*Enhancing the Skills of Basic Education Science Investigatory Advisers in Tools and Techniques for Biological Science via Modular Training Workshop*" from January 2019 until the program's termination.
2. Relative to this, please advise your Science teachers to download the attached questionnaire , accomplish it, and submit to the Office of the Education Program Supervisor in Science at the Curriculum Implementation Division, Division Office , Baguio City.
3. Immediate dissemination of this Memorandum is earnestly desired.

  
**FEDERICO P. MARTIN, EdD, CEEd, CESO V**  
Schools Division Superintendent

**ENHANCING THE SKILLS OF BASIC EDUCATION SCIENCE INVESTIGATORY PROJECT  
ADVISERS IN TOOLS AND TECHNIQUES FOR BIOLOGICAL SCIENCE STUDIES VIA  
MODULAR TRAINING-WORKSHOPS**

March 11, 2019

Sir/Ma'am,

Good day!

In line with the ongoing extension program of the Department of Biology, School of Natural Sciences, Saint Louis University which aims to enhance the skills of basic education science investigatory project advisers in the application and conduct of basic tools and techniques in biological studies via the implementation of a series of training-workshops following a soon to be agreed upon schedule, may we solicit your initial participation by answering this questionnaire to provide us data on the extent of your skills on identified tools and techniques in biological studies as applied in the preparation of science investigatory projects.

We hope that through your response, we would be able to prepare appropriate training-workshop programs and materials as per your requirement.

Thank you very much!

Very truly yours,

Department of Biology Faculty

**PART I. Demographics**

Please fill out or place a check mark as appropriate.

<b>NAME:</b>	<b>AGE:</b>	
<b>SCHOOL:</b>		
<b>GENDER:</b>		
<b>LENGTH OF TEACHING SERVICE:</b>	<b>YEAR(S)</b>	<b>MONTH(S)</b>
<b>EXPERIENCE AS SCIENCE INVESTIGATORY PROJECT ADVISER:</b>	Yes	No

**PART II. Extent of skills on science investigatory project making**

Please indicate your extent of skill (degree of proficiency) in each of the indicated items by checking the appropriate column using the reference below then indicate your willingness to participate in a training-workshop about the indicated item by checking the appropriate column (Yes/No).

- 1 - No theoretical and practical background (have no prior exposure to the topic)
- 2 - With theoretical but no practical background (have learned the topic in class/ demonstration/ training/ etc. but have not performed the topic at least once)
- 3 - With theoretical and practical background (have learned the topic in class/ demonstration/ training/ etc. and have performed the topic at least once)
- 4 - With theoretical and proficient practical background (have learned the topic in class/ demonstration/ training/ etc. and have performed the topic several times with mastery)

TOPIC AND SUBTOPICS	EXTENT OF SKILL				WILLINGNESS TO BE TRAINED	
	1	2	3	4	YES	NO
<b>Science investigatory project making</b>						
Topic selection and research problem identification						
Related literature collection and review writing						
Methodology selection and experiment design						

TOPIC AND SUBTOPICS	EXTENT OF SKILL				WILLINGNESS TO BE TRAINED	
	1	2	3	4	YES	NO
<b>Phytochemical analyses</b>						
Plant specimen collection						
Extraction of plant components/metabolites						
Qualitative screening/detection of plant components/metabolites						
Quantitative determination of plant components/metabolites						
<b>Ecological/Biodiversity studies</b>						
Water sample collection						
Physical properties of water						
Chemical properties of water						
Soil sample collection						
Physical properties of soil						
Chemical properties of soil						
Biological specimen collection/sampling						
Biological specimen management						
<b>Cytotoxicity assays</b>						
<i>Allium cepa</i> (onion) assay						
<i>Artemia salina</i> (brine shrimp) assay						
<b>Antimicrobial susceptibility tests</b>						
Bacterial culture preparation						
Bacterial specimen characterization/ identification						
Antibacterial susceptibility tests						
Fungal culture preparation						
Fungal specimen characterization/ identification						
Antifungal susceptibility tests						

**PART III. Please answer the following questions on the provided spaces. Please use the back part if necessary.**

1. What other tools and techniques for biological sciences studies not mentioned above do you wish to be trained on?

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2. What possible problem(s) or limitation(s) do you foresee in the conduct of the above mentioned procedures in your home institutions (i.e. absence of a functional laboratory room, absence of an incubator, problem with sourcing of bacterial specimen, etc.)?

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3. Have you participated in trainings-workshops similar to these proposed topics? If yes, please provide details on how you would want to make this proposed training-workshop different from what you have already participated in.

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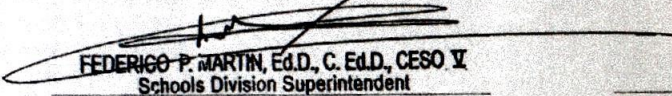
**Thank you very much!**

MANIFESTATION OF COOPERATION FOR EXTENSION

Date: November 06, 2018

To the University President:

May I inform your Office of our willingness to cooperate with the School of Natural Sciences – Department of Biology of St. Louis University in their Extension Program entitled **ENHANCING THE SKILLS OF BASIC EDUCATION SCIENCE INVESTIGATORY PROJECT ADVISERS IN TOOLS AND TECHNIQUES FOR BIOLOGICAL SCIENCE STUDIES VIA MODULAR TRAINING WORKSHOP** from January 2019 up until the Program's termination.



FEDERIGO P. MARTIN, Ed.D., C. Ed.D., CESO V  
Schools Division Superintendent

(Signature above Printed Name)

Designation

Department of Education – Baguio City Division  
Office/Agency/Institute

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CP/Landline: 446-6438  
Email address: feder.10.martin@deped.gov.ph

Cc:  
EMPT  
UEC  
SEC