



Republic of the Philippines
Department of Education
Region III
SCHOOLS DIVISION OF BULACAN

March 19, 2024

DIVISION MEMORANDUM

No. 43, s. 2024

**ENHANCING SPECIAL CURRICULAR PROGRAMS IN SCIENCE THROUGH
QUIDBOTS: ROBOTICS IN SCIENCE EDUCATION**

To: Division Chiefs
Public Schools District Supervisors
All Public Elementary School Heads
All Public Secondary School Heads
All Others Concerned

1. The Schools Division of Bulacan announces the conduct of the training-workshop in *Enhancing Special Curricular Programs in Science through QuidBots: Robotics in Science Education*. The three-day activity will be on May 17-18 & 24, 2024 at Casa Cirila Pavilion and Resort, Bulihan Dulo, Plaridel, Bulacan.
2. In response to the BULAKENYO Flagship Program of Nurturing teachers with competencies to improve efficiency and teaching performances making learners future-ready and equipped with 21st-century skills, the activity aims to:
 - a. retool science teachers with the robotics learning kits for learners of the Special Curricular Program in Science;
 - b. upskill science teachers with the basics of building and programming language for QuidBots kits; and
 - c. capacitate science teachers to craft lesson exemplars and session guides that integrate the use of QuidBots kits in SSES science, computer science, and basic electronics subjects.
3. The participants of this activity are the Grades 5 & 6 teachers of the SSES, Computer Science teachers, and Basic Electronics teachers of the STE Program. This memorandum serves as the travel authority of participants.
4. Expenses to be incurred in the conduct of the training-workshop shall be charged to the Division INSET fund while the transportation expenses of the participants shall be charged to school's Maintenance and Other Operating Expenses (MOOE) subject to the usual accounting and auditing rules and regulations.
5. Attached herewith are the training matrix and the list of participating schools for reference.
6. Wide and immediate dissemination of this memorandum is earnestly desired.


NORMA P. ESTEBAN, EdD, CESO V
Schools Division Superintendent

Encls.: As stated



Republic of the Philippines
Department of Education
Region III
SCHOOLS DIVISION OF BULACAN

Enclosure No. 1 Training Matrix in Enhancing Special Curricular Programs in Science through QuidBots: Robotics in Science Education

Table 1. TRAINING MATRIX OF THE DIVISION TRAINING-WORKSHOP

Date/Time	Activity	Speaker/Facilitator
Day 1 (Friday, 17 May 2024)		
7:30 – 8:00 AM	Arrival/Registration/	TWG
8:00 – 8:30 AM	Opening Program	TWG
8:30 – 10:00 AM	Session 1 I. Introduction to Robotics a. Basic Definition b. Input-Process-Output c. Brands d. Application of Robotics in SSES and STE	Learning Facilitators and Speakers
10:00 – 10:30 AM	Health Break	
10:30 – 12:15 NN	Session 2 II. IPO Model in Robotics a. Sensors b. Micro-Controller c. Actuators	Learning Facilitators and Speakers
12:15 – 1:00 PM	Lunch Break	
1:00 – 2:45 PM	Session 3 III. Basic Electronics a. Circuits b. Electronic Components Common in Robotics	Learning Facilitators and Speakers
2:45 – 3:15 PM	Health Break	
3:15 – 5:00 PM	Session 4: c. Common Tools Used in Electronics d. Hands-on Activity on Basic Electronics	Learning Facilitators and Speakers
Day 2 (Saturday, 18 May 2024)		
7:30 – 8:00 AM	Arrival/Registration/	TWG
8:00 – 8:30 AM	Management of Learning (MOL)	TWG/Participation
8:30 – 10:00 AM	Session 5 IV. Basic Coding a. Algorithm b. Creation of Algorithm (Flow Chart)	Learning Facilitators and Speakers
10:00 – 10:30 AM	Health Break	
10:30 – 12:15 PM	Session 6	Learning Facilitators and Speakers



Republic of the Philippines
Department of Education
Region III
SCHOOLS DIVISION OF BULACAN

	a. Introduction to QuidBots b. Input-Process-Output model using QuidBots	
12:15 – 1:00 PM	Lunch Break	
1:00 – 2:30 PM	Session 7: Hands-On Activity on QuidBots	Participants
2:30 – 3:00 PM	Health Break	
3:00 – 5:00	Session 8: Workshop/Crafting of Lesson Exemplars and Activity Sheets using QuidBots	Participants
Day 3 (Friday, 24 May 2024)		
7:30 – 8:00 AM	Arrival/Registration/	TWG
8:00 – 8:30 AM	Management of Learning (MOL)	TWG/Participants
8:30 – 10:00 AM	Presentation of SSES Outputs	Participants
10:00 – 10:30 AM	Health Break	
10:30 – 12:15 PM	Critiquing	Participants
12:15 – 1:00 PM	Lunch Break	
1:00 – 2:30 PM	Presentation of STE Outputs	Participants
2:30 – 3:00 PM	Health Break	
3:00 – 5:00 PM	Critiquing Closing Program and Awarding of Certificates	Participants TWG



