

#### PHILIPPINE PROFESSIONAL STANDARDS FOR TEACHERS

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## **MODULE**



4.5.2 SELECT, DEVELOP,
ORGANIZE AND USE
APPROPRIATE TEACHING AND
LEARNING RESOURCES,
INCLUDING ICT, TO ADDRESS
LEARNING GOALS







DAIIDAI









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### INTRODUCTION TO TEACHER RESOURCE PACKAGE

## Hello, dear Teacher! Welcome to this Resource Package.





#### I am Teacher Jen!

#### And I am Teacher Mike!

We are members of your support group. Together with your principal, master teacher, and co-teachers, we are pleased to be your guides and companions as you walk through the modules.



Are you ready?

We begin by letting you know how the journey started for us in putting together this resource package.

In August 2017, Department of Education Secretary Leonor Briones signed the Philippine Professional Standards for Teachers (PPST) into policy through DepEd Order No. 42, S. 2017. The policy states, among others, that the PPST "shall be used as a basis for all learning and development programs for teachers."

The Department of Education is committed to supporting your continuing professional development. This resource package hopes to contribute to this commitment.

As a teacher, understanding the PPST is crucial in order for you to grow and flourish in your profession. The PPST identifies what you are expected to know, be able to do, and value in your profession.

These modules are standalone sections that vou can select based on your needs and interests. This means that you can choose and read any module that is most relevant to you. You can take your time in familiarizing yourself with any one module with no pressure to finish reading

all 12.

#### This resource package:

- serves as your guidebook towards becoming better acquainted with the PPST;
- comprises 12 modules corresponding to the 12 indicators that are aligned with the Results-based Performance Management System (RPMS); and
- contains illustrative and instructive information that you will find realistic, sensible and workable and can help you achieve the target indicators across curriculum teaching areas and key stages of learners' education.

We are happy to say that this resource package has been created and compiled by teachers in support of other teachers.

You will find the materials here useful if you:

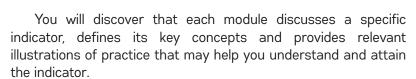
- reflect on your own classroom practices, and ensure that your teaching practices are aligned with the indicators;
- · want to mentor beginning teachers so they become better in their practice;
- are a part of a group of teachers who need materials for your schoolbased Learning Action Cell (LAC) sessions in order to (i) learn more about the PPST and (ii) innovate on practices using the samples in the resource material as guide; and
- want to develop or expand the current work by (i) providing more examples of practices or (ii) working on other career stages or indicators other than the 12 presented in this package.

If learning is your passion, this resource package is for you.





#### What can you expect to find in each module?





The modules explore the following indicators:

#### **MODULE 1**

1.1.2 Apply knowledge of content within and across curriculum teaching areas.

#### MODULE 2

1.4.2 Use a range of teaching strategies that enhance learner achievement in literacy and numeracy skills.

#### MODULE 3

1.5.2 Apply a range of teaching strategies to develop critical and creative thinking, as well as other higher-order thinking skills.

#### MODULE 4

2.3.2 Manage classroom structure to engage learners, individually or in groups, in meaningful exploration, discovery and hands-on activities within a range of physical learning environments.

#### MODULE 5

2.6.2 Manage learner behavior constructively by applying positive and non-violent discipline to ensure learning-focused environments.

#### MODULE 6

3.1.2 Use differentiated, developmentally appropriate learning experiences to address learners' gender, needs, strengths, interests and experiences.

#### MODULE 7

4.1.2 Plan, manage and implement developmentally sequenced teaching and learning processes to meet curriculum requirements through various teaching contexts.

#### MODULE 8

4.4.2 Participate in collegial discussions that use teacher and learner feedback to enrich teaching practice.

#### MODULE 9

4.5.2 Select, develop, organize and use appropriate teaching and learning resources, including ICT, to address learning goals.

#### **MODULE 10**

5.1.2 Design, select, organize and use diagnostic, formative and summative assessment strategies consistent with curriculum requirements.

#### **MODULE 11**

5.2.2 Monitor and evaluate learner progress and achievement using learner attainment data.

#### **MODULE 12**

5.4.2 Communicate promptly and clearly the learners' needs, progress and achievement to key stakeholders, including parents/guardians.

#### PARTS OF THE MODULES



The module contains the following parts:





**OVERVIEW** introduces you to the indicator and why you need to achieve the indicator:



**ILLUSTRATIONS OF PRACTICE** walks you through sample

illustrations of specific teaching practices that show how the Standards are put into action;



**SELF-REFLECTION** allows you to reflect on your knowledge, skills and attitude related to the indicator;



#### PROFESSIONAL DEVELOPMENT

PLAN helps you identify your strengths and development needs and plans for specific action for professional development; and



**KEY CONCEPTS** defines key concepts pertinent to the indicator;



**RESOURCE LIBRARY** provides you with resources (which may include bibliography, forms, templates, appendices and links) that can help you further understand the indicator.



SUPPORT GROUP allows you to consult and collaborate with our teacher-friends who will provide suggestions on how to improve your current practice;

Each module takes you through a journey of exploration and discovery, while you learn more about the indicator and you apply it in your teaching context.

We encourage you to actively engage with the text as you read through the module.

