



Republic of the Philippines  
Department of Education  
Region V  
**SCHOOLS DIVISION OFFICE OF SORSOGON**  
Capitol Compound, Sorsogon City



April 30, 2019

**DIVISION MEMORANDUM**

No. 77, s. 2019

To: Asst. Schools Division Superintendent  
SGOD and CID Chiefs  
Education Program Supervisors/ Specialist Concerned  
Secondary School Principals of STEM Schools  
Others Concerned

**EDUCATORS' WORKSHOP ON DESIGN THINKING PROCESS  
FOR THE STEAM ( SCIENCE, TECHNOLOGY, ENGINEERING, AGRICULTURE,  
AND MATHEMATICS) PROGRAM FOR SENIOR HIGH SCHOOL-STEM**

1. With the desire to capacitate personnel in developing and sustaining a culture of research and innovation along the implementation of STEAM (Science, Technology, Engineering, Agriculture, and Mathematics) Program for Senior High School-STEM, SDOs of Sorsogon Province and Sorsogon City Divisions in partnership with the Unilab Foundation will sponsor the conduct of the **Educators' Workshop on Design Thinking Process for the STEAM Program for SHS-STEM on May 6-8, 2019 at Sorsogon National High School, Sorsogon City.**
2. At the end of the three-day workshop, participants are expected to:
  - a. define STEM Education in response to Industry 4.0;
  - b. identify components of high-quality STEM Education;
  - c. discuss appropriate technology support for STEAM research and innovation in senior high school;
  - d. analyze processes involved in design thinking process (DTP);
  - e. demonstrate problem finding strategies;
  - f. collaborate within a group and identify a community-based/ industry-aligned/academe-inspired problem to be solved;
  - g. generate solutions for the identified community-based/industry-aligned/ academe-inspired problem;
  - h. develop a prototype solution;
  - i. demonstrate ways of communicating solutions and redesigns;
  - j. discuss ways of monitoring students' progress during DTP; and
  - k. use rubrics for assessing DTP outputs.
3. This activity shall be attended in by one hundred forty (140) participants from the 12 STEM schools of Sorsogon Province and Sorsogon City Divisions, moderators and facilitators from CISTEM/ DepEd-CO/ULF/Pointwest, observers/guests from Bicol University/SSU Laboratory School/ Aboitiz, and working committees/ support staff.

4. Enclosed are the following:
  - a. List of participants from Sorsogon Province Division
  - b. Program of Activities
  
5. Participants shall be granted with 3 days service credits/COC pursuant to DepEd Order No. 53, s. 2003.
  
6. Sorsogon City Division, being the host division shall sponsor the meals (snacks and lunch) of the participants for day 1 and day 3, while Sorsogon province division will sponsor the participants' meals (snacks and lunch) for day 2, which is chargeable against Division MOOE. Expenses of participants from the schools that include meals (breakfast and dinner), accommodation, transportation and other incidental expenses shall be charged against local funds/school MOOE subject to the usual accounting and auditing rules and regulations.
  
7. For information, dissemination and compliance of all concerned.

  
**LOIDA N. NIDEA, Ed.D., CESO V**  
*Schools Division Superintendent*

**EDUCATORS' WORKSHOP ON DESIGN THINKING PROCESS  
FOR THE STEAM ( SCIENCE, TECHNOLOGY, ENGINEERING, AGRICULTURE, AND MATHEMATICS) PROGRAM FOR SENIOR HIGH SCHOOL-STEM**

May 6-8, 2019/ Sorsogon National High School, Sorsogon City

**LIST OF PARTICIPANTS**

PARTICIPANTS from SDO-Sorsogon (OSDS/CID/SGOD)		
SDS	SGOD Chief	CID Chief
ASDS	SGOD EPS/ Senior HS Coordinator	CID EPS-I (Science, Math, TLE/TVL,)
Division ICT Officer	HRTD EPS-II	

No.	STEM School	List of Participants from STEM Schools				
		School Principal	Science Teachers	Math Teachers	Research Teachers	TVL Coordinator
1	Gallanosa NHS	Nancy T. Bajamundi	Mary Ann J. Lacra Lawrence Ann L. Mendina Ester T. Gonzales	Grazielle R. Tan Aurora B. Rojo Lorena B. Obida	Jeanilyn F. Banania Madelyn A. Gigantone Jared A. Gimpao Alona Jane H. Arellano	Ailen S. Laguda
2	Bulan NHS	Salve E. Ferreras	Maria Charlene D. Dipad * Rey Eugene G. Lee * Ernie G. Guan Maria Imma Concepcion C. Esteves	Arian E. Granado Karen B. Gutlay Mercy A. Gamba	April Pauline F. Arevalo Christina G. Guañizo	Jose Norman B. Gamba
3	Gubat NHS	Ramon P. Estur	Jennifer D. Cordinete	Leo J. Hubilla	Homer E. Ereño	Nora E. Estabaya
4	Donsol NCHS	Evangeline M. Datar	Jasmin C. Molleno Jinky R. Orenciada Ronald L. Lomerio *	Shem Rei G. Cervantes Francis C. Razo Ronald J. Desulo * Eza C. Razo	Julius Caesar P. Averilla Joseph Rey M. Alim	Gracia F. Fumera
5	Matnog NHS	Amadeo O. Laguda	Ivy G. Barcelona Marivic G. Hadap * Addie E. Azurin	Albert C. Mendiola	Marilyn F. Balasta	Evelyn F. Hispano
6	Bulusan NHS	Ave E. Mendizabal	Aaron A. Funa *	Nenita D. Bagadiong	Jay N. Beltran	Jean T. de Los Santos
7	Cumadcad NHS	Josephine L. Villaruel,	Judith N. Añonevo Lyza M. Manalo	Ronnel L. Delloza	Sarah Jane T. Lagata Argielyn D. Samson	Noel L. Lafuente
8	Casiguran TVS	Alex A. Rodriguez	Jocelyn A. Gueta	Charlie D. Desabayla	Jose Ramil E. Enteria	Henry L. Mendez Jr.
9	Juban NHS	Josephine B. Enteria	Roman B. Jebulan	Armaly F. Detoito	Renee E. Corpus	Elena D. Adajar
		9	19	16	15	9