Republic of the Philippines
Department of Education
Region III
SCHOOLS DIVISION OF BULACAN

Enclosure No. 2 List of Participating Schools in the Training-Workshop on Enhancing Special Curricular Programs in Science through QuidBots: Robotics in Science Education and List of Training-Writershop Organizer/Resource Speakers/TWG

Table 2. NUMBER OF PARTICIPATING TEACHERS OF SSES/STE IMPLEMENTERS

Name of School	District	Teacher-Participant
SSES Implementers		
1. Matias A. Fernando MS	Angat	Grade 5 or Grade 6
2. Francisco F. Illescas ES	Angat	Grade 5 or Grade 6
3. Balagtas Central School	Balagtas	Grade 5 or Grade 6
4. Cong. Erasmo R. Cruz MCS	Bocaue	Grade 5 & Grade 6
5. Lolomboy ES	Bocaue	Grade 5 or Grade 6
6. Northville ES	Bocaue	Grade 5 or Grade 6
7. St. Martha ES	Bocaue	Grade 5 or Grade 6
8. Gen. Gregorio Del Pilar IS	Bulakan	Grade 5 & Grade 6
9. Bambang ES	Bulakan	Grade 5 or Grade 6
10. Bonga Menor ES	Bustos	Grade 5 or Grade 6
11. Bustos ES	Bustos	Grade 5 or Grade 6
12. Liciada ES	Bustos	Grade 5 or Grade 6
13. F. Mendoza Memorial ES	Calumpit North	Grade 5 or Grade 6
14. San Marcos ES	Calumpit South	Grade 5 or Grade 6
15. Calumpit Central School	Calumpit South	Grade 5 or Grade 6
16. Guiguinto Central School	Guiguinto	Grade 5 & Grade 6
17. Malis ES	Guiguinto	Grade 5 or Grade 6
18. Sta. Rita Elementary School	Guiguinto	Grade 5 or Grade 6
19. Hagonoy East Central School	Hagonoy East	Grade 5 or Grade 6
20. Hangga Elementary School	Hagonoy East	Grade 5 or Grade 6
21. Timoteo Policarpio Memorial ES	Norzagaray East	Grade 5 or Grade 6
22. San Pascual ES	Hagonoy West	Grade 5 or Grade 6
23. Hagonoy West Central School	Hagonoy West	Grade 5 or Grade 6
24. Marilao Central Integrated School	Marilao South	Grade 5 & Grade 6
25. Prenza ES	Marilao North	Grade 5 or Grade 6
26. Norzagaray ES	Norzagaray West	Grade 5 or Grade 6
27. Obando Central School	Obando	Grade 5 or Grade 6
28. Paco Elementary School	Obando	Grade 5 or Grade 6
29. San Pascual Elementary School	Obando	Grade 5 or Grade 6
30. Bunsuran ES	Pandi South	Grade 5 or Grade 6
31. Paombong Central School	Paombong	Grade 5 or Grade 6
32. Banga ES	Plaridel	Grade 5 or Grade 6
33. Plaridel ES	Plaridel	Grade 5 & Grade 6
34. Pulilan Central School	Pulilan	Grade 5 & Grade 6
35. Segundo Esguerra Sr. MES	Pulilan	Grade 5 or Grade 6
36. Inaon Integrated School	Pulilan	Grade 5 & Grade 6
37. Sto. Cristo ES	Pulilan	Grade 5 or Grade 6
38. Balatong ES	Pulilan	Grade 5 or Grade 6
39. San Ildefonso ES	San Ildefonso North	Grade 5 & Grade 6



Republic of the Philippines
Department of Education
Region III
SCHOOLS DIVISION OF BULACAN