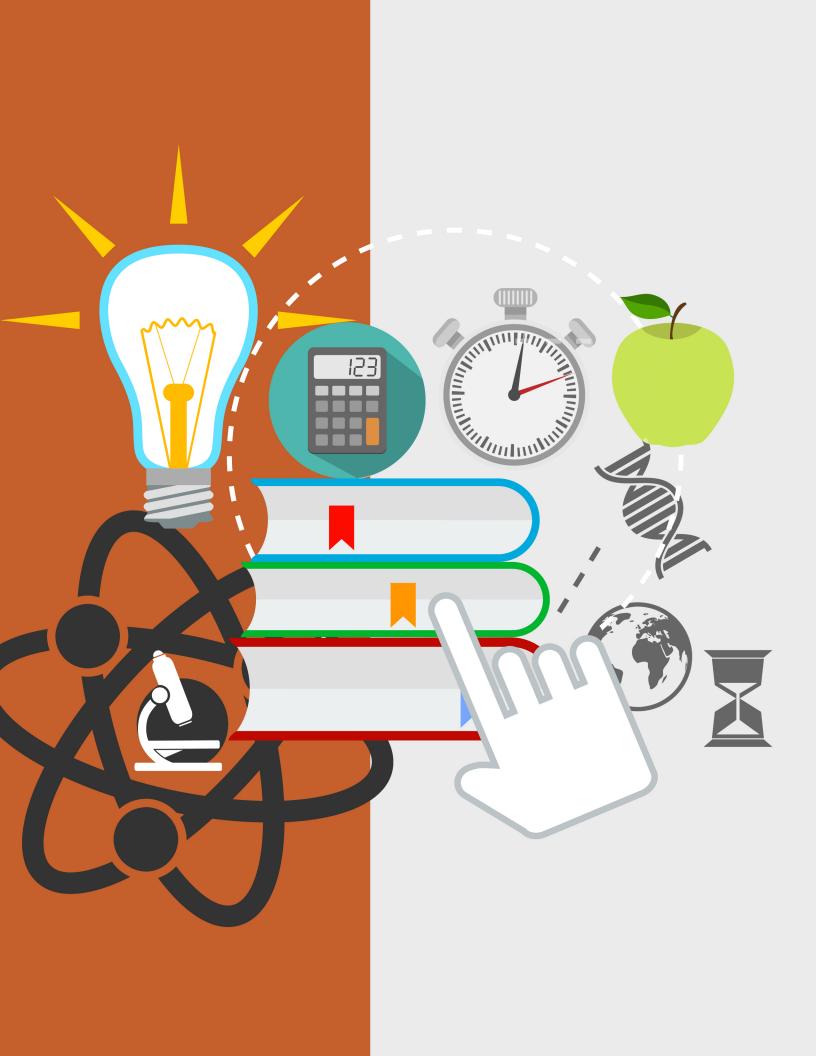
We hope you find the information, materials and resources in this package helpful as you engage with the Philippine Professional Standards for Teachers towards your professional development.



We, Teacher Jen and Teacher Mike, will be with you every step of the way.



Have a happy journey.



## SELECT, DEVELOP, ORGANIZE AND USE APPROPRIATE TEACHING AND LEARNING RESOURCES, INCLUDING ICT, TO ADDRESS LEARNING GOALS



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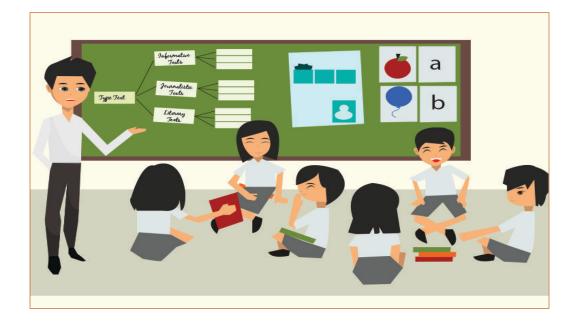
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Hello! Welcome to Module 9. I am Teacher Jen and, with a little help from Teacher Mike, I will be your guide throughout this module.



As teachers, we are expected to provide appropriately developed teaching and learning resources to effectively deliver our lesson. These teaching and learning resources (TLRs) support the learning experience of learners in order to enhance their academic achievement.



The proper selection, development, organization and utilization of teaching and learning resources, including ICT, helps enhance and maximize learners' participation through providing them with teaching and learning resources that can be seen or heard which provide concrete experiences about the lessons.

These TLRs should not only give vibrancy to the classroom setting by adding color and appeal to the learners but also help the teachers address the learning goals.

In this module, we will focus on:



STRAND: Teaching and learning resources including ICT



**INDICATOR**: 4.5.2 Select, develop, organize and use appropriate teaching and learning resources, including ICT to address learning goals.



## **KEY CONCEPTS**



Hello! I am Teacher Mike. Before we discuss TLRs in detail, let us be familiar with the key concepts of teaching and learning resources. Understanding these concepts facilitates a deeper appreciation of the indicator and helps you deliver lessons using appropriately-developed teaching and learning resources.



**LEARNING GOALS.** These are broad statements of learning outcomes which include Content and Performance Standards.

**TEACHING AND LEARNING RESOURCES.** These refer to resources used in the teaching and learning process such as teaching resources (e.g., curriculum guides, teacher's manuals); learning resources (e.g., learner's materials, worksheets).

#### INCLUSION OF INFORMATION AND COMMUNICATIONS TECHNOLOGY

**(ICT).** This refers to the integration of ICT in the teaching and learning process. This also includes digital resources downloaded from the Learning Resource Management and Development System (LRMDS) Portal, YouTube and the like.



## **SELF-REFLECTION**



Let us first reflect on our current teacher practices on the selection, development, organization and utilization of the teaching and learning resources. As Proficient Teachers, we need to have the knowledge, skills and attitude about TLRs.



Considering the key concepts, I have written down my reflections on these.

#### KNOWLEDGE

## As a Proficient Teacher, I know...

... that learning resources are the learning materials that help me deliver my lessons effectively.

#### SKILLS

## As a Proficient Teacher, I do...

... prepare learning materials that are appropriate to my lessons.

#### **ATTITUDES**

## As a Proficient Teacher, I feel...

... that lessons are best mastered and remembered when learning materials are used.



Now, it's your turn to reflect on this indicator.



l know	<b>/</b>

KNOWLEDGE
As a Proficient Teacher,

SKILLS		
As a Proficient Teacher, I do		
·		

ATTITUDES		
As a Proficient Teacher, I <b>feel</b>		



## **SUPPORT GROUP**



Welcome to our support group! Let us consider the case of Teacher Noemi and see how she tries to apply the indicator in her practice.

Teacher Noemi is an English 9 teacher. She prepares her Daily Lesson Log (DLL) targeting the competency on distinguishing text types (EN9WC-la-8). Let me lead you through the highlighted part and reflect on the notes.



	Monday Date:	Tuesday Date:	Wednesday Date:
I. OBJECTIVES	During the lesson, the learners need to:  identify the text types of the texts given  discuss the text type characteristics and features; and present findings before the class.	During the lesson, the learners need to:  compare and contrast informative, journalistic and literary writing and classify samples according to text types.	During the lesson, the learners need to:  • justify what text type was given in the samples and  • compose original sample of text types based on the given job card
A. Content Standards	The learner demonstrates understanding how Anglo-American literature and other text types serve as means of enhancing the self; how to use processing, assessing, summarizing information, word derivation and formation strategies, appropriate word order, punctuation marks and interjections to enable him/her to participate actively in a speech choir.		
B. Performance Standards	The learner actively participates in a speech choir through using effective verbal and nonverbal strategies based on the following criteria: Focus, Voice, Delivery, Facial Expression, Body Movements/ Gestures and Audience Contact.		
C. Learning Competencies/ Objectives Write the LC Code for each	EN9WC-la-8: Distinguish between and among informative, journalistic, and literary writing.		

