De La Salle University

A Teachware for Mobile Teachers on Basic Reading

by

Barrios, Ma. Katrina Carmela T.
Castillo, Lian Sabella V.
Tenorio, Ma. Clarissa Andrea C.

Tan, Mike Anthony S.
Adviser

Espiritu, Jose Lloyd D.
Tabora, Liandro Antonio T.
Tan, Mike Anthony S.
Panelists

De La Salle University

Acknowledgement

The efforts done in this thesis came not only from the members, but from other people as well. Such efforts have been very helpful and valuable in the success of this thesis. The people who lent a hand to the group should not go unnoticed.

First of all, would also like to thank our parents Mr. Antonio and Mrs. Lillian Elizabeth Barrios, Mr. Rossano and Mrs. Leny Castillo, and Mr. Bobby and Mrs. Imee Tenorio, for their moral support and constant encouragement. We are also grateful for the wisdom they shared with us and for the financing they have done for the thesis. We could not have done it without you.

We would also like to thank Gerard Del Mundo, Jelvin Base, Andrew Pamorada, Jonathan Keh, Martin San Diego, Ken Koo, Bien Mandac, Mike Chua, Jasper See, and Mite Kuzeyski for contributing photos they have taken with great expertise.

We would also like to thank Aymys Rempis for her voice over skills. Her excellent diction, modulation and expert pronunciation helped in achieving one of the thesis' main objectives. Her contribution is vital in the development of the teachware.

We would also like to thank Albert Leonard Dizon for sharing his expertise in ActionScript coding; That of which is necessary to develop a better teachware through optimized algorithms.

De La Salle University

We would also like to thank Jerald Ngo for helping us complete the Word Manipulation sets. Indeed, his creative mind had been needed for us to complete our modules with great effectivity.

We would also like to thank Sam Reyes and Eric Mendoza for assisting us with our requirements prior our defence proper. Both of them are blockmates that are truly selfless in service.

We would also like to thank Ngo, Platon, Tenorio and Ylaya residences for housing us during our thesis meetings and development phase. We would like to thank ate Tess for taking care of us and keeping us safe.

We would also like to thank the MRT and LRT, Mr. Proseso, and Jerald Ngo's personal chauffeur for our transportation and for ensuring we have a safe trip wherever we may go.

We would also like to thank CSB – SDA campus for providing us a sound proof recording room and remarkable equipment. This greatly contributed to the excellent quality of the voice overs for our teachware.

We would like to thank GGSi for sponsoring our tokens for our content experts. Happiness is an attribute that we greatly value.

We would also like to thank DepEd – ALS, Quezon City Jail and the assistant detainees, Barangay Loyola Heights – ALS, and PESO for assisting us in acquiring data and smooth operations for testing our teachware.

De La Salle University

To our friends and classmates, we would like to thank you for the care and encouragement that pushes us not to give up.

To each of our own inspirations, we would like to thank you for giving us the motivation we needed in finishing this thesis.

To our content experts, Ms. Angelyn Malabanan and Ms. Irene Barzaga, and our IST mentors, Ms. Kiran Budhrani, Ms. Estefanie Ulit, Mr. Liandro Antonio Tabora and Dr. Jose Lloyd Espiritu, we would like to thank you for all the help you have given us, for the advice and expertise that you were never reluctant to share with us.

To our thesis adviser, Mr. Mike Anthony Tan, for sharing with us his time, effort, knowledge and determination, we would like to thank you Sir from the bottom of our hearts. No words could ever express how grateful we are for all the help you have given us. Once again, thank you very much.

Finally, we would like to thank our Almighty Father, God, for guiding us and for giving us the courage, wisdom, determination and unconditional love. We thank you Lord God because none of this would be possible without you.

M. K. C. T. B.

L. S. V. C.

M. C. A. C. T.

Abstract

More than sixteen (16) million Filipinos cannot read and write (DepEd, 2011). Illiteracy is the continuous cycle between poverty and ignorance that cultivates the Filipino struggle. In this light, the Bureau of Alternative Learning System has partnered with various organizations including the Quezon City Police Department Station 10 and Barangay Loyola Heights in order to deliver and conduct lessons for illiterate individuals. Their learners include a variety of people that are usually domestic workers and inmates who completely cannot read the basic alphabet. The teachers cannot deliver the topics in an organized manner and do not present the letters as constituents of the word as well as properly exhibit the mapping of the word to letter to sound and vice versa.

With that said, the proponents will develop a teachware that will serve as a tool that will assist the mobile teachers in teaching adult learners to verbalize a word with or without knowing its meaning. Explicit Reading, Systematic Reading and Phonemic Awareness Instruction are the models and/or teaching approach to be used so that the teachware to be developed will be effective and appropriate to the demographic.

