



Republic of the Philippines  
**Department of Education**  
**REGION XI**  
**SCHOOLS DIVISION OF DIGOS CITY**

Office of the Schools Division Superintendent

**DIVISION MEMORANDUM**

CID-2024-255

To : Assistant Schools Division Superintendent  
CID and SGOD Chiefs  
Public Schools District Supervisors  
Education Program Supervisor in Science  
School Head of Digos City National High School  
Science Department Head of Digos City National High School  
Ms. Floradel Dumadag  
Ms. Aileen Joy M. Sanchez

Subject : **INVITATION TO THE UNESCO-UNITWIN KNUE-UP TRAINING ON DIGITAL COMPETENCE AND LIFELONG LEARNING FOR STEM EDUCATORS, 15-17 JULY 2024, UP NISMED AUDITORIUM, UP DILIMAN, QUEZON CITY**

Date : July 8, 2024

Attached is a letter from Prof. Sheryl Lyn C. Monterola, Ph.D., Director of National Institute for Science and Mathematics Education Development, re: Invitation to the UNESCO-UNITWIN KNUE-UP Training on Digital Competence and Lifelong Learning for STEM Educators on July 15 to 17, 2024 at UP NISMED Auditorium, UP Diliman, Quezon City.



Participants of this training are: (1) Ms. Floradel Dumadag and (2) Ms. Aileen Joy M. Sanchez, both from Digos City National High School.


Accommodation, meals and training fee of the participants shall be charged against UNESCO-UNITWIN KNUE while the transportation and incidental expenses shall be charged against local/school MOOE subject to usual accounting and auditing rules and regulations.

All other details of the activity are in the enclosures.

Immediate dissemination of this Memorandum is hereby enjoined.

For and in the absence of the  
Schools Division Superintendent

  
**SOLLIE B. OLIVER, JD, MATE**  
Chief Education Supervisor  
Officer In-Charge 

Enclosed: As stated by: 

CID/jbc





4 July 2024

**Melanie P. Estacio, PhD, CESO VI**  
OIC Schools Division Superintendent  
Department of Education, Digos City

**Re: Invitation to the UNESCO-UNITWIN KNUE-UP Training on Digital Competence and Lifelong Learning for STEM Educators, 15-17 July 2024, UP NISMED Auditorium, UP Diliman, Quezon City**

Dear Dr. Estacio:

Greetings from the UP National Institute for Science and Mathematics Education Development!

The University of the Philippines has partnered with the Korea National University of Education (KNUE) for the UNESCO UNITWIN Network for Quality Teacher Education. As part of the partnership, KNUE, the UP College of Education, and the UP National Institute for Science and Mathematics Education Development are co-organizing a three-day professional development program called **Training on Digital Competence and Lifelong Learning for STEM Educators**. It will be held on 15-17 July 2024 at the **UP NISMED Auditorium, UP Campus, Diliman, Quezon City**. It will immerse participants in hands-on workshops and plenary talks from professors and specialists from KNUE and UP. Please see attached agenda for the three-day training.

In this regard, may we invite **Ms. Floradel Dumadag** and **Ms. Aileen Joy M. Sanchez** from your institution to participate in the program as facilitator and participant, respectively? The **program is by-invitation only and free of charge**, courtesy of the support from UNESCO-UNITWIN KNUE. The said support covers: (a) accommodation of the participants at the UP NISMED Hostel from July 14 to July 18, 2024; (b) meals; and (c) training fee. This excludes transportation to the University of the Philippines - Diliman. We hope that the sending institution can charge the participant's transportation expenses to their available funds for professional development. We also recommend that participants bring their own laptop.

We look forward to your favorable response. Please ask your institution's nominated participant/s to complete the **registration on or before 10 July 2024** using this link: <https://forms.gle/mmzNjx3Tf7qnHfw56>.

Thank you very much.

