



Republic of the Philippines  
**Department of Education**  
 Region X-Northern Mindanao  
**DIVISION OF CAGAYAN DE ORO CITY**



Fr. Masterson Avenue Upper Balulang, Cagayan de Oro City

ED-DIVISION OF CAGAYAN DE ORO CITY  
 CAGAYAN DE ORO CITY  
 May 16, 2019  
**RELEASED**  
 DATE: May 27 2019  
 BY: [Signature]

**DIVISION MEMORANDUM**

No. 384 s. 2019

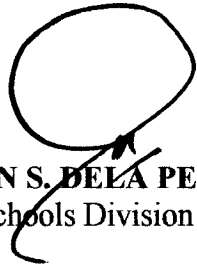
**3<sup>rd</sup> STEM TRAINING CASCADE: #TALINO  
 (Teaching and Learning Innovations) Bootcamp Mindanao Cluster**

To: **EDUCATION PROGRAM SUPERVISORS (Math & Science)**  
**CONCERNED SECONDARY SCHOOL HEADS (Gusa RSHS-X & CDONHS-JHS)**  
*This Division*

1. The Department of Education (DepEd) has partnered with the Department of Science and Technology (DOST), Philippine Science High School System (PSHS), Nanyang Polytechnic International, and Temasek Foundation on Innovations in Teaching and Learning STEM. As part of the PSHS' commitment on cascading the training, they will conduct the **3<sup>rd</sup> STEM Training Cascade: #TALINO (Teaching and Learning Innovations) Bootcamp Mindanao Cluster** at PSHS Southern Mindanao Campus, Sto. Niño, Tugbok District, Mintal, Davao City, from July 5 to 8, 2019.
2. The activity aims to help introduce new concepts and strategies that will help build up STEM education within the region. It is designed as a boot camp where teachers do not only hear about but also experience problem-based learning and design thinking.
3. The identified DepEd CDO participants are as follows:

Office	Name of Participants	Position/Specialization
SDO Cagayan de Oro City	Ray O. Maghuyop	Math Division Supervisor
	Eduardo T. Cartel/ Joel D. Potane	Science Division Supervisor
Gusa Regional Science High School	Brenda P. Galarpe	Principal
	Joan Ohay	Biology
	Aristotle Mabale	Chemistry
	Sherryl Emata	Physics
	Jerico Parreno	Mathematics
	Lloyd Allan Cabunoc	Research
Cagayan de Oro National High School	Doris Napone	Research
	William C. Agomana	Principal
	Jacqueline G. Gasatan	Biology
	Lauren M. Manus	Chemistry
	Leah Lyn A. Lingatong	Physics
	Cherry Mae P. Casinillo	Mathematics
Margareth H. Macabodbod	Research	
Severino M. Cantorne	Research	

4. All travel expenses including per diem and other incidental expenses of participants for their participation in the activity shall be charged against local funds while food and accommodation shall be shouldered by the PSHS, subject to existing auditing and accounting rules and regulations.
5. Participants are required to fill in the pre-registration form in this link:  
<http://goo.gl/forms/FCbMH6xdt2WtX7gD3>.
6. Enclosed are the DepEd Memorandum, List of Participants, Registration Form, and Program of Activities for your reference.
7. Immediate dissemination of this Memorandum is desired.



**JONATHAN S. DELA PEÑA, Ph. D., CESO V**  
Schools Division Superintendent

Encls: As stated

To be indicated in the Perpetual Index under the following subjects:

Math Science Innovations

cid/ray



*Undersecretary for Curriculum and Instruction*

**MEMORANDUM**  
DM-CI-2019-00094

**FOR : ALL CONCERNED REGIONAL DIRECTORS  
AND BUREAU DIRECTORS**

**FROM :**   
**LORNA DIG DINO, Ph. D.**  
*Undersecretary*

**SUBJECT : #TALINO BOOTCAMP**

**DATE : April 2, 2019**

The Department of Education has partnered with the Department of Science and Technology (DOST), Philippine Science High School System (PSHS), Nanyang Polytechnic International and Temasek Foundation on the Innovations in Teaching and Learning STEM. As part of the PSHS' commitment on cascading the training, they will conduct the 3rd STEM Training Cascade: #TALINO (Teaching and Learning Innovations) Bootcamp on the dates and venues indicated below.

<b>Cluster</b>	<b>Dates (Exclusive of Travel Time)</b>	<b>Venue</b>
North Luzon Cluster	June 28 to July 1, 2019	PSHS Cagayan Valley Campus Brgy. Masoc, Bayombong, Nueva Vizcaya
NCR and South Luzon Cluster	June 21 to 24, 2019	PSHS Main Campus Agham Road, Diliman, Quezon City
Visayas Cluster	June 28 to July 1, 2019	PSHS Eastern Visayas Campus Pawing, Palo, Leyte
Mindanao Cluster	July 5 to 8, 2019	PSHS Southern Mindanao Campus Sto. Niño, Tugbok District, Mintal, Davao City

The #TALINO Bootcamp is designed to help introduce new concepts and strategies that would help build up STEM education within the region. It is designed as a boot camp where teachers do not only hear about but also experience problem-based learning and design thinking.

