



Republic of the Philippines  
**Department of Education**  
REGION III  
SCHOOLS DIVISION OFFICE OF BATAAN

NOV 09 2023

**DIVISION MEMORANDUM**  
No. 426, s. 2023

**DIVISION TRAINING WORKSHOP IN BUILDING A STRONG SCIENTIFIC FOUNDATION FOR ELEMENTARY, JUNIOR, AND SENIOR HIGH SCHOOL TEACHERS ON CONTENT KNOWLEDGE AND PEDAGOGICAL APPROACHES IN IMPROVING SCIENTIFIC LITERACY**

To: Assistant Schools Division Superintendent  
Chief Education Supervisors  
Education Program Supervisors  
Public Schools District Supervisors  
Public and Private Elementary and Secondary School Heads  
All Others Concerned

1. This Office, through the Curriculum Implementation Division announces the conduct of Division Training Workshop in Building a Strong Scientific Foundation for Elementary, Junior, and Secondary School Teachers on Content Knowledge and Pedagogical Approaches in Improving Scientific Literacy to Science teachers on November 14-16, 2023 at Pan Resort and Events Place, Abucay, Bataan.
2. This workshop focuses on enhancing teachers' content knowledge and pedagogical approaches to effectively improve scientific literacy among students based on the result of division assessment and monitoring of National Learning Camp for Science. By providing a combination of theoretical insights, practical strategies, and hands-on activities, this workshop equips teachers with the necessary tools to build a strong scientific foundation in the classroom.
3. The Division Training Workshop aims to:
  - a. enhance teachers' content knowledge in key scientific concepts across grade levels;
  - b. explore effective pedagogical approaches to engage students in scientific inquiry and critical thinking;
  - c. develop strategies for integrating scientific literacy skills into cross-curricular teaching;
  - d. foster collaborative learning environments that promote scientific exploration and problem-solving; and
  - e. provide resources and tools to support ongoing professional development in scientific education.



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4. The participants are the newly hired Science Teachers, and untrained Science teachers from Elementary to Senior High School, Science Department Heads and Elementary School Principal District Coordinators.
5. The participation of teachers shall be subject to the no-disruption-of classes policy stipulated in DO No. 9, s. 2005 titled Instituting Measures to Increase Engaged Time-on-Task and Ensuring Compliance Therewith.
6. Expenses to be incurred in the conduct of this activity shall be charged to School Maintenance and Other Operating Expenses (MOOE) and other local funds subject to usual accounting and auditing rules.
7. Attached is the list of participants, for reference.
8. This Memorandum also serves as travel authority of identified participants.
9. Immediate dissemination of this Memorandum is desired.

**CAROLINA S. VIOLETA, EdD, CESO VI**  
Schools Division Superintendent

FOR THE SCHOOLS DIVISION SUPERINTENDENT

Encls: As stated

Reference: DepEd Order 014, S. 2023  
DepEd 013, s. 2023

**MILAGROS M. PEÑAFLOR, Ph.D.**  
Chief Education Supervisor-CID

To be included in the Perpetual Index  
Under the following subjects:

5  
CONTENT KNOWLEDGE  
PEDAGOGICAL APPROACHES  
SCIENTIFIC LITERACY

CI7  
November 9, 2023



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Enclosure No. 1 to Division Memorandum No \_\_s, 2023