Teacher Noemi stated the learning goals in her DLL.

III. LEARNING	Monday	Tuesday	Wednesday
RESOURCES	Date:	Date:	Date:
2. Other Learning Resources	1. Reading texts lifted from the internet, books, magazines, journals, recipe book, car manual, newspaper, brochure, cell phone manual, and comics 2. Metacards https://www.slideshare. net/ronacatubig07/grade- 9-informative-writing-journalistic-writing-and-literary-writing	1. LCD projector 2. Venn-Diagram Activity Sheet 3. Concept mapping Activity Sheet 4. Manila Paper 5. Job Cards	1. LCD projector 2. Job Card

Teacher Noemi selects and organizes the learning resources that she will use for the day's lesson.

IV. PROCEDURES	Monday Date:	Tuesday Date:	Wednesday Date:
B. Establishing a purpose for the lesson	of writing?  What kind of write-ups have  The Afro-Asiar Text by GEMS	How to Cook Sinigang from The Afro-Asian Literature Text by GEMS Publishing	The teacher does the following:  He or she asks the class
Do yo	you produced? Do you follow patterns or rules in writing?	How to Cook Sinigang by Mama Sita	if they understood what was discussed in the previous meeting and if
		Coconut: A Tree of Life (A recount on the different uses of the coconut tree parts)	they still have questions. He or she gives the class the final outputs. The students will be made to work in groups Each group identifies
		Sports Article from Manila Bulletin	
		The Legend of Maria Makiling	a leader.  - The group leaders
		Trees by Joyce Kilmer	are going to draw lots as to what job card
		An Editorial	each group will work on. Written on the job cards are the three basic text types.
			- From the list of suggested topics for each text type,
			the group will write a composition with a minimum of three paragraphs and a maximum of five paragraphs.

The highlighted parts of the DLL are the various types of learning materials used by Teacher Noemi to help meet the competency of the lesson.

	Monday	Tuesday	Wednesday
	Date:	Date:	Date:
F. Developing Mastery (Leads to Formative Assessment)	The teacher shall elicit from the learners the definition of the text types based on the samples given.  Learners shall give their personal definition of the text types considering their characteristics and features.  The teacher shall write the key concepts, terms or phrases coming from the students in the Manila paper.	The teacher shall now present another graphic organizer in the form of Concept Map to help the learners abstract what they learned and lead the students in the classification of write-ups.  INFORMATIVE TEXTS  JOURNALISTIC TEXTS  LITERARY TEXTS	The outputs of the learners shall be given to other groups to evaluate if they have followed the instructions given them.  The learners give their comments as to how the work of the other groups could be improved.  In case the writing output has not met the minimum criteria following the text type, the learners may ask the writer to revise the output to come up with the required text type assigned to them.

## **Probing**



Looking closely at the given sample excerpt, please try to answer and reflect on the questions presented below.



ı	How did the teaching and learning resources help the learners demonstrate content knowledge
	Did the teaching and learning resources lead to the learners' demonstration of what they need to learn and how they learn it? If yes, please elaborate.
	How did Teacher Noemi employ the process of selecting the teaching and learning resources?
	Did you find the developed teaching and learning resources useful in the teaching and learning process?

e teacher help the learners meet their learning goals through the utilization of and learning resources?

## **Suggestions for Improvement**

We commend Teacher Noemi for coming up with a good lesson log about text types. She used teaching and learning resources throughout the three-day lesson. She also adapted other learning resources that are generic and surely engaged the learners to actively participate in the class discussion.

However, to better help her enhance her lesson log, the following suggestions may be considered:

- For Part F, Developing Mastery, Teacher Noemi directed the learners to write their answers on a Manila paper. It would have been better had she illustrated the Learning Wall in the Manila paper using the metacards. This would have helped the learners categorize ideas and concepts about text types.
- Though Teacher Noemi used guided tables and metacards to evaluate learning, the
  activity is not aligned with the learning goals. The learning goal is to distinguish the
  text types and not to define them. It would have been better had she provided another
  activity or TLR to evaluate learning.



Great job! We hope that you find these suggestions helpful.

To further guide you in the selection, development, organization and utilization of the teaching and learning resources, including ICT, to address learning goals, we have provided some teacher practices in the succeeding pages.





## **ILLUSTRATIONS OF PRACTICE**



Mike and I will walk you through the various illustrations of teacher practices that will show specific ways on how to meet the indicator of this module.



We will consider the following scenario to help us fully understand the indicator.

Teacher Mark needs to teach his learners the lesson on recount. He ensures that the learners will fully understand the processes on how to write interesting recounts using varied sentence structures.

In his compilation of Instructional Materials (IMs), he finds some related materials-pictures and charts. He also searches the Learning Resource Management and Development System (LRMDS) portal for additional appropriate teaching and learning resources.

Considering his learning goals and the nature of his learners, he finally thinks that interactive materials from the portal will greatly aid him in instruction.

#### **ILLUSTRATION OF PRACTICE NO. 1:**

## Selecting Appropriate Teaching and Learning Resources



In the earlier cited situation, Teacher Mark includes in his selection process the existing materials. With an array of available teaching materials, his decision is primarily based on the nature of his learners. Here, the selection of appropriate teaching and learning resources (TLRs) plays an important role in curriculum delivery. These TLRs set the foundation for developing deeper engagement of learners that will facilitate the completion of knowledge and skills (Bunga, et al., 2016).



You may consider the following guidelines in selecting appropriate teaching and learning resources (Guidelines and Processes for LRMDS Assessment and Evaluation).