In this regard, slots have been provided for your Science/Math Division Supervisor, Principal and teachers to attend the said boot camp. Please see Enclosure 1 for the detailed number of participants and particulars per region.

Likewise, please advise all participants to accomplish the online registration from through the link <https://oos.ci/forms/FO5MH6xd12/vX7gD3> or submit the accomplished attached registration form to the #TALINO Registration Committee cluster coordinator via email.



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DepEd Complex, Meralco Avenue, Pasig City, Philippines  
Direct Line: (632) 633-7202 Telefax: (632) 636-4879  
Website: [www.deped.gov.ph](http://www.deped.gov.ph)



*Undersecretary for Curriculum and Instruction*

Once the school's registration has been confirmed, the committee shall send the pre-training guidelines/instructions thru email.

Participants are requested to observe the following:

1. Take the cheapest means of transportation to and from the venue.
2. Bring their own towels.
3. Note that first meal is Dinner of Day 0. Please refer to the Program of Activities attached on this memorandum.
4. Present endorsement from the Regional Director or the Asst. Regional Director if he/she is a replacement.

All travel expenses including per diem and other incidental expenses of facilitators relative to their participation in the aforementioned activity shall be charged against the local funds. Food and accommodation will be shouldered by the PSHS.

Heads of institutions are encouraged to assign individuals who will handle the duties of participants while they are on official travel. Teacher-participants shall be entitled to service credits in accordance with DepEd Order NO. 53, s. 2003 entitled *Updated Guidelines on the Grant of Vacation Service Credits to Teachers*. On the other hand, non-teaching personnel shall be provided with Compensatory Time-Off (CTO) per Civil Service Commission (CSC) and Department of Budget and Management (DBM) Joint Circular No. 2, s. 2004 on Non-Monetary Remuneration for Overtime Service Rendered.

You may email your inquiries and other related concerns to [talino@pshs.edu.ph](mailto:talino@pshs.edu.ph).

Immediate dissemination and response is advised.



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**ENCLOSURE 1**

**LIST OF PARTICIPANTS**

**NORTH AND CENTRAL LUZON CLUSTER**

**June 28 to July 1, 2019 at PSHS Cagayan Valley Campus**

REGION	OFFICE / DIVISION / SCHOOL	PARTICULARS
I	SDO La Union	1 Math Division Supervisor 1 Science Division Supervisor
	Regional Science High School for Region I	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
	Luna National High School	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
II	SDO Isabela	1 Math Division Supervisor 1 Science Division Supervisor
	Regional Science High School for Region II	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
	Tumauini National High School	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
III	SDO Olongapo City	1 Math Division Supervisor 1 Science Division Supervisor
	Regional Science High School – III	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
	Olongapo City National High School	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
CAR	SDO Benguet	1 Math Division Supervisor 1 Science Division Supervisor
	Cordillera Regional Science High School	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
	Benguet National High School	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
CO	Bureau of Curriculum Development	Joseph Gutierrez



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**NCR AND SOUTH LUZON CLUSTER**

**June 21 to 24, 2019 at PSHS Main Campus**

REGION	OFFICE / DIVISION / SCHOOL	PARTICULARS
IV-A	SDO Cavite Province	1 Math Division Supervisor 1 Science Division Supervisor
	Cavite National Science High School	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
	Maragondon National High School	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
IV-B	SDO Oriental Mindoro	1 Math Division Supervisor 1 Science Division Supervisor
	Bansud National High School – Regional Science High School for Region IV-B Mimaropa	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
	Apilong National High School	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
V	SDO Naga City	1 Math Division Supervisor 1 Science Division Supervisor
	Naga City Science High School	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
	Bicol Regional Science High School	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
NCR	SDO Quezon City	1 Math Division Supervisor 1 Science Division Supervisor
	Quezon City Science High School	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
	Ramon Magsaysay High School	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
CO	Bureau of Curriculum Development	Lilia Lagrimas
	Bureau of Learning Delivery	1 Science Specialist 1 Math Specialist



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**VISAYAS CLUSTER**

**June 28 to July 1, 2019 at PSHS Eastern Visayas Campus**

<b>REGION</b>	<b>OFFICE / DIVISION / SCHOOL</b>	<b>PARTICULARS</b>
VI	SDO Aklan	1 Math Division Supervisor 1 Science Division Supervisor
	Regional Science High School for Region VI	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
	Aklan National High School for Arts and Trades	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
VII	SDO Dumaguete City	1 Math Division Supervisor 1 Science Division Supervisor
	Ramon Teves Pastor Dumaguete Science HS	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
	Piapi High School	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
VIII	SDO Catbalogan City	1 Math Division Supervisor 1 Science Division Supervisor
	Samar National School	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
	Eastern Visayas Regional Science High School	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
CO	Bureau of Curriculum Development	Eliza Peralta
	National Educators Academy of the Philippines	2 Specialists



