



Republic of the Philippines
Department of Education
REGION VII – CENTRAL VISAYAS
Schools Division of Cebu Province

Office of the Schools Division Superintendent

November 10, 2023

DIVISION MEMORANDUM

No. **474**, s. 2023

**SCHOOL TRYOUT OF BUREAU OF LEARNING RESOURCES
(BLR)-CEBU DEVELOPED PROTOTYPES**

To: Assistant Schools Division Superintendents
Chiefs, CID & SGOD
Heads Public Schools District Supervisors/School Heads
All Others Concerned

1. This Office announces the conduct of the **School Tryout of Bureau of Learning Resources (BLR)-Cebu Developed Prototypes**. Hereto attached is the letter from the office of the **BLR Director, Director IV, ARIZ DELSON ACAY D. CAWILAN** with the BLR Memorandum addressed to: **GINA O. GONONG, Undersecretary for Curriculum and Teaching** regarding the conduct of the school tryout.

2. Below is the list of schools and the identified science teachers in Junior/ Senior High School to attend the orientation about the equipment prototypes and the scheduling of the actual conduct of the school tryout on **November 13, 2023 (9:00AM -5:00PM)** at Ecotech Center, Lahug, Cebu City. Snacks and lunch will be served. Transportation expense will be reimbursed.

Minglanilla NHS/Science HS:

- Biology-JADE C. BACON
- KRISTYL JOY P. PEÑARANDA
- Chemistry-JANE R. CEDEÑO
- NONAH C. ALICAYA
- Physics-ROMIN R. SANCHEZ
- JEAN A. MORALES

Liloan NHS,Liloan District:

- Biology-GEMMA D. PALMA
- DOROTHY GAYE GIANGAN
- Chemistry-MAYCHIELL S. DUEÑAS
- JONATHAN C. SEDILLO
- Physics-ROEL B. MASONG
- SINLEY S. OLGASAN

Arcelo NHS, Liloan District:

- Biology-MA. GLINDA CACANOG
- ARACELI S. MANATO
- Chemistry-LEAH BUGTAI
- Physics-VERZEL N. GALILA

Liloan NHS Ext. Don Bosco Campus :

- Chemistry-CHARMAINE C. MEDILLO

Calero Integrated School,Liloan District:

- Physics-CHEENA LOU M. ARIESGADO



Address: IPHO Bldg., Sudlon, Lahug, Cebu City

Telephone No.: (032)424-9000


Email Address: cebu.province@deped.gov.ph

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Schools Division of Cebu Province

3. This Memorandum serves as **Authority to Travel**
4. It is emphasized that participants are to adhere to strict compliance with the provision of DECS Order No. 09, s.2005, titled **“Instituting Measures to increase Engaged Time-on-Task or No Disruption of Classes Policy” and all other existing DepEd Policies and Regulations and Ensuring Compliance Therewith**”.
5. Immediate dissemination of and compliance with this Memorandum is directed.


LORENZO M. DIZON, Ed.D., CESO V
ASSISTANT SCHOOLS DIVISION SUPERINTENDENT
SENEN PRISCILO P. PAULIN, CESO V
Schools Division Superintendent

<SPPP/VAY/LMD/FCL/CID/SGOD/MAPF/JEM>



Address: IPHO Bldg., Sudlon, Lahug, Cebu City
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Republic of the Philippines
Department of Education
BUREAU OF LEARNING RESOURCES

Office of the Director
BLR-2023-11- 1716

November 6, 2023

SENEN P. PAULIN
Schools Division Superintendent
Cebu Province Division
Department of Education

Attention: **MS. JUVIMAR MONTOLO**
Division Science Supervisor
Cebu Province Division

Dear **SDS Paulin**:

Greetings!

The Bureau of Learning Resources Cebu (BLRC) is mandated to undertake the development science and mathematics equipment thru prototyping. Currently BLRC has prototypes in the areas of biology, chemistry, and physics ready for school tryout. As background information, the process of developing prototypes includes the following stages: conceptualization, design, fabrication, in-house quality assurance, and finally school tryout.

The school tryout phase will ascertain the usefulness of the items in the classroom.

The following are the BLRC prototypes for school tryout.