TYPES OF RESOURCES	SAMPLE	KEY QUESTIONS
Print	Workbooks, dictionaries, encyclopedias, newspapers, magazines,	<ul> <li>Is the material suitable for the learners' development needs?</li> <li>Does the material cover the content?</li> </ul>
	handouts, wordless books, fliers, reference books, maps, laboratory	<ul> <li>Does the material promote higher cognitive skills such as critical thinking, creating, learning by doing, inquiry and problem solving?</li> </ul>
	manuals, syllabi, brochures, pamphlets, show-me boards	<ul> <li>Is the material free from ideology, cultural and gender biases?</li> <li>Does the material reflect values and traits of being</li> </ul>

TYPES OF RESOURCES	SAMPLE	KEY QUESTIONS
		<ul><li>a Filipino?</li><li>Does the material address the interests of the learners?</li><li>Is the material free from any kinds of error?</li><li>Does the material address the learning goal?</li></ul>
Charts Posters Flash Cards Manipulatives	Charts, posters, flash cards, diorama boxes, finger puppets, movie roll boxes, TV roll boxes, origami dioramas, gardening tools, anatomy models	<ul> <li>Are the presented facts accurate?</li> <li>Are visuals clear and adequate?</li> <li>Are the materials age appropriate?</li> <li>Does the material serve its purpose?</li> <li>Is the material durable?</li> <li>Is the material free from any kind of error?</li> <li>Does the material address the learning goal?</li> </ul>
Non-Print Materials	CD-Rom, VCD, DVD, slide deck presentation, transparencies, TV, digital interactive	<ul> <li>Is the material consistent with the content of the DepEd Learning Competencies?</li> <li>Is the content accurate?</li> <li>Is the material logically developed and organized?</li> <li>Is the material relevant to real-life situations?</li> <li>Is the language appropriate?</li> <li>Is the material free from any kinds of error?</li> <li>Do the materials support values formation?</li> </ul>



Now that we are done and guided with how the learning materials were selected and how the learning goals were considered, we are ready to move forward to organizing and using our TLRs in our lessons.



However, when there are no available appropriate TLRs, we are encouraged to develop them. Take time to read the following illustrations of practice.

#### **ILLUSTRATION OF PRACTICE NO. 2:**

### Developing and Organizing Appropriate Teaching and Learning Resources

Teacher Faye is preparing her learners for a listening activity. She is looking for a literary piece from Anglo-American literature which will enable her learners to infer thoughts, feelings, and intentions in the material viewed (EN9VC-la-3.8); analyze literature as a means of discovering the self(EN9LT-la-14); distinguish between and among informative, journalistic, and literary writing (EN9WC-la-8); and use the appropriate segmentals (sounds of English) and the suprasegmentals or prosodic features of speech when delivering lines of poetry and prose, such as speech choir, jazz chants and raps (EN9OL-lc-1.15).

She is able to find a suitable resource in YouTube. However, she intends to maximize the existing material in targeting the development of other skills. She is challenged to develop her own learning material which will integrate four domains in one lesson presentation.

## Select, develop, organize and use appropriate teaching and learning resources, including ICT, to address learning goals

I. OBJECTIVES	
A. Content Standards	The learner demonstrates understanding of how Anglo-American literature and other text types serve as means of enhancing the self; how to use processing, assessing, summarizing information, word derivation and formation strategies, punctuation marks and interjections
B. Performance Standards	The learners actively participate in speech choir through using effective verbal and non-verbal strategies based on the following criteria: Focus, Voice, Delivery, Facial Expression, Body Movements/Gestures and Audience Impact.
C. Learning Competencies/Objectives Write the LC Code for each	EN9VC-la-3.8 Infer thoughts, feelings, and intentions in the material viewed EN9LT-la-14 Analyze literature as a means of discovering the self EN9WC-la-8 Distinguish between and among informative, journalistic and literary writing EN9OL-lc-1.5 Use the appropriate segmentals (sounds of English and the suprasegmentals or prosodic features of speech when delivering lines of poetry and prose, such as speech choir, jazz chants and raps)

The learning competencies targeted in this Daily Lesson Plan (DLP) help meet the content and performance standards which are the learning goals.

Therefore, Teacher Faye considers the learning goals in selecting the TLRs to be used in the lesson.

Let us focus on how Teacher Faye comes up with the use of TLR in this Review of Previous Lesson.

She wants her learners to apply their learning on stress. Since she wants the review to be interactive and engaging to everyone, she comes up with a developed material.

IV. PROCEDURES						
A. Reviewing the previous lesson or presenting the new lesson	picto	The class will be given a sentence written on metacards. Metacards are pictorial cards founded on Neurolinguistic Programming principles. This helps in engaging learners in the learning process.				
		I love you		I love you	I love <b>you</b>	
1	Tell the learners that the words in bold letters receive the primary stress and that means that the words should be spoken with appropriate pitch, length and loudness. The learners are expected to identify the changes in meaning as the words being stressed is changed.					

What things did Teacher Mary Faye consider in developing unavailable TLRs?

QUESTIONS TO PONDER	POSSIBLE RESPONSES AND REMARKS
Is there a need to develop a new TLR?	Yes.
What is my target goal?	Refer to the content and performance standard as realized through the learning competencies.
What type of TLR should I develop?	It may be audio, print, non-print, video, or audio-video resources.
Are there localized and/or indigenized materials to be used?	Yes. If none, proceed to the availability of materials to be used in the development of TLRs.
What material should I use in the development of the material?	The materials to be used in the development of TLRs depend on their availability.
Are the materials to be used in the development of the TLR available?	Yes. If not available, look for possible or alternative materials to be used.
When do I start planning and developing the new resources?	Planning to develop new resources starts once the teacher has identified the learning goals to be addressed, the necessary and available materials to be used, and the learners' background.

What things did Teacher Mary Faye consider in developing unavailable TLRs?

QUESTIONS TO PONDER	POSSIBLE RESPONSES AND REMARKS
Should I pretest the developed resources?	Yes. Look at how the learning resources would contribute to the teaching and learning process.
How should I use the developed materials?	Organize the materials used in the lesson plan. Consider the simplicity or the complexity of the materials to appropriately address the learning goals.



Remember that locally crafted TLRs substitute expensive ones which are not readily available. Our ability to localize or indigenize materials makes us adaptable to our classroom situation. It is encouraged that we develop localized and indigenized materials that are aligned with the learning goals.



I. OBJECTIVES			
B. Establishing the purpose for the lesson	The teacher discusses the objectives of the lesson.		
C. Presenting examples/ instances of the new lesson	,		
	Group Activity (10 minutes) The class will be divided into four groups. Each group will be given the following printed materials to study and will be informed that they are going to present their understanding of the materials. Below are the printed materials: Group 1: Biography of William Shakespeare - interview Group 2: Summary of Hamlet - press release Group 3: Character Sketch of Ophelia - commentaries Group 4: Character Analysis of Ophelia - monologue The following are the presentations:		
	Interview Photocopy of Shakespeare's biography and Interview Sheet		
	Press Release	Photocopy of the summary of Hamlet and sample press release	
	Commentaries	Photocopy of character sketch and sample commentaries	
	Monologue	Photocopy of the character analysis of Ophelia and sample monologue	
D. Discussing new concepts and practicing new skills #1	Each group will present their output. Rubrics will be used in grading the outputs: Group 1: Rubrics in Presenting an Interview Group 2: Rubrics in Publicly Announcing a Press Release Group 3: Rubrics in Presenting a Public Commentary Group 4: Rubrics-in-Delivering a Monologue		

Teacher Faye selects the existing learning materials. She also finds out that there is a need to develop other materials that will support the learning competency that is aligned to the learning goals.