Table of Contents

Chapter 1 Problem and its background

1.1.	Introduction	1-1
1.2.	Background of the Study	1-3
1.3.	Statement of the Problem	1-6
1.4.	Theoretical Framework	1-9
1.5.	Objectives	1-14
1.6.	Significance of the Study	1-15
1.7.	Scope and Limitation	1-16

Chapter 2 Review of Related Literature and Systems

2.1.	Illiteracy in the Philippines	2-1
2.2.	Partner Institutions and Programs	
2.2.1.	Department of Education (DepEd)	2-2
2.2.2.	Bureau of Alternative Learning System (BALS)	2-2
2.2.3.	Alternative Learning System (ALS)	2-2
2.3.3.1.	Mobile Teachers	2-6
2.3.	Reading	2-7
2.3.1.	Reading Skills	
2.3.1.1.	Phonemic Awareness	2-8
2.3.1.1.1.	Phonics Instructions	2-8
2.3.1.1.1.1.	Synthetic Phonics	2-8
2.3.1.1.1.2.	Embedded Phonics Instructions	2-9
2.3.1.1.1.3.	Analogy Phonics	2-9
2.3.1.1.1.4.	Phonics through Spelling	2-9
2.3.1.1.1.5.	Analytic Phonics	2-10

De La Salle University

	2.3.1.1.2. Explicit and Systematic Phonics	2-10
	2.3.1.1.3. Phonemic Awareness Instruction	2-11
	2.3.1.2. Word Recognition	2-12
	2.3.1.2.1. Word Recognition Strategies	
	2.3.1.2.1.1. Phonic Analysis and Synthesis	2-13
	2.3.1.2.1.2. Whole Word	2-13
	2.3.1.2.1.3. Context Clues	2-14
	2.3.2. Explicit Reading	2-14
2.4.	Filipino Structure	
	2.4.1. The Tagalog Alphabet	2-14
	2.4.2. The Tagalog Phonemes	2-15
	2.4.3. Diphthongs	2-16
	2.4.4. Consonant Clusters	2-16
	2.4.5. Syllabication	2-17
2.5.	Dual Coding Theory	2-18
2.6.	Related Systems	
	2.6.1. Sight Words buddy for Windows	2-19
	2.6.2. Fast ForWord Language to Reading: Make the Connection from Sounds to Letters	2-20
	2.6.3. Fast ForWord Reading 1: Building the Bridge to Better Reading	2-21
	2.6.4. Fast ForWord Reading 2: Connections for Better Comprehension	2-24
	2.6.5. Fast ForWord Reading 3: Making Words and Language Fit Together	2-25
	2.6.6. WYNN Literacy Software Solution	2-27
	2.6.7. Kurzweil 3000	2-28
	2.6.8. Smart Tutor's Phonemic Awareness	2-29

2.6.9. A Phonics Introduction Application	2-32
2.6.10. I Love Phonics! Software	2-33
2.6.11. Table Summary of Related Systems	2-37
Chapter 3 Methodology	
3.1. Analysis	3-1
3.1.1. Overview of the Current Learning Situation / Environment	3-1
3.1.2. Target User	3-2
3.1.3. Problem Discussion	3-2
3.1.4. Content Analysis	3-4
3.1.5. Mode of Delivery	3-4
3.1.6. Gantt Chart	3-6
3.1.7. Problems Encountered	3-7
3.1.8. Analysis Cost	3-7
3.2 Design	3-9
3.2.1. Topic Outline	3-9
3.2.2. Instructional Objectives	3-10
3.2.3. Theories and Instructional Strategies	3-11
3.2.3.1 Multimedia (The Seven Principles of the Cognitive Theory of Multimedia Learning)	3- 11
3.2.3.2 Spatial Contiguity (The Seven Principles of the Cognitive Theory of Multimedia Learning)	3-12
3.2.3.3 Temporal Contiguity (The Seven Principles of the Cognitive Theory of Multimedia Learning)	3-12
3.2.3.4 Repeated Reading	3-13
3.2.3.5 Echo Reading	3-14

3.2.4. Multimedia Selection	3-14
3.2.4.1 Text	3-14
3.2.4.2 Visuals	3-15
3.2.4.3 Audio	3-15
3.2.4.4 Interactive Components	3-16
3.2.5. Instructional Design Matrix	3-16
3.2.6. Storyboard	3-18
3.2.7. Screen Designs	
3.2.7.1 General Theme	3-21
3.2.7.2 Main Menu	3-22
3.2.7.3 Lessons	
3.2.7.3.1 Alpabeto Menu	3-23
3.2.7.3.2 Alpabeto (Patinig)	3-24
3.2.7.3.3 Pantig Menu	3-25
3.2.7.3.4 Pantig	3-26
3.2.7.3.5 Salita	3-27
3.2.7.4 Dictionary	3-28
3.2.8. Script	3-29
3.2.9. Problems Encountered	3-232
3.2.10. Design Cost	3-233
3.3 Development	
3.3.1 Team Organization and Member Roles	3-234
3.3.2 System Specifications	3-236
3.3.2.1 Modules	
3.3.2.1.1 Alpabeto Module	3-236
3.3.2.1.2 Pantig Module	3-237
3.3.2.1.3 Salita Module	3-237