Biology – Transpirometer
- LOBO Chart

Chemistry – Isotopes of Carbon/Hydrogen Model
- Atomic Model Set

Physics – Heat and Temperature and Heat Transfer Kit
- Static Equilibrium Apparatus

We tentatively selected at random **Minglanilla NHS, Liloan NHS, Arcelo MNHS** in Cebu Province Division as tryout schools.

Should there be other schools to be recommended as tryout schools instead of the ones we identified, we are open for options.



DIVISION CODE: BLRC-2023-282
(BLRM) Ground, Bonifacio Building, DepEd Complex, Meralco Avenue, Pasig City; (02) 2634-1072; 8634-0901; 8634-1054;
(BLRC) Ecotech Compound Sudlon, Lahug, Cebu City; (032) 230-7939; (032) 230-7948
Email Address: blr_og@deped.gov.ph; blr_lod@deped.gov.ph; blc/road@deped.gov.ph; blr_cebu@deped.gov.ph

DepEd Philippines

@depedphilippines

@DepEd_PH

www.deped.gov.ph

Prior to the school try proper we are going to have a one-day meeting with the tryout teachers and the division science supervisor Ms. JUVIMAR MONTOLO at the BLRC, ECOTECH Compound, Sudlon, Lahug, Cebu City on **November 13, 2023 from 9:00 AM – 5:00 PM** for the orientation about the equipment prototypes and the conduct of the school tryout. Snacks and lunch will be served. Transportation expense will be reimbursed.

Should there be conflict with teacher activities on any of afore mentioned dates we are free for adjustment on our side.

May we seek assistance from the division science supervisor to identify Senior High School science teachers of each the afore said schools for the following subject areas.

Minglanilla NHS

- 2 teachers – for living things (biology)
- 2 teachers – for matter (chemistry)
- 2 teachers -force, motion, energy (physics)

Liloan NHS


- 2 teachers – for living things (biology)
- 2 teachers – for matter (chemistry)
- 2 teachers -force, motion, energy (physics)

Arcebo MNHS

- 2 teachers – for living things (biology)
- 2 teachers – for matter (chemistry)
- 2 teachers -force, motion, energy (physics)

Attach herewith you will please find the following BLR memorandum addressed to:
- **GINA O. GONONG, Undersecretary for Curriculum and Teaching** dated July 28, 2023 regarding the conduct of the school tryout.

Very truly yours,


ARIZ DELSON ACAY D. CAWILAN
Director IV

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Director IV





Republic of the Philippines
Department of Education
BUREAU OF LEARNING RESOURCES


Office of the Director

MEMORANDUM
BLR-2023-07-1094

FOR : 
GINA O. GONONG
Undersecretary for Curriculum and Teaching

THROUGH : 
ALMA RUBY C. TORIO
Assistant Secretary for Curriculum and Teaching

FROM : 
ARIZ DELSON ACAY D. CAWILAN
Director IV


RAUL C. LA ROSA
Director III

SUBJECT : **SCHOOL TRYOUT OF BUREAU OF LEARNING RESOURCES (BLR)-CEBU-DEVELOPED PROTOTYPES**

DATE : **July 28, 2023**

As one of its mandates, the Bureau of Learning Resources-Cebu (BLRC) undertakes the development of science and mathematics equipment through prototyping. Currently BLRC has prototypes in the areas of biology, chemistry, and physics ready for school tryout.

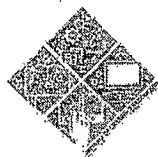
As background information, the process of developing prototypes includes the following stages: conceptualization, design, fabrication, in-house quality assurance, and finally school tryout.

The school tryout phase will ascertain the usefulness of the items in the classroom. Teachers' comments and suggestions will be considered if they are feasible.

The results of the school tryout will serve as starting point for BLRC to finalize the design and subsequent recommendation for the mass production of the items.

The following items were developed during the period 2020-2022, with respective K-12 curriculum guide competency requirements and are ready for school tryout:

BLRC-2023-176








Republic of the Philippines
Department of Education
BUREAU OF LEARNING RESOURCES


Office of the Director

MEMORANDUM
BLR-2023-07-1094

FOR : 
GINA O. GONONG
Undersecretary for Curriculum and Teaching

THROUGH : 
ALMA RUBY C. TORIO
Assistant Secretary for Curriculum and Teaching

FROM : 
ARIZ DELSON ACAY D. CAWILAN
Director IV


RAUL C. LA ROSA
Director III

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(BLR)-CEBU-DEVELOPED PROTOTYPES**

