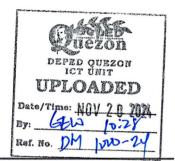


## Department of Education

Region IV-A
SCHOOLS DIVISION OF QUEZON PROVINCE



19 November 2024

DIVISION MEMORANDUM DM No. 600, s. 2024

# ENHANCING SCIENCE INVESTIGATORY PROJECT WRITING SKILLS FOR STEM TEACHERS

**To:** Assistant Schools Division Superintendents
Public Schools District Supervisors
Public and Private Elementary School Principals
Public and Private Secondary School Principals
All Others Concerned

- 1. In line with the implementation of Republic Act No. 10533, also known as the Enhanced Basic Education Act of 2013, which emphasizes the development of 21st-century skills and the promotion of scientific inquiry and research among learners, the Schools Division of Quezon will conduct a training program titled "Enhancing Science Investigatory Project Writing Skills for STEM Teachers" from November 28 to 30, 2024, at a venue to be announced in a subsequent memorandum.
- 2. Specifically, the workshop aims to:
  - a. Ensure that teachers can guide students in designing methodologically sound experimental researches that yield valid and reliable results,
  - b. Assist teachers in helping students craft clear, concise, and meaningful research titles that accurately reflect the scope of their projects,
  - c. Familiarize teachers with the proper completion of required forms, ensuring compliance with research ethics and safety standards,
  - d. Enhance teachers' skills in reviewing student manuscripts for clarity, coherence, and proper citation of sources, promoting academic integrity.



















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Region IV-A
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- 3. The participants to this training are 80 Junior and Senior Science research teachers (STEM Grade 12), 15 technical working group and 5 resource speakers. Please refer to Enclosure No. 1 for the names of the participants and Enclosure No. 2 for the names of the TWG. They are expected to arrive at the venue on November 28, 2024 (Day 1), between 7:00 a.m. and 8:00 a.m. for registration. The opening program will commence promptly at 8:00 a.m. Please refer to Enclosure No. 3 for the Activity Matrix.
- 4. Participants are adivised to bring the following:
  - Laptops (MSWord)
  - Backup Wi-Fi routers
  - Extension cords
  - One (1) sample research manuscript completed by learners for evaluation and critiquing.
- 5. The meals and accommodation of the participants, the TWG and the speakers shall be charged to the Special Education Fund SEF while the travel expenses of the participants shall be charged to school MOOE / local funds or other sources of funds while the Division Personnel shall be charged to the Division MOOE subject to the usual accounting and auditing rules.
- 6. Participating teachers are entitled to **one (1) day of service credit** for services rendered on **Saturday, November 30, 2024**, in accordance with DO No. 53, s. 2003 "Granting of Vacation Service Credits to teachers". Whereas compensatory time off (CTO) shall be granted to the teaching and teaching-related personnel on the same date.

7. Immediate dessimination of this Memorandum is desired.

ROMMEN CABAUTISTA CESO Schools Division Superintenden

cid-ims/ceao/11/19/2024



















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Region IV-A SCHOOLS DIVISION OF QUEZON PROVINCE