3.3.2.2 Features	
3.3.2.2.1 Dictionary	3-237
3.3.2.2.2 Voice Over Function	3-238
3.3.2.2.3 Highlighted Syllables	3-238
3.3.3 Tools Required	3-239
3.3.4 Technical Media Specifications	3-240
3.3.5 Prototypes	
3.3.5.1 Prototype 1	3-241
3.3.5.2 Prototype 2	3-243
3.3.5.3 Prototype 3 – Pre-Final Prototype	3-245
3.3.5.3 Prototype 4 – Final Prototype	3-246
3.3.6 Problems Encountered	3-248
3.3.7 Development Cost	3-248
3.4 Implementation and Testing	3-249
3.4.1 Installation Requirements	3-249
3.4.1.1 Hardware Requirements	3-249
3.4.1.2 Software Requirements	3-249
3.4.1.3 People Requirements	3-250
3.4.2 User Acceptance Testing	3-250
3.4.2.1 Sample Demographics	3-250
3.4.2.2 Time Requirements	3-251
3.4.2.3 Data Collection Methods	3-251
3.4.2.4 Procedure	3-252
3.4.2.5 Certification by Content Expert/ Organization	3-255

3.4.3 Problems Encountered	3-255
3.4.4 Implementation and Testing Cost	3-256
3.5 Evaluation	3-257
3.5.1 Evaluation Criteria	3-257
3.5.2 Results	3-259
3.5.3 Analysis	3-260
3.5.4 System Revisions Required	3-264
3.5.5 Problems Encountered	3-265
3.5.6 Total System Cost	3-265
Chapter 4 System Outputs	
4.1 Instructional Process	
4.1.1 Pre-Instruction Activity	4-1
4.1.2 Lesson Presentation	
4.1.2.1 Alpabeto Module	4-2
4.1.2.2 Pantig Module	4-3
4.1.2.3 Salita Module	4-5
4.1.3 Learning Activities / Exercises	4-9
4.2 Assessment Process	4-10
Chapter 5 Findings, Conclusion, and Recommendations	
5.1 Findings / Realizations	5-1
5.2 Conclusion	5-2
5.3 Recommendation	5-4

List of Tables

Table 2.6.11-1: Summary of Related Systems	2-37
Table 3.1.4-1: Topic – Artifact Matrix	3-4
Table 3.1.6-1: Gantt Chart	3-6
Table 3.1.8-1: List of Printing Expenses	3-8
Table 3.1.8-1: Breakdown of Analysis Cost	3-8
Table 3.2.5-1: Instructional Design Matrix	3-16
Table 3.2.11-1: List of Software	3-233
Table 3.2.11-2: Total Breakdown of Design Cost	3-234
Table 3.3.4-1: Technical Media Specifications	3-240
Table 3.3.7-1: Total Development Cost	3-249
Table 3.4.4-1: Breakdown for Transportation cost	3-256
Table 3.4.4-2: Breakdown of Expenses for CD Burning and Questionnaire Printing	3-257
Table 3.4.4-3: Breakdown of Implementation and Testing cost	3-257
Table 3.5.61: Total System Cost	3-265

List of Figures

2.6.1-1. Sight Words Buddy for Windows	2-20
2.6.3-1. Bed Time Beasties	2-22
2.6.3-2. Bear Bags	2-23
2.6.3-3. Magic Rabbit	2-23
2.6.3-4. Quail Mail	2-24
2.6.4-1. Ant Antics	2-24
2.6.4-2. Leaping Lizards	2-25
2.6.5-1. Canine Crew	2-26
2.6.5-2. Chicken Dog	2-26
2.6.5-3. Twisted Pictures	2-27
2.6.8-1. Letter and Sound Isolation	2-31
2.6.8-2. Rhyming (through images)	2-31
2.6.8-3. Rhyming (through sounds)	2-31
2.6.9-1. Letter Phonics Menu	2-32
2.6.9-2. Alphabets	2-33
2.6.9-3. Word Construction Activity	2-33
2.6.10-1. Letter Bingo Activity	2-35
2.6.10-2. Letter Makers	2-35
2.6.10-3. Rhymes and Sounds	2-35