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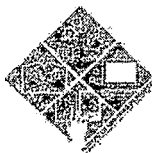
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BLRC-2023-176



Subject	BLRC Prototype	K-12 CG Code	Content Standards	Competency
Biology	Transpirometer	STEM_BIO11 /12 -Ig-h-13	Transport Mechanisms: a. Simple Diffusion b. Facilitated Transport c. Active Transport d. Bulk/Vesicular Transport	explain transport mechanisms in cells (diffusion osmosis, facilitated transport, active transport)
		STEM_BIO11 /12- IVa-h-1	Plant and Animal Organ Systems and their Functions	compare and contrast the following processes in plants and animals: reproduction, development, nutrition, gas exchange, transport/ circulation, regulation of body fluids, chemical and nervous control, immune systems, and sensory and motor mechanisms
	Levels of Biological Organization Chart	S7LT-IIc-3	the different levels of biological organization	describe the different levels of biological organization from cell to biosphere
Chemistry	Isotopes of Carbon and Hydrogen	STEM_GC11 AM-Ic-e-17	1. atomic structure 2. formulas and names of compounds	differentiate among atomic number, mass number, and isotopes, and which of these distinguishes one element from another
		STEM_GC11 AM-Ic-e-18 STEM_GC11 AM-Ic-e-19		write isotopic symbols
		S9MT-IIa13a S9MT-IIa13b	the development of atomic models that led to the description of the behavior of electrons within atoms	recognize common isotopes and their uses. describe how the Bohr model of the atom improved Rutherford's atomic model explain how the Quantum

Subject	BLRC Prototype	K-12 CC Code	Content Standards	Competency
		SBMT-IIIe-110	the identity of a substance according to its atomic structure	Mechanical Model of the atom describes the energies and positions of the electrons determine the number of protons, neutrons, and electrons in a particular atom;
	Atomic Model Set	STEM_GC11 ES-IIa-b-58	the quantum mechanical description of the atom and its electronic structure	describe the electronic structure of atoms in terms of main energy levels, sublevels, and orbitals and relate this to energy
		STEM_GC11 ES-IIa-b-59		(LAB) Perform exercises on writing electronic configuration
		SBMT-IIa13a	1. atomic structure 2. formulas and names of compounds	describe how the Bohr model of the atom improved Rutherford's atomic model
		SBMT-IIa13b	the development of atomic models that led to the description of the behavior of electrons within atoms	explain how the Quantum Mechanical Model of the atom describes the energies and positions of the electrons
		SBMT-IIIe-110	the identity of a substance according to its atomic structure	determine the number of protons, neutrons, and electrons in a particular atom;
Physics	Heat and Temperature and heat Transfer Kit	SBFE-Ig-29	heat and temperature, and the effects of heat on the body	differentiate between heat and temperature at the molecular level
		STEM_GP12T H-IIg-54	temperature and heat	perform an experiment investigating factors affecting thermal energy transfer
		STEM_GP12T H-IIg-55	temperature and heat	carry out measurements using thermometer

Subject	BLRC Prototype	K-12 CG Code	Content Standards	Competency
	Static Equilibrium Apparatus	STEM_GP12 RED-IIa-12	static equilibrium experiments	perform an experiment involving static equilibrium and analyze the data-identifying discrepancies between theoretical expectations and experimental results when appropriate

Attached are laboratory guide manuals for description and respective pedagogical and or didactic applications of the items.

In this regard, this Office seeks approval from your office to proceed with the school tryout of the aforesaid items. The school tryout is tentatively scheduled for the third quarter of FY 2023 and will be steered in at least three senior high schools in Cebu City and or Cebu Province Division/s.

Also attached are the following files relative to the conduct of the school tryout for your perusal:

- a) laboratory guide manual for each of the prototype items for school tryout;
- b) school tryout activities
- c) prototype evaluation sheets
- d) budgetary allocation

Tryout schools and tryout teachers shall be identified by BLRC upon your office's endorsement of this memorandum.

Please be informed that mass production items included in the recent SME distribution projects of DepEd are designed by then NSTIC, the forerunner of BLRC. These items include Science Kit A-Basic Science Equipment, Science Kit B-Physics Mechanics, AC-DC Variable Power Supply, Light Source Single Slit, Set of Coils, Heat Convection Apparatus, and the storage cabinets.

For your consideration.