Enclosure No. 1 to DM No. /vsi, s. 2024

#### ENHANCING SCIENCE INVESTIGATORY PROJECT WRITING SKILLS FOR STEM TEACHERS

#### LIST OF PARTICIPANTS

|   | Number of Participants |                                 |
|---|------------------------|---------------------------------|
| SCHOOL  | JUNIOR HIGH<br>SCHOOL  | SENIOR HIGH<br>SCHOOL<br>(STEM) |
| 1. Quezon NHS                                       | 1                      | 1                               |
| 2. Quezon Science HS                                | 1                      | 1                               |
| 3. Lutucan NHS                                      | 1                      | 1                               |
| 4. Recto MNHS                                       | 1                      | 1                               |
| 5. Dr Maria D. Pastrana NHS                         | 1                      | 1                               |
| 6. Paaralang Sekundarya ng Lucban<br>Integrated NHS | 1                      | 1                               |
| 7. Atimonan National Comprehensive NHS              | 1                      | 1                               |
| 8. Alabat Island NHS                                | 1                      | 1                               |
| 9. Gumaca NHS                                       | 1                      | 1                               |
| 10.Lopez Comprehensive NHS                          | 1                      | 1                               |
| 11.Bondoc Peninsula Agricultural HS                 | 1                      | 1                               |
| 12.Infanta NHS                                      | 2                      | 2                               |
| 13.Buenavista NHS                                   |                        | 2                               |
| 14.Unisan Integrated NHS                            |                        | 2                               |
| 15. General Luna NHS                                |                        | 2                               |
| 16.Hondagua NHS                                     |                        | 2                               |
| 17. Polillo NHS                                     |                        | 2                               |
| 18. Talipan NHS                                     |                        | 2                               |
| 19. Lamon Bay School of Fisheries                   |                        | 2                               |
| 20. Guinayangan NHS                                 |                        |                                 |
| 21.Ungos NHS  |                        | 2                               |
| 22. Talipan NHS                                     |                        | 2                               |
| 23. Pagbilao NHS                                    |                        | 2                               |
| 24. Hinguiwin NHS                                   |                        |                                 |
| 25. Danlagan NHS                                    |                        | 2                               |
| 26. San Isidro NHS (Gen Luna)                       |                        | 2                               |



















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| 27. San Andres NHS                                | 2 |
|---|---|
| 28. Olongtao NHS                                  | 2 |
| 29. Abuyon NHS                                    | 2 |
| 30.Sta. Catalina NHS                              | 2 |
| 31.Dr. Panfilo Castro NHS                         | 2 |
| 32. Dagatan NHS                                   | 2 |
| 33. Sampaloc NHS                                  | 2 |
| 34. San Isidro Integ School                       | 2 |
| 35. Tagkawayan NHS                                | 2 |
| 36.Lusacan NHS                                    | 2 |
| 37. Elias Salvador NHS                            | 2 |
| 38.Paaralang Sekundarya ng General Nakar          | 2 |
| 39.Manuel S. Enverga School of Arts and<br>Trades | 2 |



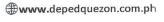
















# Department of Education

Region IV-A SCHOOLS DIVISION OF QUEZON PROVINCE

Enclosure No. 2 to DM No. 1000, s. 2024

#### ENHANCING SCIENCE INVESTIGATORY PROJECT WRITING SKILLS FOR STEM TEACHERS November 28-30, 2024

#### TWG

| Eliza D. Malinas Edgar G. Yabut Reyna Alpay Melanie Flores Shillem L. Mitra Sarah A. Amparo Florentino I De Guzman Harold Bert L. Distor Khristine Mae Montas Leianne Mae P. De Guzman Oliver B. Cajan John Michael A. Castillo | EPS Head Teacher Master Teacehr I Head Teacher II Master Teacher II Teacher III   |   | SDO Quezon DMDPastrana NHS Lutucan Integ NHS Alabat Island NHS Atimona CNHS Recto Memorial NHS Gumaca NHS Ltucan Integ NHS DMDPastrana NHS Quezon NHS Quezon NHS DMDPastrana NHS Recto MNHS Lopez CNHS   |
|---|---|---|--|
| Angelo C. Angeles   | Teacher III   |   | Lopez CNHS   |
| Nico O. Buenaventura  | Teacher III   |   | Gumaca NH  |
|   | Carmela Ezcel A. Orogo Eliza D. Malinas Edgar G. Yabut Reyna Alpay Melanie Flores Shillem L. Mitra Sarah A. Amparo Florentino I De Guzman Harold Bert L. Distor Khristine Mae Montas Leianne Mae P. De Guzman Oliver B. Cajan John Michael A. Castillo Angelo C. Angeles Nico O. Buenaventura | Eliza D. Malinas  Edgar G. Yabut  Reyna Alpay  Melanie Flores  Shillem L. Mitra  Sarah A. Amparo  Florentino I De Guzman  Harold Bert L. Distor  Khristine Mae Montas  Leianne Mae P. De Guzman  Oliver B. Cajan  John Michael A. Castillo  Angelo C. Angeles  Master Teacher II  Master Teacher III  Teacher III | Eliza D. Malinas  Edgar G. Yabut  Reyna Alpay  Melanie Flores  Shillem L. Mitra  Sarah A. Amparo  Florentino I De Guzman  Harold Bert L. Distor  Khristine Mae Montas  Leianne Mae P. De Guzman  John Michael A. Castillo  Angelo C. Angeles  Head Teacher  Master Teacher II  Master Teacher III  Teacher III |