2.6.10-4. Word Builder Activity	2-36
3.2.7.1-1. General Theme	3-21
3.2.7.2-1. Main Menu	3-22
3.2.7.3.1-1. Alpabeto	3-23
3.2.7.3.2-1. Alpabeto (Patining)	3-24
3.2.7.3.3-1. Pantig Menu	3-25
3.2.7.3.4-1. Pantig	3-26
3.2.7.3.5-1. Salita	3-27
3.2.7.4-1. Dictionary	3-28
3.3.5.1-1. Home Page	3-241
3.3.5.1-2. Alpabeto-Patinig	3-241
3.3.5.1-3. Pantig - B	3-242
3.3.5.2-1. Home Page	3-243
3.3.5.2-2. Alpabeto - Katining	3-243
3.3.5.2-3. Salita – Word Manipulation	3-243
3.3.5.2-4. Diksyunaryo Partial Screen	3-244
3.3.5.3-1. Salita Menu with Final Word List	3-245
3.3.5.3-2. Komplikadong Salitan Selection	3-245
3.3.5.4-1. Alpabeto with a Toggle Button	3-246
3.3.5.4-2. Pantig with a Toggle Button	3-246
3.3.5.4-3. Diksyunaryo	3-247

3.5.2-1. Teacher Evaluation Results	3-359
3.5.2-2. Student Evaluation Results	3-360
4.1.1-1. Module Selection	4-1
4.1.2.1-1. Alpabeto Module	4-2
4.1.2.1-2. Alpabeto Module - Patinig	4-3
4.1.2.2-1. Pantig Module	4-4
4.1.2.2-2. Pantig Module - Katinig-Patinig	4-5
4.1.2.3-1. Salita Module	4-6
4.1.2.3-2. Salita Module - Hulapi-Unlapi/Unlapi-Hulapi	4-6
4.1.2.3-3. Salita Module	4-7
4.1.2.3-4. Salita Module - Simpleng Manipulasyon	4-8
4.1.2.3-5. Salita Module	4-9
4.1.2.3-6. Salita Module - Mga Salita	4-9

List of Appendices

Appendix A. Certification of organization tie-up

Appendix B. Personal Information Sheet

Appendix C. Teachware Content

Appendix D. Photos during testing

Appendix E. User Acceptance Test – Mobile Teachers

Appendix F. User Acceptance Test – Learners

Appendix G. Certification of Testing

Chapter 1 Problem and its background

1.1. Introduction

It is estimated that more than sixteen (16) million Filipinos cannot read nor write (DepEd, 2011). Illiteracy rate is expected to increase as a greater number of children will be unable to continue or even begin schooling because of several factors (Edicio de la Torre as cited in Garcia, 2009). Prominent factors would be poverty and economic difficulty as these would greatly influence the decision of the financially challenged family.

Furthermore, due to the prominent poverty rising in the country, a number of people have resorted in committing various criminal offenses in order to compensate for their current economic status while others would prefer working than getting a diploma for practicality.

In the Alternative Learning system – Quezon City Division, the learners are adults aged 18years old and above who come from various backgrounds and experiences. The inmates of QCPD Station 10 and learners from Barangay Loyola Heights in particular have experienced first-hand how it is like to be on the bottom part of the society. The learners were still fortunate to have been introduced to the daily routines or practices of life, such as household chores, daily conversations with the people they meet, earning a living through selling plastic bottles and newspapers, being a driver, constructional worker, farmer, and the like. They have eventually become knowledgeable of these, giving them the chance to live a productive life. However, not all of them are lucky enough to have had the privilege of finishing school. There are adults who are literate, but on the other hand, some of them

can neither read nor write. Every month, an average of 20 people are imprisoned in QCPD Station 10. Of these, 75% have dropped out of school or have not attended school at all (personal communication, 2011). Adults who are enrolled in BLP under Barangay Loyola Heights have also neglected their studies resulting in their illiteracy.

There is a risk of reverting to illiteracy if a student drops out at fourth grade, much more so if there is a lack of reading materials and learning stimulants at home and the community environment (Quijano as cited in Quismundo, 2010).

Alternative Learning System – Quezon City Division offers a functional literacy program to out-of-school youth and adults. Volunteers conduct lessons about basic and functional literacy to its willing learners. Aside from performing its main function of rehabilitating the offenders of the society in a jail, the inmates from Quezon City Police District Station 10 are encouraged to participate in the project. Of all QCPD Station 10 inmates, 48 have participated in the functional literacy program. In addition, Barangay Loyola Heights also offers literacy programs around the Quezon City area. A total of 12 adults have participated in the basic literacy program since 2008. QCPD Station 10 and Barangay Loyola Heights have partnered with the Bureau of Alternative Learning System to provide education development programs. The Bureau of Alternative Learning System (BALS) is a sector of the Department of Education (DepEd) that implements non-formal education programs. They develop programs and alternative learning opportunities for out-of-school youth and adults who desire to learn. Instructional managers, or also known as mobile teachers, from BALS teach the learners usually in groups, and in some cases, one-on-one. This has given

the adults an opportunity to enhance their reading abilities.

1.2. Background of the Study

Alternative Learning System (ALS), a program under BALS, is a parallel learning system that provides a viable alternative to the existing formal education instruction. It encompasses both the non-formal and informal sources of knowledge and skills. It opens opportunities for Filipino citizens who do not have easy access to formal education, especially to those who are in the marginalized group, an alternative and free education program. There is no age limit for the learners; this type of system is advantageous because people will enroll regardless of age (personal communication, January 2011). The ALS program has collaborated with mobile teachers to deliver education to out-of-school youth and adults, especially those who live in remote areas.