40. Anyatam ES	San Ildefonso North	Grade 5 or Grade 6
41. Pinaod Central School	San Ildefonso South	Grade 5 or Grade 6
42. Malipampang ES	San Ildefonso South	Grade 5 or Grade 6
43. San Miguel ES	San Miguel South	Grade 5 & Grade 6
44. Don Felix De Leon MS	San Miguel South	Grade 5 or Grade 6
45. Tartaro ES	San Miguel Central	Grade 5 or Grade 6
46. San Miguel North Central School	San Miguel North	Grade 5 & Grade 6
47. Maguinao ES	San Rafael West	Grade 5 & Grade 6
48. San Rafael CS	San Rafael East	Grade 5 or Grade 6
49. Caingin ES	San Rafael East	Grade 5 or Grade 6
50. San Roque ES	San Rafael West	Grade 5 or Grade 6
51. Sta. Maria Central School	Sta. Maria Central	Grade 5 or Grade 6
52. Sta. Cruz ES	Sta. Maria Central	Grade 5 or Grade 6
53. M.M. Cruz Memorial School	Sta. Maria Central	Grade 5 or Grade 6
54. Sta. Clara ES	Sta. Maria Central	Grade 5 or Grade 6
55. Jose Juan Serapio ES	Sta. Maria Central	Grade 5 or Grade 6
56. Guyong ES	Sta. Maria Central	Grade 5 or Grade 6
57. Cornelia M. De Jesus MCS	Sta. Maria West	Grade 5 & Grade 6
58. Cay Pombo ES	Sta. Maria West	Grade 5 or Grade 6
59. Parada ES	Sta. Maria East	Grade 5 or Grade 6
60. San Vicente Gulod ES	Sta. Maria East	Grade 5 or Grade 6
Total SSES Teacher-Participants		72
STE Program Implementers		
61. Calumpit NHS	Calumpit South	CS 7 & CS 8, BElex 10
62. San Roque NHS	Paombong	CS 7 & CS 8
63. Bajet-Castillo HS	Pulilan	CS 7 & CS 8, BElex 10
64. Aguinaldo J. Santos NHS	Bustos	CS 7 & CS 8
65. Alexis G. Santos NHS	Bustos	CS 7 & CS 8, BElex 10
66. Dr. Felipe De Jesus NHS	Plaridel	CS 7 & CS 8, BElex 10
67. San Ildefonso NHS	San Ildefonso North	CS 7 & CS 8
68. San Miguel NHS	San Miguel South	CS 7 & CS 8, BElex 10
69. Carlos F. Gonzales HS	San Rafael West	CS 7 & CS 8, BElex 10
70. AFG Bernardino MTS	Marilao South	CS 7 & CS 8, BElex 10
71. Prenza NHS	Marilao North	CS 7 & CS 8, BElex 10
72. Obando NHS	Obando	CS 7 & CS 8
73. Balagtas NAS	Balagtas	CS 7 & CS 8
74. Bunsuran NHS	Pandi South	CS 7 & CS 8
75. Pres. Diosdado Macapagal MHS	Angat	CS 7 & CS 8
76. Norzagaray NHS	Norzagaray West	CS 7 & CS 8, BElex 10
77. F.F. Halili NAS	Sta. Maria Central	CS 7 & CS 8, BElex 10
78. Parada NHS	Sta. Maria East	CS 7 & CS 8, BElex 10
79. Pulong Buhangin NHS	Sta. Maria West	CS 7 & CS 8, BElex 10
Total STE Teacher-Participants		50

Name of Teacher	Role/Task	School
80. Nica Marie B. Magisa, HT-III	Resource Speaker	Parada NHS
81. Jaehadd Lou Untalan, T-III	Resource Speaker	Bajet-Castillo HS



Republic of the Philippines
Department of Education
Region III

SCHOOLS DIVISION OF BULACAN

82. Conrad A. Populi, T-III	Resource Speaker	Bunsuran NHS
83. Joan T. Buluran, HT-III	TWG STE	Dr. PV Mendoza, Sr. HS
84. Beverly V. Basilio, HT-III	TWG STE	Lolomboy NHS
85. Meriam H. Roldan, HT-III	TWG STE	FVR NHS
86. Maricel M. Sosa, HT-III	TWG SSES	Maronquillo NHS
87. Jayson B. Eugelio, T-III	TWG SSES	Carlos F. Gonzales HS
88. Patrick Henry Eusebio, T-III	TWG SSES	Dr. Felipe De Jesus NHS
89. Espy S. Balbuena, MT-I	TWG SSES	AFG Bernardino MTS
90. Phoebe Grace D. Biol, T-III	TWG SSES	Prenza NHS
91. Maria Nimfa M. Concepcion, T-III	TWG SSES	AFG Bernardino MTS
Total Number of Support Team		12