Teacher Faye also takes time to develop her activity materials, particularly the Interview sheet. She also includes rubrics in her lesson plan to ensure that all the learning experiences and deliverables of the learners shall be graded accordingly.

#### Select, develop, organize and use appropriate teaching and learning resources, including ICT, to address learning goals

IV. PROCEDURES	
E. Discussing new concepts and practicing new skills #2	Watching YouTube presentation of Five Truths: Stanislavski (https://www.youtube.com/watch?v=20D7phopWWk&list=PL5DE67813461897E6 retrieved January 7, 2018)
	The students will use a teacher-made observation sheet about getting inferences about thoughts, feelings, and intentions on the material viewed.

Teacher Mary Faye also considers the availability of online sources. She acknowledges the learners' interest toward technology. She takes into consideration the learners' learning styles since most of them are inclined to technology.

IV. PROCEDURES	
J. Additional activities for application or remediation	Digital Comic Strip Rubrics in Evaluating Digital Comic Strip

The inter-connectedness of the varied TLRs used is also considered in the organization of the TLRs in the lesson.

Teacher Mary Faye demonstrates positive use of ICT in her lesson as she asks for an authentic output from the learners which is ICT-enabled.



The wise, logical and appropriate selection, development and organization of the teaching and learning resources contribute to its effective use in the classroom. This does not only address the learning goals but also engages the learners in a meaningful experiential learning.

Now that TLRs are appropriately selected, developed and organized, we are ready to use them to make learning more engaging and interesting to the learners. Join me in our quest of ensuring the appropriate use of the TLRs as we go to the next illustration of practice.



#### **ILLUSTRATION OF PRACTICE NO. 3:**

## Organization and Utilization of Appropriate Teaching and Learning Resources



As Proficient Teachers, you may opt to consider the following various ways to appropriately use teaching and learning resources for each of the subject learning areas.



The first table presents various learning resources in Teaching Math.

USE OF MANIPULATIVES IN TEACHING MATH CONCEPTS		
MANIPULATIVES	USES	
Counters	To teach one-on-one correspondence, ordinal numbers, and basic addition and subtraction	
Counting cubes	To solve simple addition and subtraction equations	
Fraction strips/pieces	To add and subtract fractions or to show equivalent fractions  To represent different fractional concepts and relationships	
Pattern blocks, attribute blocks, geometric shapes of different colors, sizes, and scales	To assist learners in learning basic algebra To assist learners in classifying and patterning tasks	
Base ten blocks	To represent and perform operations on multidigit numbers, such as 352+461	

USE OF MANIPULATIVES IN TEACHING MATH CONCEPTS		
MANIPULATIVES	USES	
Geoboards	To identify simple geometric shapes	
Geometrical solid models	To learn about spatial reasoning	
Standard and non-standard rulers and measuring cups	To represent length or volume in measurement lessons	
Tiles	To calculate the area or perimeter of an object	
Spinners	To find the probability of landing on a designated area	
Number of cases or dice	To find the probability of rolling a certain number or combination of numbers	

\*Source: Bunga, et al. (2016)



While manipulatives are usually very effective, their use does not sufficiently guarantee meaningful learning. Teachers must ensure that they are used in the context of the educational tasks to actively engage learners' thinking with the guidance of the teacher. This ensures that the use of manipulatives will lead to the ultimate goal of learning math which is to do math without them.

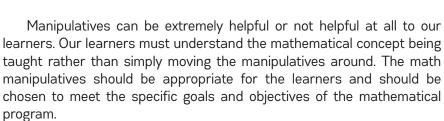


To further illustrate, let us consider the following scenario of Teacher Zachary, a Grade 4 Mathematics teacher, in his use of the manipulatives.

Teacher Zachary teaches his class the lesson on fractions. He provides them with a lot of manipulatives, such as counting sticks, geoboards, dice, and solid blocks. He explains the activity and asks his Grade 6 learners to use manipulatives to explore and familiarize concepts about fractions. Before the end of the lesson, he gives a five-item quiz and, to his surprise, none of the learners answered them correctly.



What could be the problem in the scenario? Actually, there is no problem with the use of manipulatives in the activity or in any mathematics or mathematics related-subjects. However, Teacher Zachary did not identify first the specific learning goal or goals; hence, he was not able to identify the objectives for using the manipulatives.





In the next table, we present various instructional materials used in teaching Science.

#### VARIOUS INSTRUCTIONAL MATERIALS AND THEIR USES IN TEACHING SCIENCEV

1			
MEDIUM	USES	ADVANTAGES	DISADVANTAGES
Charts Posters Bulletin Boards	<ul> <li>Attract attention</li> <li>Arouse interest</li> <li>Reinforce and add dimension</li> <li>Provide concrete meaning to abstract ideas</li> </ul>	<ul><li>Inexpensive</li><li>No equipment needed</li><li>Easy to use and store</li><li>Readily available</li></ul>	<ul><li>Limited to two dimensions</li><li>No motion</li></ul>
Overhead Transparencies	<ul> <li>Graphic Presentations</li> </ul>	<ul><li>Inexpensive software</li><li>Availability</li><li>Size</li></ul>	<ul><li>Impermanent</li><li>Require less common equipment</li></ul>
Handouts	<ul> <li>For important information:     as a quiz, as a guide and as     a reminder</li> <li>To emphasize a point</li> <li>For a complete explanation</li> </ul>	<ul><li>Can be prepared in advance</li><li>Can be retained for future reference and review</li></ul>	Some learners do not like to read handouts
Audiotapes Compact Disk (CD)-audio	<ul><li>Music fitness</li><li>Create a mood</li></ul>	<ul><li>Ease of production of tapes</li><li>Low cost, accessible</li></ul>	<ul> <li>Portable player is bulkier and heavier than other equipment like MP3 player</li> </ul>
Videotapes Films CD-visual DVDs	<ul> <li>Evaluation of learner performance</li> <li>Self-evaluation of learner or teacher</li> <li>Magnify small objects</li> </ul>	<ul><li>Instant replay</li><li>Can be saved for future use</li><li>Inexpensive</li><li>Portable</li></ul>	<ul> <li>They require equipment such as portable players and other audio-visual devices</li> <li>May not guarantee</li> </ul>