One of the two programs offered by ALS is the Basic Literacy Program (BLP). BLP is a program that aims to eradicate illiteracy by teaching and developing basic literacy skills such as reading, writing, and numeracy to out-of-school children, youth, and adults who are willing to learn. There is no age limit for the learners; oftentimes the learners in the BLP are adults.

Learners undergoing education development program from both Quezon City Police Department Station 10 and Barangay Loyola Heights are enrolled in the ALS program. ALS learners are required to answer a Personal Information Sheet (PIS) (see Appendix B) which contains basic information such as their name, address, birthday, and the like. The PIS will determine whether the learner is literate or illiterate; incorrect or the absence of information is an indicator that the learner cannot comprehend or write. If proven to be

illiterate, the learner will proceed to the BLP where s/he will learn basic literacy in reading and writing. Thereafter, the learner will be given an Individual Learning Agreement (ILA) wherein s/he will state what s/he needs and wants to learn, as well as what the learner wants to accomplish by the end of the program. This serves as the contract between the teacher and the learner. With the given ILA, the teacher may recommend modules that will address what the learner needs to learn. Every now and then, the teacher will check up on the learner if s/he is in accordance with their agreement. Any program in ALS is flexible; the learners may update or modify their ILA as they please at any time.

BALS and the mobile teachers create and review the curriculum that is to be distributed to ALS. Basic Literacy is tackled under the first learning strand namely Communication Skills. Communication Skills has been divided into 4 foci: listening, speaking, reading and writing. The teacher must be able to tackle these topics in 3 months' time. Based on the Core Competencies of the Basic Education for the Alternative Learning System booklet, the topics are as follows:

Topics	Current Teaching Approach	Skills to be Learned
Letters of the Alphabet	a. How the letter looks like b. How the letter sounds like c. Common words that begin with the letter	Recognition of letters (sound-symbol relationship)
Common Sight Words in a Paragraph	1. Poem is read aloud and given to the learner 2. What words begin with a given letter	a. Word Recognition b. Establishing Vocabulary

Reading Literacy entails learners to learn Letters of the Alphabet and Common Sight Words. The actual reading skills involved in reading is the sound-to-letter

relationship and word recognition. The letters of the alphabet are taught first, wherein teachers immediately present the letter as they are deemed and written, and then repeat it several times. In effect, the learners cannot distinguish the letter's name from its corresponding sound (phoneme). For example, AKO should be read as /a/-/ko/ but since phonemes have not been differentiated from the letters' names, the learners do not apply phonemic awareness and cannot decode words properly. They end up merely memorizing the form of the word in place of recognizing the distinctive phonemes involved. Consequently, they cannot read new words they have not yet seen, no matter how similar their pattern (i.e. AKIN).

Teaching sight words involve word recognition; this mostly entails learners to already read and decode the word mentally. Basically they should be mapping sounds to letters and vice versa. Mapping is the ability to know the phonemes' corresponding graphemes, and that they chain together to form the word. However, this is not the strategy that is applied by the ALS teachers in the station. Their actual method involves phonemic awareness in which they ask the learners to identify what words begin with a particular sound. This way, the learners regress and they neglect the sound-letter relationship that is imperative in reading literacy.

The teachers do not create a strong foundation for reading literacy; they lack association and support between the previously learned topics to the newly introduced topics.

This curriculum is the basis for the content of the topics to be taught by the teachers. However, for basic reading, the curriculum is almost never followed; students do not progress because of the following factors:

- Teachers cannot easily go back and forth from one topic to another;
- Teachers do not deliver the topics in an organized manner;
- Teachers cannot present the letters as constituents of the word; and
- Teachers cannot properly exhibit the mapping of the word to letter to sound and vice versa.

1.3. Statement of the Problem

1. Teachers have difficulty in teaching basic reading literacy with a systematic reading program material.

The teachers do not follow a systemic way of teaching. They do not follow a definite flow of lessons and their material varies and depends on the students whims. This makes it difficult for the learners because the teacher jumps from topic to topic, sometimes learning the most complex topics before learning the simplest topics. This results in a poor foundation for literacy and henceforth, they do not learn reading as they should. They also lack association and support between the previously learned topics to the newly introduced topics. This overwhelms the learners and results in poor retention of lessons. Teachers need to follow a certain curriculum so as to define what the learners need to learn for the session. This way, the lessons will be taught in a systematic and organized

manner (from the simplest to most complex topics), with each basic reading topic being tackled with ample time.