#### FACILITATORS / RESOURCE SPEAKER

| 1. | Russel T. Soltura      | Master Teaher II  | Quezon Science HS  |
|----|------------------------|-------------------|--------------------|
| 2. | Jeric M. Ilao          | Teacher III       | Quezon Natonal HS  |
| 3. | Luningning E. De Villa | Master Teacher II | Quezon National HS |
| 4. | Gemma R. Bernardo      | Special Teacher I | Quezon Science HS  |

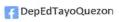




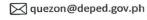














## Department of Education

Region IV-A
SCHOOLS DIVISION OF QUEZON PROVINCE

Enclosure No. 3 to DM No. 000, s. 2024

# ENHANCING SCIENCE INVESTIGATORY PROJECT WRITING SKILLS FOR STEM TEACHERS

November 28 - 30, 2024

#### **Activity Matrix**

| DAY 1         |   |
|---------------|---|
| 6:30 - 7:30   | Registration and Arrival                                    |
| 8:00 - 9:00   | Opening Program   |
| 9:00 - 9:30   | Break   |
|               | Topic 1:  |
| 9:00 - 11:00  | Principles of Science Investigatory Project                 |
|               | Topic 2:  |
| 11:00 - 12:00 | Creating Research Titles                                    |
| 12:00 - 1:00  | LUNCH BREAK1  |
|               | Continuation of Topic 2                                     |
| 1:00 - 2:00   | Creating Research Title                                     |
|               | Creating Research Title                                     |
| 2:00 - 3:00   | Workshop  |
| 3:00 - 3:15   | Snacks  |
| 3:15 - 4:15   | Topic 3: Guidelines of Preparing INTEL Forms                |
| 4:15 - 5:15   | Topic 4: Preparing Project Data Log book and Display Boards |

| DAY 2         |  |
|---------------|--|
| 7:00 - 8:00   | BREAKFAST  |
| 8:00 - 8:15   | MOL  |
| 8:15 - 9:15   | Topic 5: Scienctific Writing fot Research Proposal       |
| 9:15 - 9:30   | SNACKS   |
|               | Continutaion of Topic 5: Scientific Writing for Research |
| 9:30 - 10:30  | Proposal   |
| 10:30 - 12:00 | Workshop   |
| 12:00 - 1:00  | LUNCH BREAK  |
|               | Topic 6: Basic Laboratory Techniques for Materials and   |
| 1:00 - 3:00   | Methods  |
| 3:00 - 3:15   | SNACKS   |
|               | Topic 7: Selecting Appropriate Statistical Tools for the |
| 3:15 - 5:00   | Quantitative Analysis for Science Investigatory Projects |



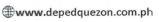
















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Region IV-A SCHOOLS DIVISION OF QUEZON PROVINCE

| DAY 3         |   |
|---------------|---|
| 7:00 - 8:00   | BREAKFAST   |
| 8:00 - 8:15   | MOL   |
|               | Topic 8: Writing a Research Paper for a Research Proposal |
| 8:15 - 9:15   | (IMRAD)   |
| 9:15 - 9:30   | SNACKS  |
|               | Continutaion of Topic 8: Writing a Research Paper for a   |
| 9:30 - 10:30  | Research Proposal (IMRAD)                                 |
| 10:30 - 12:00 | Topic 9: Proogreading and Referencing                     |
| 12:00 - 1:00  | LUNCH BREAK   |
| 1:00 - 2:00   | Workshop  |
| 2:00 - 3:00   | CLOSING PROGRAM   |
| 3:00          | HOME SWEET HOME   |