earners can make their vn videos cimulate verbal ommunication and eativity	<ul><li>Ease of operation</li><li>Can be interfaced with a computer</li></ul>	learning; thus, they need to be supplemented by
resent meaning involving otion ompel attention eighten reality romote understanding of ostract concepts	for individualized instruction	other teaching methods
omputer-assisted struction ecord keeping ord processing	<ul><li>High interest</li><li>Fast</li></ul>	Equipment offer limited to computer lab or resource center
nhancement of concepts	<ul><li>Inexpensive software</li><li>Can be combined with audio</li></ul>	Requires darkened room
trategy talks	<ul><li>Easy to use</li><li>Attention getting</li><li>Less hazardous specially for the asthmatic people</li></ul>	<ul><li>More expensive than chalkboard</li><li>Not available in all stores</li></ul>
cemplifies real-life tuation	• High reality- 3D	<ul> <li>Sometimes displays are expensive but not very engaging for learners.</li> </ul>
	•	,

\*Source: Bunga, et al. (2016)



The appropriate choice of learning resources, including ICT, can contribute to the teacher's effectiveness in instruction.



The next table presents the instructional materials for language teachers (English, Filipino, Mother Tongue, and Foreign Language).

#### Select, develop, organize and use appropriate teaching and learning resources, including ICT, to address learning goals

LEARNING RESOURCES	USES
Audio Books	Improve the learners' listening comprehension and vocabulary
Dictionaries	<ul> <li>Bilingual dictionaries are useful for beginners and intermediate learners.</li> <li>Monolingual dictionaries are useful for advanced learners.</li> <li>Pocket dictionaries are easy to carry and good for quick reference.</li> <li>Electronic dictionaries are portable, easy and quick to search.</li> </ul>
Video tapes	<ul> <li>Enhance the listening experience of the learners</li> <li>Provide important visual stimulus for language production as observed in the setting, action, emotions and gestures.</li> </ul>
Recording devices (tape recorders, video cameras)	Record conversations, radio programmes, songs, classes and lectures and help the learners improve listening comprehension
Computer software	<ul> <li>Some computer programs are designed to accelerate language acquisition.</li> <li>Supplements the core language program used in the classroom</li> </ul>
Flash cards	<ul> <li>Useful for learning vocabulary and grammar</li> <li>Used to write words, phrases, or sentences on one side and meaning or definition or translation on the other side</li> </ul>
Chart	Useful in learning sounds, words, connected speech
Pictures	<ul> <li>Improve the learners understanding of language through pictures of objects, people, animals, plants and others</li> </ul>
Newspaper and Magazine	<ul> <li>Brings real-life situation to learners and used to enhance skills in reading, writing, listening and speaking.</li> <li>Used to reflect the culture of a certain community through the language they contain</li> </ul>

\*Source: Bunga, et al. (2016)



With the wide range of available materials presented, it is important for a language teacher to know what kind of resources to use and when to use them for the specific language lesson and which materials are best suited to the different ability levels of the learners.



The following illustration presents the instructional resources which can be used as auxiliary tools in text, visual or audio media both in print and in digital format in Araling Panlipunan.

- Instructional Materials for **Araling Panlipunan**
- Maps
- Models
- · Charts
- Slogans
- Pamphlets

- Guide Cards
- Globes

- Bulletin Boards
- Posters
- Whiteboards
- Graphics
- Worksheets
- Photographs



The use of computer, powerpoint slide decks, projectors, videos, films is effective in teaching Araling Panlipunan.





Every teacher needs instructional materials that best suit the method and strategy that could fully develop the technical skills of learners. To assure meaningful and effective Edukasyong Pantahanan at Pangkabuhayan (EPP) or Technology and Livelihood Education (TLE) instruction, the teacher should identify proper tools and equipment to use.



The following must be considered in identifying tools to use in EPP or TLE.

- · Variety of tools appropriate for different content areas
- · Availability of tools in each subject area
- · Availability of raw materials to be used
- · Adequate number of tools to be used by the learners
- · Adequate classroom or laboratory work space

APPROPRIATE LEARNING RESOURCES TO USE IN TLE					
SUBJECT AREA	APPROPRIATE MATERIALS T	APPROPRIATE MATERIALS TO USE			
Home Economics	Pictures and images can be Videos, powerpoint slide dec Real materials like:  1. Sewing or Garment Mat a. Handsewing needle b. Rotary cutter c. Scissors d. Machine needles e. Pincushion f. Pinking shears/ scissors  2. Cooking utensils: a. Knife b. Chopping board c. Tweezers d. Ladle	rerials es g. Safety pins h. Flat iron i. Thread j. Marking pencil k. Seam ripper			
Agriculture		used when tools are not available hat follow could be used, too: g. Insecticides h. Cutlass			

c. Bolo

d. Pick

e. Crowbar

f. Pitch forks

i. Hoes

j. Spades

k. Wheel barrow hoe

#### Select, develop, organize and use appropriate teaching and learning resources, including ICT, to address learning goals

## APPROPRIATE LEARNING RESOURCES TO USE IN TLE

#### **SUBJECT AREA**

#### **APPROPRIATE MATERIALS TO USE**

#### Industrial Arts

1. Hand tools:

Pliers, hammers, screwdrivers, saw (ripsaw, crosscut saw, keyhole saw), push-pull rule, nails, adhesive tapes, cutter, pair of compasses

- 2. Electrical tools:
  - Hammers (claw hammer, ball peen hammer, mallet), portable electric drill, slide cutting pliers
- 3. Videos and powerpoint slide decks can also be used to discuss other ways of using tools

Information and Communications Technology (ICT)

- Computer-aided materials
- · Powerpoint slide decks
- Computers (desktop computer, laptop computer)
- Tablets
- Videos

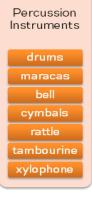
\*Source: Bunga, et.al. (2016)



The use of appropriate learning resources in Music and Arts is equally important as those earlier mentioned. The use of recorded teaching materials in the classroom has proven to improve music performance. Specific and actual musical instruments may also be considered in teaching music.











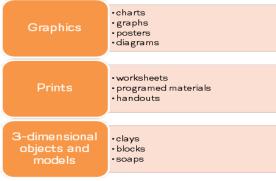
Miscellaneous Instruments

harmonica

keyboard

\*Source: Bunga, et al. (2016)

For the Arts, the use of tangible materials in the classroom is important.