2. Teachers have difficulty maintaining consistency of speech sounds over repetitive periods of time.

The Filipino language has a wide variation of dialects. Due to this fact, inconsistency with the pronunciation of the phonemes and words is prone to happen. For example, in the Tagalog language the word pito is pronounced as pi-to whereas in the Visayan language, it is pronounced as pi-tu. Each dialect produces a different pronunciation for the same word, thus resulting in a lack of distinctness with the phonemes. This is very important especially in letter-sound association and phoneme manipulation. With such inconsistency, it negatively affects their ability to recognize, read and verbalize individual letters and words correctly.

3. Teachers have difficulty incorporating sound-to-symbol relationships because they lack the means to map letters to words and sounds.

The selection of words that the teacher presents varies from what the inmates suggest. Words are immediately taught as a whole and are not broken down to its individual components. Teachers neglect to break down the word into syllables, letters and sound. They do not teach letter recognition and letter-sound association thus there is no differentiation between the letter name and the letter

sound. This causes the inmates to poorly distinguish and map out each letter properly to its corresponding sound, and end up simply memorizing the words.

4. Teachers have difficulty manipulating word displays and sounds.

Due to the fact that mapping out graphemes (letters) to their corresponding phonemes (sounds) was not taught to the inmates, it is difficult for them to decode, manipulate and read the words presented to them. Because of this, they are unable to read new words they have not yet handled before despite having similar patterns with the previously introduced words.

1.4. Theoretical Framework

Phonemic Awareness Instruction is an approach that teaches learners to manipulate sounds in spoken words by blending sounds to form words or segmenting words into phonemes. Phoneme blending, phoneme segmentation, phoneme substitution, phoneme deletion, phoneme addition, phoneme isolation and phoneme identity are phonemic awareness instructions. The teachware will be using all said phonemic awareness instructions to teach letter-sound relationship and word recognition to the inmates.

Dual Coding Theory (DCT) is an established theory of general cognition that has been directly applied to literacy (Paivio, 1991). It implies that verbal and non-verbal systems are alternative internal representations of events. Another value offered by DCT is that it provides a combined account of decoding, comprehension, and response (Sadoski & Paivio, 2004).

Letter-Sound Relationship

Letter Recognition Letters will be introduced to the learners with their corresponding letter name. Isolating letters one by one will help make the letters familiar to the learners thereby recognize the letters and their names.

Letter-Sound Association The sound of the letter will be presented in association with its corresponding letter. Before the learners begin to read in print, they should become aware of the individual sounds in spoken words. *Phonemic Awareness Instruction* is applied beginning on this segment.

Isolating the same sounds in different words will aid learners in distinguishing the sounds involved in forming words. *Dual coding theory* is applied by using a defined set of words that will be read out and represented through pictures.

Individual letters (written) and their corresponding phoneme (audio) will be presented simultaneously. While the inmates are learning about the letter name, they should be able to concurrently hear the sound of the said letter.

To practice the letter-sound association, inmates will be presented with words that begin with the same sound. However, considering that these inmates are illiterate, other letters will still look foreign to them as if they were simply designs or symbols. To avoid confusion, the words will be presented through pictures (image) while sounding out the word (audio).

Example:

Letter *a* + /a/ (written + audio) → *aso, ama, araw, anak* (audio + image)

Letter *b* + /b/ (written + audio) → *baso, bata, bote, buhok* (audio + image)

According to Paivio (1986) one can think of the mental image of an object (example is *aso*) and then describe it in words, or read or listen to words and then form a mental image. DCT is particularly effective because it presents one which is already familiar and another which is foreign thereby creating association for easy retention.

After teaching the vowel and the consonant, their respective *phonemes* (sounds) will then be manipulated such as combining or blending the separate sounds in order to

verbalize the entire word. The Dual Coding Theory will then again be applied when combining two or more phonemes (sounds).

Example:

$a + b = ab, ba$ (written + audio)

Another set of words with their respective photos will be shown and given as an example of the blended phonemes.

Example:

ab: **abogado**, **abo**, **abaniko** (audio + image)

ba: **basa**, **bawang**, **baboy** (audio + image)

This however is not applicable for all consonant and vowel combinations because there are combinations whose phonemes do not blend accordingly. There do not exist common words to be used as examples of the blended phonemes. Otherwise, they are uncommon or cannot be represented visually. For example, no word that begins with **ah** will sound like /ah/. **Ahas** for one begins with **ah** but it is not read as /ah/-/as/ but rather as /a/-/has/.

Word Recognition

Phoneme Recognition In line with *Phonemic Awareness Instruction*, sound manipulation will still be done by breaking up or segmenting a word into its separate sounds.

Example:

aso = /a/-/s/-/o/

Awareness of Syllables The learner needs be aware of the sounds or beats of words that are called syllables. Segmenting the words to separate sounds will enable the learner to perform phonemic segmentation. In this manner, they can understand that the blended phonemes create the syllables which in turn comprise words.

Example:

a-so; a-ma; ba-so; ba-ta.