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**MINDANAO CLUSTER**

**July 5 to 8, 2019 at PSHS Southern Mindanao Campus**

REGION	OFFICE / DIVISION / SCHOOL	PARTICULARS
IX	SDO Zamboanga City	1 Math Division Supervisor 1 Science Division Supervisor
	Regional Science High School for Region IX	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
	Don Pablo Lorenzo Memorial High School	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
X	SDO Cagayan de Oro City	1 Math Division Supervisor 1 Science Division Supervisor
	Gusa Regional Science High School	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
	Cagayan de Oro National High School	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
XI	SDO City of Mati	1 Math Division Supervisor 1 Science Division Supervisor
	Davao Oriental Regional Science High School	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
	Mati National Comprehensive High School	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
XII	SDO Sarangani	1 Math Division Supervisor 1 Science Division Supervisor
	Alabel National Science High School	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
	Alabel National High School	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
Caraga	SDO Surigao City	1 Math Division Supervisor 1 Science Division Supervisor
	Caraga Regional Science High School	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)





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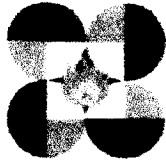
	Surigao City National High School	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
ARMM	SDO Maguindanao II	1 Science Supervisor
	Regional Science High School for ARMM	1 Principal 6 teachers in the field of Biology, Chemistry, Physics, Mathematics and Research (make sure that each field is represented)
CO	Bureau of Curriculum Development	Bernadeth Daran



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**Department of Science and Technology**  
**Philippine Science High School System**  
 Agham Road, Diliman Quezon City



**Program of Activities**

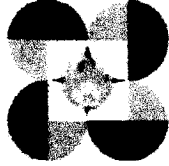
	Day 0 - ARRIVAL	Day 1	Day 2	Day 3	Day 4
8:00-8:30	ARRIVAL and REGISTRATION of Participants	Registration	Management of Learning (reflection)	Management of Learning (reflection)	Management of Learning
8:30-9:00		Opening Program	Plenary 2: Design Thinking (c/o Ma'am Gene)	Plenary 4: Creative Workshops	Viewing of Exhibit
9:00-9:30					Plenary : Keynote on Industry- Academe partnership
9:30-10:00		Intro to the Boot Camp (Design Thinking)	Plenary 3: 21st Century Classroom Integrating Technology in Education (c/o CS Unit)	Plenary 4: Creative Workshops	Round table discussion on partnership (Principals and Directors) /Culminating: Sharing of outcomes (Teachers)
10:00-10:30		Plenary 1: Understanding your Learners			Mentoring Sign-Up
10:30-11:00			LUNCH BREAK	Networking Lunch	
11:00-11:30		External Learning Journey (Field Trip): Design Thinking introduction		Parallel Sessions by Discipline (Part II)	Parallel Sessions by Discipline (Part II)
11:30-12:00			Parallel Sessions (Extension)		
12:00-12:30		Getting to know you dinner + sharing of output		DINNER BREAK	
12:30-1:30					
1:30-2:00					
2:00-2:30					
2:30-3:00					
3:00-3:30					
3:30-4:00					
4:00-4:30					
4:30-5:00					
5:00-5:30					
5:30-6:00					
6:00-8:00	DINNER (1st meal)	Getting to know you dinner + sharing of output	DINNER BREAK		



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Please fill out the form for your registration. For teacher participants, specify your subject area i.e. Integrated Science, Mathematics, Physics, Chemistry, ICT, Biology.

Registration Form			
Name of School:			
Region/ Cluster:			
Name	Position/ Designation	Email Address	Subject Area (for teacher participants only)

Kindly submit the accomplished registration form to the #TALINO Registration Committee cluster coordinator via email on or before [insert date]:

North and Central Luzon Cluster	Meiba Patacsil <a href="mailto:melba.patacsil@yahoo.com.ph">melba.patacsil@yahoo.com.ph</a>
NCR & South Luzon Cluster	Anna Carmela Bonifacio <a href="mailto:cbbonifacio@pshs.edu.ph">cbbonifacio@pshs.edu.ph</a>
Visayas Cluster	Eleazar Guia <a href="mailto:ebguia@cvisc.pshs.edu.ph">ebguia@cvisc.pshs.edu.ph</a>
Mindanao Cluster	Daisyre Altar <a href="mailto:dgaltar@crc.pshs.edu.ph">dgaltar@crc.pshs.edu.ph</a>

For inquiries, you may get in touch with us, through sending us an email at [talino@pshs.edu.ph](mailto:talino@pshs.edu.ph).