Physical Education (PE) has a wide range of materials and technology to use to enhance and supplement PE instruction. The use of instructional materials has become a major instructional platform to facilitate cognition and skill performance. The following table gives suggestions in the use of learning materials in teaching PE.

MATERIALS AND EQUIPMENT USED IN TEACHING PE					
EDUCATIONAL GAMES	EDUCATIONAL DANCE	EDUCATIONAL GYMNASTICS	PHYSICAL FITNESS ASSESSMENT		
Playground balls Balls for striking Beach balls Yarn alls Balloons Flying disks Deck rings Plastic bottle bats Tennis rackets Sticks with styrofoam Portable bym Standard nets Cones or jug markers Spotmarkers Basketballs Adjustable basketball Goals Soccer balls Parachute	Plastic hoops Styrofoam hoops holders Rhythmic equipment -ankle wrist bells -rain stick -rap stick -drum with mallet -lummi sticks Stretchy material Bands nylon scarves Jump bands CD/Tape player Cordless microphone Sound system	Foam vaulting Trapezoid styrofoam Shapes (circles, triangles, ovals, wedge) Mats Landing mats Inclined mats Balance beams Benches Balance boards Jumping boxes Shapes of varying heights Connecting ladder Hanging ropes Jump ropes	Sit and reach box for measuring flexibility Stopwatches Skinfold callipers Modifies chin up bar and standards Fitness assessment package		

\*Source: Bunga, et.al. (2016)



Having seen how Indicator 4.5.2 can be targeted and attained, I am confident that you are now ready to incorporate in your lesson plans the appropriate selection, development, organization and utilization of the teaching and learning resources, including ICT, to address learning goals.

The following table presents other illustrations of practice that you may also consider in making your teaching practices aligned to this indicator.



#### **OTHER ILLUSTRATIONS OF PRACTICE**

#### 1. Teaching and Learning Resources to address learning goals

The teacher strategically selects from a huge array and wide variety of teaching and learning resources consistently aligned to the learning goals. He or she picks teaching and learning materials that help the learner understand the key concepts or key skills (e.g. the teacher is teaching independent reading. Part of the process is the learners' understanding of the unfamiliar words. The teacher encourages the learners to use a handy dictionary or offline dictionary installed in an android phone to look for word meanings.)

## Select, develop, organize and use appropriate teaching and learning resources, including ICT, to address learning goals

The teacher considers the diversity of the learners in the development of the teaching and learning materials.

He or she sees to it that the materials to be crafted may be basic or supplementary to the curriculum.

The teacher utilizes learning resources which are consistently aligned with the learning goals. He or she aligns all instructional materials to the instructional purposes.

The teacher modifies activities and materials found in the Learner's Materials and Teacher's Guide, if any, to suit the learning needs and interest of the learners.

He or she further looks for the need of developing new teaching and learning materials to appropriately suit the learning goals to ensure learners' active participation.

The teacher also considers the level of the learners' development and readiness. He or she selects existing teaching and learning resources that are age appropriate, individual appropriate and cultural & social context appropriate (e.g. vocabulary level and difficulty of concepts.)

The teacher sees to it that he or she uses the variety of educational technology tools: auditory aids, visual aids, audio-visual aids and activity aids (e.g. Manila paper, chalkboards, charts, diagrams, books, magazines, projectors, TV, video clips, flip charts, markers, handouts, worksheets, activity sheets, modules, Strategic Intervention Materials, metacards, pictures, learning trips/field trips, task cards, observation notebook, journal, globes, calculator, maps, blocks, number charts, sticks, stones, and other manipulatives.)

The teacher considers the time element relative to the use of the teaching and learning resources ensuring that materials are not used to consume the entire teaching and learning contact time.

#### 2. Teaching and Learning Resources, including ICT, to address learning goals

The teacher considers the Learning Resource Management and Development System(LRMDS) Portal of the Department of Education (DepEd) which are used across curriculum areas (e.g. the teacher looks for a teaching material to be used to teach how to write a recount in English Grade 7. In the LRMDS portal, the teacher found one material entitled "Here, boy!" a show and tell online illustrations on how to write a recount.)

The teacher prepares ICT-aided instruction, if available, aligned to the learning goals considering the learners' development, interest, and readiness (e.g. the use of android phones, tablets and interactive white boards which direct learners to interact face-to-face with the technology.)

The teacher utilizes online platform to download related materials aligned to the learning goals (e.g. a science teacher would like to show the vast relationship of the celestial bodies and the solar system; instead of using just pictorial presentations, she looks for a video snap shot presentation of the universe in YouTube to catch the attention of the learners)

The teacher modifies ICT-based instruction, if needed, aligned to the learning goals (e.g. the use of social networking platforms, learners manipulation and presentation of output through a software)



## PROFESSIONAL DEVELOPMENT PLAN



After you have explored the different key concepts on the selection, development, organization and utilization of teaching and learning resources, including ICT, you now have a better appreciation of the indicator. Based on your learning in this module, think of what you can do to enhance your professional development.



Fill in the personal action plan below.

STRENGTHS What are the skills you are good at?	<b>DEVELOPMENT NEEDS</b> What are the skills you need to improve?	ACTION PLAN What can you recommend for your development intervention?	<b>TIMELINE</b> When will you implement your plan?	RESOURCE NEEDED What assistance/ resources do you need to implement the plan?



Happy planning!





## RESOURCE LIBRARY



This section provides you with resources that can help you further understand the indicator.



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The author, who is a Grade 11 learner, presents a sample of an Informative Essay entitled "The Great War", a literary write-up, used in the Daily Lesson Log of Teacher Noemi.

Antofina, Jr., V. R. (2016). Teaching and learning materials [Presentation slides]. Retrieved from https://www.slideshare.net/En\_Teng/teaching-and-learning-materials

These are slide deck presentations prepared by the author about Teaching and Learning Materials (TLMs) in the context of the Department of Education. This includes definition of the TLMs, the purpose and importance of the TLMs, and the types of TLMs.

Bunga, J. B., Pilariza, C. A., & Serrano, E. D., (2016). *Principles of teaching 2.* Quezon City: Adriana Printing Co., Inc.

This book features chapters on the appropriate selection of instructional materials for specific subject learning areas. These chapters are helpful in providing the list of learning materials, their uses, advantages and disadvantages.

Chanda, D. H., Phiri, S. N. A., & Nkosha, D. C. (1998). Teaching and learning materials analysis and development in basic education (G. Tambulukani, Ed.). [Training manual]. Retrieved from http://unesdoc.unesco.org/images/0013/001320/132019eo.pdf

This online toolkit on the teaching and learning material analysis and development talks about the need to analyze the materials to be used in the basic education and the need to develop materials if there are no available resources.