**TRAINING MATRIX**

November 14-16, 2023

Time	Day 1-November 14, 2023	Day 2-November 15, 2023	Day 3-November 16, 2023
8:00 AM - 9:00 AM	Registration/Opening Program	Management of Learning	Management of Learning
9:00 AM – 10:00 AM	<b>Topic 1A: Essential Scientific Content Knowledge:</b>  <b>Subtopic 1:</b> Overview of key scientific concepts across elementary, junior, and secondary school levels  <b>Subtopic 2:</b> Deepening understanding of core scientific disciplines:  Earth Science Biology Chemistry Physics	<b>Topic 1B: Essential Scientific Content Knowledge:</b>  <b>Subtopic 1:</b> Overview of key scientific concepts across elementary, junior, and secondary school levels  <b>Subtopic 2:</b> Deepening understanding of core scientific disciplines:  Earth Science Biology Chemistry Physics	<b>Topic 1C: Essential Scientific Content Knowledge:</b>  <b>Subtopic 1:</b> Overview of key scientific concepts across elementary, junior, and secondary school levels  <b>Subtopic 2:</b> Deepening understanding of core scientific disciplines:  Earth Science Biology Chemistry Physics
10:00 AM – 10:30 AM	<b>SNACKS</b>		
10:30 - 11:30 AM	<b>Topic 2A: Pedagogical Approaches for Scientific Literacy:</b>  <b>Subtopic 1:</b> Inquiry-based learning strategies to promote student engagement and curiosity  <b>Subtopic 2:</b> Effective teaching methods for developing critical thinking and problem-solving skills  <b>Subtopic 3:</b> Differentiated instruction	<b>Topic 2B. Pedagogical Approaches for Scientific Literacy:</b>  <b>Subtopic 1:</b> Inquiry-based learning strategies to promote student engagement and curiosity  <b>Subtopic 2:</b> Effective teaching methods for developing critical thinking and problem-solving skills  <b>Subtopic 3:</b> Differentiated instruction	<b>Topic 2C. Pedagogical Approaches for Scientific Literacy:</b>  <b>Subtopic 1:</b> Inquiry-based learning strategies to promote student engagement and curiosity  <b>Subtopic 2:</b> Effective teaching methods for developing critical thinking and problem-solving skills  <b>Subtopic 3:</b> Differentiated instruction



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	<i>to accommodate diverse learning styles and abilities.</i>	<i>to accommodate diverse learning styles and abilities.</i>	<i>to accommodate diverse learning styles and abilities.</i>
11:30 AM – 12:00 NN	<b>Integrative Workshop</b>		
12:00 NN – 1:00 PM	<b>LUNCH</b>		
1:00 PM – 2:00 PM	<b>Topic 4A. Integrating Scientific Literacy across Subjects:</b>  <b>Subtopic 1:</b> <i>Cross-curricular connections to promote interdisciplinary learning</i>  <b>Subtopic 2:</b> <i>Infusing scientific literacy skills</i>  <b>Subtopic 3:</b> <i>Collaboration opportunities for teachers across different subject areas/grade levels</i>	<b>Topic 4B. Integrating Scientific Literacy across Subjects:</b>  <b>Subtopic 1:</b> <i>Cross-curricular connections to promote interdisciplinary learning</i>  <b>Subtopic 2:</b> <i>Infusing scientific literacy skills</i>  <b>Subtopic 3:</b> <i>Collaboration opportunities for teachers across different subject areas/grade levels</i>	<b>Topic 4C. Integrating Scientific Literacy across Subjects:</b>  <b>Subtopic 1:</b> <i>Cross-curricular connections to promote interdisciplinary learning</i>  <b>Subtopic 2:</b> <i>Infusing scientific literacy skills</i>  <b>Subtopic 3:</b> <i>Collaboration opportunities for teachers across different subject areas/grade levels</i>
2:00 PM – 3:00 PM	<b>Topic 5A: Hands-on Science Experiments and Activities:</b>  <b>Subtopic 1:</b> <i>Practical demonstrations of engaging science experiments and demonstrations</i>  <b>Subtopic 2:</b> <i>Designing and implementing inquiry-based investigations</i>  <b>Subtopic 3:</b> <i>Using technology and resources to enhance hands-on learning experiences</i>	<b>Topic 5B: Hands-on Science Experiments and Activities:</b>  <b>Subtopic 1:</b> <i>Practical demonstrations of engaging science experiments and demonstrations</i>  <b>Subtopic 2:</b> <i>Designing and implementing inquiry-based investigations</i>  <b>Subtopic 3:</b> <i>Using technology and resources to enhance hands-on learning experiences</i>	<b>Topic 5C: Hands-on Science Experiments and Activities:</b>  <b>Subtopic 1:</b> <i>Practical demonstrations of engaging science experiments and demonstrations</i>  <b>Subtopic 2:</b> <i>Designing and implementing inquiry-based investigations</i>  <b>Subtopic 3:</b> <i>Using technology and resources to enhance hands-on learning experiences</i>
3:00 PM – 3:30 PM	<b>Snacks</b>		