Sincerely,

**PROF. SHERYL LYN C. MONTEROLA, Ph.D.**  
Director



*UNESCO UNITWIN In Partnership with the Korea National University of Education (KNUE) and UP College of Education (UPCED)*

**Training on Digital Competence and Lifelong Learning  
for STEM Educators**

Hosted by	UNESCO-UNITWIN, Korea National University of Education, UP College of Education
Organizer	UP College of Education and NISMED (National Institute for Science and Mathematics Education Development)  Jerome T. Buenviaje, PhD Sheryl Lyn C. Monterola, PhD Lady Angela M. Rocena Robert John D. Dela Cruz Floradel M. Dumadag
Main objective/s	<ol style="list-style-type: none"> <li>1. To discuss lifelong learning in relation to learner’s well-being and future readiness</li> <li>2. To try out various digital tools for developing learners’ higher-order thinking skills and lifelong learning skills</li> <li>3. To explore the use of artificial intelligence (AI) in teaching STEM</li> <li>4. To determine new ways of assessing student competence in STEM</li> <li>5. To create lesson exemplars integrating lifelong learning or the use of digital tools in the Philippine curriculum</li> </ol>
Schedule and Venue:	15 – 17 July 2024   UP NISMED Auditorium, UP Diliman, QC



<p><b>14 July 2024</b></p> <p>Arrival (Check-in: UP NISMED Hostel)</p>	
<p><b>15 July 2024</b></p> <p>Day 1   UP NISMED Auditorium</p>	
8:00 - 8:30 am	Registration
8:30 - 9:30 am	<p>Opening Program</p> <p>Philippine National Anthem</p> <p>Republic of Korea National Anthem</p> <p>Welcome Remarks</p> <p><b>Chancellor Edgardo Carlo L. Vistan III</b></p> <p>Chancellor, University of the Philippines - Diliman</p> <p>Opening Remarks</p> <p><b>Dr. Younghoon Kim (Video Message)</b></p> <p>Project Manager, UNESCO UNITWIN Program on Quality Teacher Education</p> <p><b>Dr. Young Sek Kim (In-person)</b></p> <p>Professor, Department of Education (Adult Education), Korea National University of Education (KNUE)</p> <p>Introduction of the Participants</p> <p><b>Dr. Sheryl Lyn C. Monterola</b></p> <p>Director, National Institute for Science and Mathematics Education</p>

	<p>Development, (UP NISMED)</p> <p>Group Photo</p>
9:30 - 10:15 am	<p>Keynote Message</p> <p><i>Improving Quality Teacher Education in the Philippines: UNESCO-UNITWIN Network for Quality Teacher Education</i></p> <p><b>Dr. Jerome T. Buenviaje</b></p> <p>Dean, College of Education, University of the Philippines - Diliman</p> <p>Q&amp;A</p> <p>(30-minute presentation; 15-minute Q&amp;A)</p>
10:15 - 10:30 am	Health break
10:30 - 11:15 am	<p>Seminar 1</p> <p><i>Exploring Digital Tools for STEM Learners' Future Readiness</i></p> <p><b>Dr. Sheryl Lyn C. Monterola</b></p> <p>Director, UP NISMED</p> <p>Q&amp;A</p> <p>(30-minute presentation; 15-minute Q&amp;A)</p>
11:15 - 12:00 nn	<p>Training Orientation</p> <p><b>Dr. Sheryl Lyn C. Monterola</b></p> <p>Director, UP NISMED</p>
12:00 - 1:00 pm	Lunch
1:00 - 3:00 pm	<p>Workshop 1</p> <p><i>Using Micro:bit in Making Microcontroller Projects for Classroom Use</i></p>

	<p>Objectives:</p> <ol style="list-style-type: none"> <li>1. familiarize the teachers with the use of Micro:bit</li> <li>2. demonstrate classroom lessons/activities/projects that utilize microcontrollers</li> <li>3. develop teachers skills in coding and using microcontrollers setup/project in their lesson</li> </ol> <p>Team Leader: Ms. Cerilina Maramag Deputy Director for Administration, UP NISMED</p> <p>Lead Trainer: Ms. Deborah Anne L. Colades</p> <p>Facilitators: Ms. May R. Chavez Ms. Beatrice Faye M. Mataac Ms. Floradel M. Dumadag, DepEd</p>
3:00 - 3:15 pm	Health break
3:15 - 5:00 pm	Continuation of Workshop 1
5:00 - 5:30 pm	Travel to dinner place
5:30 - 7:30 pm	Dinner (Kamay-Kainan, Kalayaan Avenue, Quezon City)
7:30 - 8:00 pm	Return to hotel