\* Teachers with Research subject



**Educators' Workshop on Design Thinking Process  
Sorsogon City National High School, Sorsogon City  
May 6-8, 2019**

**OBJECTIVES**

At the end of the three-day workshop, participants are expected to:

1. define STEM Education in response to Industry 4.0
2. identify components of high-quality STEM Education
3. discuss appropriate technology support for STEAM research and innovation in senior high school
4. analyze processes involved in design thinking process (DTP)
5. demonstrate problem finding strategies
6. collaborate within a group and identify a community-based/industry-aligned/academe-inspired problem to be solved
7. generate solutions for the identified community-based/industry-aligned/academe-inspired problem
8. develop a prototype solution
9. demonstrate ways of communicating solutions and redesigns
10. discuss ways of monitoring students' progress during DTP
11. use rubrics for assessing DTP outputs

**PROGRAM**

**May 6, 2019 | Monday**

8:00AM 8:30AM	Registration for Day 1	
8:30AM 9:00AM	Opening Program	Dr. Lorna Dino Dr. Loida Nidea Dr. Nympha Guemo Ms. Lilibeth Aristorenas
9:00AM 10:30AM	Framing the Workshop: STEAM Innovation Program	Sher Monterola
10:30AM 10:45AM	Coffee Break	
10:45AM 11:15PM	STEAM Research and Innovation Agenda for Sorsogon SHS	Sher Monterola
11:15AM 12:00NN	Technology support for STEAM Research and Innovation (IoT)	Sherwin Pelayo (Pointwest)
12:00NN 1:00PM	Lunch	
1:00PM 2:00PM	Technology support for STEAM Research and Innovation	Sherwin Pelayo (Pointwest)



2:00PM 3:00PM	<b>Session 1: Design Thinking Process</b>	Sher Monterola
3:00PM 3:15PM	Coffee Break	
3:15PM 5:30PM	<b>Session 2: Empathize</b> Strategies for empathizing with the community	Wina Paderna

**May 7, 2019 | Tuesday**

8:00AM 8:30AM	Registration for Day 2	
8:30AM 9:00AM	Key Takeaways from Day 1	Selected participants
9:00AM 10:00AM	<b>Session 3: Define</b> Problem finding strategies	Wina Paderna
10:00AM 10:15AM	Coffee Break	
10:15AM 11:00AM	Continuation of Session 3	Wina Paderna
11:00AM 12:00NN	<b>Session 4: Generate</b> Strategies for generating ideas	Sher Monterola
12:00NN 1:00PM	Lunch	
1:00PM 3:00PM	Continuation of Session 4	Sher Monterola
3:00PM 3:15PM	Coffee Break	
3:15PM 4:00PM	Continuation of Session 4	Sher Monterola
4:00PM 5:00PM	<b>Session 5: Positive STEM Education</b> Resilience, mindfulness, and relaxation techniques	Sabrina Ongkingko

**May 8, 2019 | Wednesday**

8:00AM 8:30AM	Registration for Day 3	
8:30AM 9:00AM	Key Takeaways from Day 2	Selected participants
9:00AM 10:00AM	<b>Session 6: Distill</b> Strategies for choosing best possible solution	Nympha Joaquin
10:00AM 10:15AM	Coffee break	
10:15AM 11:15AM	Continuation of Session 6	Nympha Joaquin
11:15AM 12:30PM	<b>Session 7: Test, Create, and Communicate</b>	Sabrina Ongkingko
12:30PM 1:30PM	Lunch	



1:00PM 2:30PM	Continuation of Session 7	Sabrina Ongkingko
2:30PM 2:45PM	Coffee Break	
2:45PM 3:30PM	Session 8: Assessing STEAM Learning Outcomes	Nympha Joaquin
3:30PM 4:30PM	Session 9: Gallery Walk	Sher Monterola
4:30PM 5:30PM	Session 10: Validation of 3Is Syllabus Using DTP	Rose Yangco
5:30PM 6:00PM	Closing Program	

**Other Facilitators**

July Abrea, Bureau of Learning Delivery, DepEd Central Office

Lilia Lagrimas, Bureau of Curriculum Development, DepEd Central Office

Tristan Orbeta, Center Manager, Center for Integrated STEM Education in the Philippines  
(CISTEM)

Hilson Garcia, STEM+PH, Unilab Foundation

Sharmaine Tanyag, STEM+PH, Unilab Foundation

Kevin Gales, STEM+PH, Unilab Foundation