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3:30 PM – 4:30 PM	<b>Topic 6A: Assessment Strategies for Scientific Literacy</b>  <b>Subtopic 1:</b> Formative and summative assessment approaches to evaluate scientific understanding  <b>Subtopic 2:</b> Authentic assessment methods to gauge student mastery of scientific concepts  <b>Subtopic 3:</b> Providing constructive feedback to foster continuous improvement	<b>Topic 6B: Assessment Strategies for Scientific Literacy</b>  <b>Subtopic 1:</b> Formative and summative assessment approaches to evaluate scientific understanding  <b>Subtopic 2:</b> Authentic assessment methods to gauge student mastery of scientific concepts  <b>Subtopic 3:</b> Providing constructive feedback to foster continuous improvement	<b>Topic 6C: Assessment Strategies for Scientific Literacy</b>  <b>Subtopic 1:</b> Formative and summative assessment approaches to evaluate scientific understanding  <b>Subtopic 2:</b> Authentic assessment methods to gauge student mastery of scientific concepts  <b>Subtopic 3:</b> Providing constructive feedback to foster continuous improvement
4:30 PM – 5:00 PM	Integrative Workshop		Closing Program
EMCEE	<b>Pollen Grain C. Paguio</b>	<b>Argee Atuan</b>	<b>Shy-Anne N. Santos</b>



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Enclosure No. 2 to Division Memorandum No. 5, 2023

### LIST OF PARTICIPANTS

No	District	ELEMENTARY PARTICIPANTS			
		Science Teacher (1)	Science Teacher (2)	Science Teacher (3)	Science Teacher (4)
1	Dinalupihan West (4)	Razon, Ma. Theresa C.	San Pablo ES	Dimalanta, Adonis Angel M.	Bernaldo, Mariel S.
2	Dinalupihan East (4)	Ronquillo, Ardie S.	Pagalanggang ES	Quiambao, Gelliza	Dinalupihan ES
3	Hermosa (4)	Basi, Ma. Razzel	SMVPL MIS	De Guia, Laksmi A.	Maite IS
4	Orani (4)	Singca, Darwin James R.	Legua IS	Eugenio, Ma. Cristina	Pulo IS
5	Samal (4)	Bugay, Glomar H.	Lalawigan ES	Capiral, Maria Camille M.	Tolentino, Cherry Rose R.
6	Abucay (4)	Manrique, Edelyn T.	Hacienda ES	Boniquit, Joylene F.	Bangkal ES
7	Bagac (4)	Tuaño, Cherry C.	Bagac ES	Gatdula, Jense C.	Parang ES
8	Morong (4)	Manalo, John Kevin V.	Minanga ES	Sacramento, Kris Fatima V.	Nagbalayong ES

Kabukiran, Calayayan, Abucay 2114 Bataan

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www.facebook.com/DepedBataan



Outstanding Quality Excellence

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9	Pilar (4)	Sangalang, Thelma T.	Balut ES	Lopez, Divina Roma A.	Panilao ES	Gajisan, Rjen M.	Alauli ES	Abad, Julie Anne C.	Wakas ES
10	Orion (4)	Bernaldo, Virginia G.	Pablo Roman ES	Ofrecio, Mariz D.	Sabatan ES	Bautista, Rona D.	Puting Buhangin ES	Tigue, Camille Jane S.	Capunitan ES
11	Limay (4)	Tanguild, Sabrina C.	Lamao ES	Mendoza, Bienna	Lamao ES	Dando, Jefferson	Lamao ES	Sapico, Christine A.	Duale ES
12	Mariveles (6)	Muñoz, Shiela Mae	Cabcaben ES	Constante, Nescelle Mae M.	Ipag ES	Marquez, Elenita M.	Mt. View ES	Viray, Christian May	AGLES
	Mariveles	Lumibao, Princess B.	Balon ES	Montabon , Joan L.	Sisman ES				