<b>16 July 2024</b> Day 2	
8:00 - 8:30 am	Pre-workshop
8:30 - 9:15 am	Seminar 2 (tentative title)  <i>Lifelong Learning and Learner's Well-being and Future-Readiness</i>  <b>Dr. Young Sek Kim</b>  Korea National University of Education  Q&A  (30-minute presentation; 15-minute Q&A)
9:15 - 10:30 am	Workshop 2  <i>Transforming STEM Education and Research through Generative AI</i>  Objectives: <ol style="list-style-type: none"> <li>1. explain Generative AI and its potential role in STEM education and research</li> <li>2. construct effective prompts to create images and text outputs;</li> <li>3. design learning plans and instructional materials using varied GenAI tools and platforms; and</li> <li>4. create a draft for their institution's (school or classroom) policy on the responsible and creative use of AI</li> </ol> Team Leader and Lead Trainer: Ms. Reena Ongsotto Science Education Specialist, UP NISMED  Facilitators: <p style="margin-left: 40px;">Asst. Prof. Ramon Sanchez III, College of Education            Asst. Prof. Regina Carla Taduran, UP Integrated School</p>
10:30 - 10:45 am	Health break
10:45 - 12:00 nn	Continuation of Workshop 2

12:00 - 1:00 pm	Lunch
1:00 - 3:00 pm	<p>Workshop 3</p> <p><i>Crafting Tomorrow's Innovators: 3D Printing Training for Teachers</i></p> <p>Objectives:</p> <ol style="list-style-type: none"> <li>1. explain the general additive manufacturing process;</li> <li>2. create 3D models using a CAD software;</li> <li>3. operate an FDM 3D printer; and</li> <li>4. showcase their own 3D model designs and printed objects that can be used for teaching</li> </ol> <p>Team Leader: Mr. Renz Salas Science Education Specialist, UP NISMED</p> <p>Lead Trainers: Mr. Renz Salas and Mr. Jobeth Martecio</p> <p>Facilitators: Ms. Monique Anne B. Tizon Mr. Jude Krisson Toledo Mr. Robert John dela Cruz</p>
3:00 - 3:15 pm	Health break
3:15 - 5:00 pm	Continuation of Workshop 3
5:00 - 7:00 pm	Dinner
7:00 - 7:30 pm	<p>Return to hotel</p> <p>(Meeting with KNUE Representatives for teacher consultation) (tentative)</p>



17 July 2024 Day 3	
8:00 - 8:30 am	Pre-workshop
8:30 - 9:15 am	Seminar 3 (tentative title)  <i>Leveraging Digital Technology for Instructional Excellence</i>  <b>Dr. Youngju Lee</b>  Korea National University of Education  Q&A  (30-minute presentation; 15-minute Q&A)
9:15 - 10:30 am	Workshop 4  <i>Empowering Teachers through Mobile App Development</i>  Objectives: <ol style="list-style-type: none"> <li>1. navigate the interface of MIT App Inventor;</li> <li>2. apply fundamental coding concepts in developing mobile apps</li> <li>3. design and create educational apps for teaching science and mathematics</li> </ol> Team Leader: Monalisa T. Sasing Deputy Director for Research and Extension, UP NISMED Lead Trainer: Mr. Jobeth Martecio  Facilitators: <ul style="list-style-type: none"> <li>Mr. John Alex M. Reyroso</li> <li>Ms. Loise Angelica G. Oruga</li> <li>Asst. Prof. Lady Angela Rocena, UP Integrated School</li> </ul>
10:30 - 10:45 am	Health break
10:45 - 12:00 nn	Continuation of Workshop 4

12:00 - 1:00 pm	Lunch
1:00 - 3:00 pm	Continuation of Workshop 4
3:00 - 3:15 pm	Health break
3:15 - 4:00 pm	Continuation of Workshop 4
4:00 - 5:00 pm	<p>Closing Program</p> <p>Congratulatory Message</p> <p><b>Dr. Yong Sek Kim</b></p> <p>Professor, Korea National University of Education, UNESCO UNITWIN Program on Quality Teacher Education</p> <p>Response from Participants</p> <p>Awarding of Certificates</p> <p>Workshop Highlights</p> <p>Group Photo</p> <p>Closing Remarks</p> <p><b>Dr. Jerome T. Buenviaje</b></p> <p>Dean, UP College of Education</p>
5:00 - 5:30 pm	Travel to dinner place
5:30 - 7:30 pm	Dinner (UP Hotel)
7:30 - 8:00 pm	Return to hotel

**18 July 2024**

Departure (Check out: UP NISMED Hostel)