Phoneme Spelling A more advanced understanding in phoneme manipulation would be required from the learner. It involves being familiar enough that the learner is able to manipulate the words by adding, deleting or substituting phonemes in any part of the word to create new words.

Example:

b + aso = baso

a_o = abo

For the aforementioned reading skills, a defined set of 355 words will be used to teach the learners basic reading. These set of words are further broken down into categories

according to each reading skill – letter recognition, letter-sound relationship and word recognition. For the letter recognition, 20 letters of the Filipino alphabet will be taught to the learners (see Appendix C-1). Words used in teaching the letter-sound relationship are categorized according to the combination of the vowel-consonant sound and the consonant-vowel sound (see Appendix -C-2). Each combination includes words wherein emphasis for the vowel-consonant sound or consonant-vowel sound will be given to the initial, middle and last sound of the word. In this manner, the learners will be able to practice word manipulation. However, for the list of words for the letter-sound relationship (see Appendix C-2), those in "----" means that a word neither exists nor is included in the defined set of words. All 355 words will be used in teaching the word recognition skill since every learner must have ample practice to be able to verbalize a word correctly and successfully (see Appendix C-5).

1.5. Objectives

1.3.1 General Objective

The general objective of the research is to develop a teachware that will aid mobile teachers in teaching adult learners to verbalize a word with or without knowing its meaning.

1.3.2 Specific Objectives

The specific objectives of the research paper are the following:

- To address the basic reading problem of illiterate adults;

- To gather enough educational materials to be used as basis in the development of the modules;
- To review related studies, systems and literatures that will support the research paper;
- To study existing coursewares and teachwares (if any) about basic reading that will help the software development;
- To design an interface for the teachware that is suitable for the age of the learners;
- To determine the appropriate learning theories/approaches/models that will be used as support or basis for the teachware;
- To devise a teaching process that will make the teachware effective for teaching adults; and
- To create a teachware that will assist the teacher in teaching basic reading to the adults.

1.6. Significance of the Study

The teachware will pave the way for decreasing the percentage of illiteracy in reading in the country since learners will effectively learn how to verbalize a word with or without knowing its meaning through the use of the Phonics Instruction. Marginalized individuals, groups, and vulnerable sectors of marginalized communities will have the opportunity to enhance their level of reading.

With the decrease of illiteracy in reading, a lot of people will be given the opportunity to communicate and understand accurately. Functional literacy, an advanced phase of literacy, is when the person's ability to read and write when applied to daily life is sufficient to make him/her function normally in a society (Oxford American Dictionary, 2010). Basic reading allows the person to move on to the next phase which is functional literacy. It will allow them to have simple yet meaningful conversations with other people. Eventually, many will have the chance for education, employment and such.

The teachware will be initially tested out in the area of Quezon City. If it receives positive feedbacks, it can be distributed to schools and governments organizations wherein they will greatly benefit as this will serve as their medium of instruction because it will be used to assist them in teaching basic reading.

1.7. Scope and Limitation

Of the five (5) learning strands under the Basic Literacy Program (BLP) to teach illiterate learners, the proponents will only focus on one (1) strand, which is the Communication Skills strand. The Communication Skills strand has four (4) modules under it but the proponents will only focus on one (1) module which is the reading module. Other modules will not be tackled since these basically pertain to skills a learner must obtain. Main medium of instruction of the modules will be in the Filipino language.

Learners will be given a definite set of words, 450 words to be exact (refer to Appendix C Dictionary, for the word list), that will be used in teaching the adult inmates how to read. These words can be manipulated as well to form new words that can be also

found in the word list. The list will be categorized according to the topics that will be taught, letter-sound relationship and word recognition. The letters of the alphabet and the words will be taught only in small letters so that the inmates will not be confused. Learners are expected to verbalize the word presented to them, with or without knowing the meaning of the said word. Although learners are expected to verbalize the words they encounter at the end of the course of the teachware, they are not expected to construct a sentence yet. The teachware in addition will contain a dictionary wherein it will store the meaning of the words found in the list.

Alternative Learning System (ALS) – Quezon City Division, the proponents' partner institution, is currently teaching literacy to the learners of Quezon City Police Department (QCPD) Station 10 and Barangay Loyola Heights. Because of this, the proponents have decided to first test out the teachware to QC BLP learners. It will only cater to adult learners from ages eighteen (18) and above who are out of school or had no educational background.

Chapter 2 Review of Related Literature and Systems

2.1. Illiteracy in the Philippines

According to Dr. Norma Salcedo (2003) of the Literary Coordinating Council (LCC) under Department of Education (DepEd), around 7% of the then Filipino demographic aged 10 years old and above could not read nor write. From a much more recent survey in 2009 by E-Net Philippines, it has been said that at least 4 million Filipinos suffer from no basic literacy skills (Garcia, 2009).