### JUNIOR HIGH SCHOOL PARTICIPANTS

JUNIOR HIGH SCHOOL PARTICIPANTS									
No	District	Science Teacher (1)	Science Teacher (2)	Science Teacher (3)	Science Teacher (4)	Science Teacher (5)			
		Name (Surname, First Name, MI)							
1	Dinalupihan West (6)	Ebuenga, Lerma B.	Magsaysay NHS	Esmale, Maeve S.	Roosevelt NHS	Gelido, Nauvie Vera M.	Vispo, Marcialyn B.	Luakan NHS- Annex	Wright, Dennilyn JCPJRMHS
2	Dinalupihan East (6)	Reyes, Sta. Lucia High School	Waje, Lyndel L.	Pagalanggang Divine Grace E.	Borbon, Pagalanggang NHS	De Guzman, Abigail M.	Layac IS	Valdez, Adrian John	Tucop IS



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3	Hermosa (5)	Sulit, Rachelle Ann C.	Balsik NHS	Susi', Ericka A.	Hermosa NHS -Main	Cruz, Medalla Era S.	Balsik NHS	Reglos, Rica	Llamzon, Ivan Rhey O.	HNHS-main	Ponce, Nikki Pauline M.	HNHS-ANNEX
4	Orani (5)	Rodriguez, Minelli C.	Orani NHS-Main	Amparado, Cherrilyn P.	Legua IS	Cruz, Ruzzel	Pulo IS		Doña IS	Santos, Lalaine S.	Orani NHS	
5	Samal (5)	Estrada, Marian Elaine D.	FC del Rosario IS	Capule, Ana Margarita	Palili IS	Parilla, Irene M.	Samal NHS Annex	Cruz, Maria Anya Godiva V.	Samal NHS-Main	Enriquez, Jesy L.	Samal NHS Annex.	
6	Abucay (5)	Auditor, Avelina E.	Bangkal HS	Baltazar, Sylvia	Mabatang HS	Arimao, Marinell N.	BCNHS (Abucay HS)	Viloria, Alma D.	BCNHS	Valentos, Rica C..	BCNHS	
7	Bagac (5)	Mercado, Villorita M.	Bagac NHS - Parang	Magat, Jean T.	Saysain High School	Apales, Leonardo M.	ECBernabe NHS	Morales, Maricel M.	ECBernabe NHS	Vicencio, Jeffrey D.	ECBernabe NHS	
8	Morong (5)	Navarro, Jazmae M.	Nagbalayong NHS	Dela Cruz, Anita	Morong NHS	Perez, Jayrra D.	Morong NHS	Sulangi, Daisy C.	Samapaloc IS	Mangalindan, Jennifer B.	MNHS-Mabayo Annex	
9	Pilar (5)	Laweng, Dr Victoria B	Aguiar, Roman MHS	Dr Victoria B Aguilera L.	Marcaida, Roman MHS	Dr Victoria B Amelia T.	Dr Victoria B Roman MHS	Diwa, Noime S.	Baduel, Merrylie M.	PRNHS	PRNHS	
10	Orion (5)	Bernabe, Katherine E.	JEAGMHS	Isidro, Ann Lylwynn B.	Bagtas, Joyner Kersey S.	BSF	Delariaye, Manilyn B.	BSF	Martinez, Lyka N.	Udyong NHS		
11	Limay (5)	Siasat, Jessa Q.	Limay Junior HS	Quiroz, Emmanuel St.Francis JHS	Buan, Jhuner	Lamao JHS	Omaguing, Arshe Rina N.	Limay JHS	Cababan, Danicar C.	Limay JHS		
12	Mariveles (7)	Peralta, Rea S.	MNHS Malaya	Balbas, Maripe, D.	Foronda, Ashley, B.	MNHS Alasasin	Basco, Niña Rose C.	MNHS Alasasin	Peñaranda, Edgar, Z.	MNHS Alasasin		