Hamza, M. (2012). Training material development guide. Retrieved from https://www.msb.se/RibData/Filer/pdf/26433.pdf

This handbook serves as a guide in the development of training materials. This includes information on the main steps and stages in sequence of designing training materials.

- Lewis, B. (2018). TLM-Teaching/learning materials. Retrieved from https://www.thoughtco.com/tlm-teaching-learning-materials-2081658

  This online article gives discussion about the use of teaching and learning materials and their samples.
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  This online article presents the teaching aids, their needs, types and importance of teaching aids in the learning process. This enumerates the many aids that are available like audio, visual, and audio-visual aids.
- Quality learning and teaching resources Facilitating effective learning. (n.d.). Senior Secondary Curriculum Guide [Booklet]. Retrieved from http://cd1.edb.hkedcity.net/cd/cns/sscg\_web/html/english/mainO6.html

  This webpage provides a spectrum of educational materials that teachers use in the classroom to support specific learning objectives, as set out in lesson plans. These can be games, videos, flashcards, project supplies, and more.
- Salandanan, G. S. (2012). Methods of teaching. Quezon City: Lorimar Publishing, Inc.

  The author of this book provides a chapter on the appropriate selection and use of the teaching and learning materials (TLRs).
- The importance of learning materials in teaching. (2017). Guyana: Ministry of Education.

  Retrieved from http://education.gov.gy/web/index.php/teachers/tips-for-teaching/item/2036-the-importance-of-learning-materials-in-teaching

  The online article gives explanation on the importance of the learning materials in teaching.

  This also expounds the relation of the use of the TLRs to learner learning, lesson structure, and differentiated instruction.
- UNESCO HIV and Health Education Clearinghouse. (2002). Quality checklist for selecting teaching and learning materials. New York: UNESCO. Retrieved from http://hivhealthclearinghouse.unesco.org/sites/default/files/resources/qualitychecklist. pdf

The online PDF article contains a three-page sheet on the Quality Checklist for Selecting Teaching and Learning Materials.

#### **LINKS**

The following links are your access to further readings on the enhancement of the teaching and learning resources. You will find related literature, studies, list of TLRs, different kinds of teaching strategies using TLRs, criteria on how to select, develop, organize and use teaching and learning resources. You will also find in the following links studies conducted and recommendations on the positive use of TLRs.

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http://www.udlcenter.org/sites/udlcenter.org/files/updateguidelines2\_0.pdf

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#### **Leonor Magtolis Briones**

Secretary Department of Education

#### Allan B. De Guzman, Ph.D. Luzon Zonal Representative

Rita May P. Tagalog, Ph.D.

Visayas Zonal Representative

#### **TEACHER EDUCATION COUNCIL**

#### Evelyn G. Chavez, Ph.D.

Mindanao Zonal Representative

#### Lourdes R. Baetiong, Ph.D.

Language Subject Representative

#### Myrna B. Libutaque, Ph.D.

Mathematics Subject Representative

#### Lorina Y. Calingasan, Ph.D.

Social Studies Subject Representative

#### **SECRETARIAT**

#### Runvi V. Manguerra, Ph.D.

Executive Director II

#### Jayson A. Peñafiel

Education Program Supervisor

## **ACKNOWLEDGEMENTS**

#### **PROJECT TEAM**

#### Gina O. Gonong, Ph.D.

Joint Project Team Leader and Director PNU-RCTQ

#### John Pegg, Ph.D.

Joint Project Team Leader and Director **UNE-SIMERR** 

#### Christine Reading, Ph.D.

Senior Research Fellow **UNF-SIMFRR** 

#### Michael Wilson I. Rosero

Senior Research Officer PNU-RCTQ

#### Mikkey Mari M. Tuazon

Research Officer PNU-RCTQ

#### PNU-RCTQ and UNE-SiMERR National **Research Centre**

Jennie V. Jocson, Ph.D. Deputy Director, PNU-RCTQ

#### Allan S. Reyes. Ph.D.

Senior Program Manager, PNU-RCTQ

#### Joy Hardy, Ph.D.

Deputy Director, UNE-SiMERR

#### Ken Vine, Ph.D.

Principal Research Adviser **UNE-SIMERR** 

> Support Staff Silvia Danieli June Billings Ambrose McDermott

Glinore Morales Beverly Estocapio Ruby Gantalao Luis Angelo Abergas Lyndon Morales Guillen Nabong Ezra de Jesus

#### **WRITER-COORDINATORS**

#### Jennifer E. Lopez

Education Program Supervisor Region IV-A

#### Maria Concepcion Beltran - Montenegro

Faculty, Ateneo de Manila University

#### **WRITERS**

Adelyn R. Bartolome Domingo R. Cueto Alfred James A. Ellar Mark Anthony P. Idang Gerlie C. Lopez Francis Victor A. Medrano May Grace D. Salazar Shiela Niña Rea-Santes Rvan G. dela Torre John Paul dela Rosa Grace Urbien-Salvatus Karina Angela C. Celestial Arlene M. Hernandez Christian Mespher A. Hernandez

#### **REVIEWERS**

Shirley N. Cerbo Jerome A. Chavez, Ed.D. Mary Leigh Ann C. Perez Vivian I. Buhain, Ed.D. Philip Jay N. Alcoberes, Ph.D. Allen U. Bautista, Ed.D.

> Maricel D. Ambid Manuel R. Apuli Florpina B. Galay

Sandra A. Garcia Eduard O. Gonong Ryan H. Homan Glen P. Honrado Neri D. Mangalindan Amparo M. Muñoz Natividad V. Nacino Aufric Alma N. Navarro Carlo Donato E. Olivan Jose Ariel S. Padsoyan Jennifer M. Rojo Gemma A. Realo Neil Vincent C. Sandoval

#### **EDITOR**

Myrna L. Macalinao, Ph.D.

#### **GRAPHICS & LAYOUT ARTIST**

Raymond S. Bermudez

#### **AUSTRALIAN EMBASSY**

#### Francesca Lawe-Davies

First Secretary-Education

#### **BASIC EDUCATION SECTOR** TRANSFORMATION (BEST) **PROGRAM**

#### Kaye Cox

Team Leader

#### Alison Atwell, Ph.D.

Component Lead Teaching and Learning

#### Soledad L. Lecaroz

Teacher Development Specialist

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