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	Salonga, Ma. Faith, P.	MNHS Sisman	Bello, Danica L.	Bongcawel, Sarah Jane P.	MNHS- Poblacion	Escarmosa , Jacqueline R.	MNHS- Cabcaben
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No	District	SENIOR HIGH SCHOOL PARTICIPANTS					
		Science Teacher (1)	Science Teacher (2)	Science Teacher (3)	Name (Surname, First Name, MI)	Name (Surname, First Name, MI)	Name (Surname, First Name, MI)
1	Dinalupihan West (4)	Caling, Raymond O.	Magsaysay NHS	Borbon, Roger Joseph E.	Luakan NHS	Fajilan, Flora Danica D.	Jose C. Payumo MHS
2	Dinalupihan East (4)	Mendoza, Aleli R.	Sta. Lucia High School	Embile, Ysabel Angela V.	Pagalanggang NHS	Villareal, Hanna Faith E.	Pagalanggang NHS
3	Hermosa (3)	Antonio Jr, Edison I.	Balsik NHS	Garcia, Jennica Mae A.	Hermosa NHS-Main	Muli, Merryel Joy A.	HNHS-ANNEX
4	Orani (3)	Santos, Mark Anthony Y.	Legua IS	Santos, Karen Gay S.	Orani NHS Parang-Parang SHS	Senobio, Shane M.	Orani NHS- SHS
5	Samal (3)	Cayanan, Ma. Renalyn R.	Samal NHS SHS	Makilan, Marie May M.	Samal NHS SHS	Cruz, Joriel J.	Samal NHS SHS
6	Abucay (3)	Macalinao, Maria Concepcion V.	Bangkal HS	Atuan, Argee	Mabatang HS	De Guzman, Janeleen M.	BCNHS
7	Bagac (3)	Santos, Shy-Anne N.	Bagac NHS - Parang	Quicho, Rose Ann I.	ECBernabe NHS SHS	Limson , Erecon Mari B.	ECBernabe NHS SHS
8	Morong (3)	Cruz, Bernadeth Joy T.	Kanawan IS	Santos, Karen Rose P.	MNHS-Mabayo Annex	Duran, Jenny Lyn Q.	Morong NHS SHS



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ES PRINCIPAL DISTRICT COORDINATORS			SCIENCE DEPARTMENT HEADS		
9 Pilar (3)	Paguiio, Pollen Grain C.	Dr Victoria B Roman M HS	Hufalar, Maryneth S.	Pablo Roman NHS	Basa, Rebecca A.
10 Orion (3)	Arriola, Karen Anne G.	JEAGMHS	Serrano, Jessa Mae H.	BSF	Casuga, Julius H.
11 Limay (3)	Acuña, Jaissa Mainick R.	St.Francis SHS	Ramos, Ana Marie	St.Francis SHS	Miranda, Ma.Venice B.
12 Mariveles (4)	Sanchez, Nelly Ann, O.	MSHS Sitio Mabuhay	Vibar, Carhia A.	MSHS Sitio Mabuhay	Lapid, Kate, E.
	Basco, Niña Rica C.	MNHS Malaya	Pineda, Maurice A.	Luakan NHS- Annex	Sta. Lucia High School
1 Abucay North ES	Ana Liza V. Dominguez	SP-I	1 EC Bernabe NHS	Julieta M. Agcaoile	HT III
2 Bagac ES	Jessica A. Torres	P-II	2 Magsaysay NHS	Mayla L. Constantino	HT III
3 Dinalupihan ES	Jane D. Robles	P-IV	3 Balsik NHS	Maria Cecilia D. Flores	HT III
4 Luakan ES	Mary Ann M. De Mesa	P-III	4 BSF	Mary Ann A. Del Rosario	HT III
5 Culis ES	Emely B. Agustin	P-I	5 MNHS Cabcaben	Salvacion F. Dagdag	HT III
6 Facundo Angeles MES	Ma. Linda V. Manzano	P-I	6 JEAGMHS	Evelyn C. Quicho	HT III
7 Orani South ES	Christian N. Carizal	P-II	7 Morong NHS	Neri D. Mangalindan	HT III
8 Palili IS	Jeania L. De Los Santos	P-I	8 Hermosa NHS	Aileen J. Macaspac	HT III
9 Arsenal ES	Charina A. Morales	P-II	9 Pagalanggang NHS	Cherile B. Mendoza	HT III
10 Ipag ES	Maria May S. Forio	P-II	10 JCPMHS	Menandro S. Reyes	HT III



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11	Bilolo ES	Jhenie R. Agustin	P-I
12	Diwa ES	Janny de Leon Manila	ASP-II

11	Hermosa Annex	Rose Anne P. Pangilinan	HT III
12	B Camacho NHS	Eloisa T. San Juan	HT III
13	Luakan NHS	Erasto G. Agkis	HT III
14	Parang Parang NHS	Evelyn Perez	HT III
15	MNHS Poblacion	Deo Derro L. Ducot	HT III