The illiteracy rate increases significantly when a greater number of children are unable to continue or even begin schooling (Edicio de la Torre as cited in Garcia, 2009). Several factors affect this, and such prominent factors are poverty and economic difficulty as these considerably influence the financial decisions of challenged families.

There is a risk to revert back to illiteracy if student drops out, much more so if there is a lack in reading material, including learning stimulants found at home and in the community environment (Quijano as cited in Quismundo, 2010).

Based on the survey conducted by FLEMMS, Abra, Benguet, Kalinga, Mountain Province, La Union, Batanes, Isabela, Laguna, Quezon, Albay, Camarines Sur, Catanduanes, Iloilo, Bohol, Cebu, Siquijor, Leyte, Samar, Zamboanga del Sur, Lanao del Norte, Misamis Occidental, Misamis Oriental, and Surigao del Norte are the provinces that were said to have the barangays that have the lowest literacy rates in the Philippines (Garcia, 2009).

2.2. Partner Institutions and Programs

2.2.1 Department of Education

Through the Department of Education (DepEd), a government division, the Philippine Constitution can provide free and mandatory elementary and secondary education to Filipinos. This gives all the Filipinos the right to basic education, and DepEd is designated to provide this service to all Filipinos.

2.2.2. Bureau of Alternative Learning System

The Bureau of Alternative Learning System (BALS) is a sector under the Department of Education that develops programs and alternative learning opportunities for out-of-school youth and adults who desire to learn. It implements non-formal education programs, in all aspects such as reading, livelihood, social interactions and the like, that provide evolutionary, credible alternative learning systems. It was originally called the Bureau of Non-formal Education, but the Executive Order No. 356 allowed it to be renamed to BALS. Under BALS is the Alternative Learning System which offers alternative education to people in marginalized areas.

2.2.3. Alternative Learning System

Alternative Learning System (ALS) is a parallel learning system that provides a viable alternative to the existing formal education instruction. It encompasses both the non-formal and informal sources of knowledge and skills.

Non-formal Education refers to the organized and systematic educational activity that is being carried outside the framework of formal system. It provides learning selected to a segment of the population. Informal Education on the other hand is a process of lifelong learning. A person can acquire and accumulate knowledge, skills, attitudes, and insights from daily experiences and from life itself because of this kind of education.

Alternative Learning System opens opportunities for Filipino citizens who do not have easy access to formal education, especially to those who are in the marginalized group, an alternative and free education program. Learners are grouped based on aptitude which results in a large variety in age groups. A good number of learners who benefit from the ALS' programs are over-aged grade-schoolers ranging from 20 years old and above. This type of system is advantageous because people will enroll regardless of age (personal communication, January 2011).

The following are the objectives of ALS:

- Coordinate with various agencies for skills development to enhance and ensure continuing employability, efficiency, productivity, and competitiveness in the labor market;
- Ensure the expansion of access to educational opportunities for citizens of different interests, capabilities demographic characteristics and socio-economic origins and status;

- Promote certification and accreditation of alternative learning programs both formal and informal in nature for basic education; and
- Address the learning needs of the marginalized groups of the population including the deprived, depressed and under-served citizens.

The transformation of all non-formal and informal education is the goal of alternative learning system so that it will yield more Education for All (EFA) benefits. Among the goals included are:

- To protect and promote the right of all citizen to quality basic education; and
- To promote the right of all citizens to quality basic education and such education accessible to all by providing all Filipino children in the elementary level and free education in the high school level. Such education shall also include alternative learning system for out-of-school youth and adult learners." (Section 2 of PA. 9155, the Governance of Basic Education Act of 2001).

Some of the projects initiated include Indigenous Peoples Education Program, Balik-Paaralan Para Sa Out-of-School Adult, Family Basic Literacy Program, and Mobile Literacy Program. ALS also implements two non-formal education programs namely Basic Literacy Program (BLP) and Accreditation & Equivalency (A&E) Program. The BLP focuses on teaching illiterate out-of-school children, youth and adults basic literacy skills such as reading, writing, speaking and

listening. A&E program on the other hand teaches basically literate out-of-school youth and adults who either completed the BLP or did not graduate from elementary or secondary schooling.

The ALS has five (5) learning strands in which they use to teach basic literacy skills to the learners. Each learning strands are broken down further into different modules. These printed modules are designed to be self-instructional and self-paced which the learners may use with or without the assistance of the teacher. All learning strands are consistent for both BLP and A&E Programs; the modules only vary depending on which program the learner is currently in. The 5 learning strands and their corresponding modules are:

- Communication Skills
 - Speaking
 - Listening
 - Reading
 - Writing
- Critical Thinking and Problem Solving
 - Numeracy Skills
 - Application of Scientific Ways of Thinking in Daily Life
- Sustainable Use of Resources/Productivity
 - Ability to Earn a Living
 - Sustainable Use of Resources in Ecosystems

- Appropriate Technology for Sustainable Use & Productivity
- Productivity in the Different Modes of Employment
- Development of Self & a Sense of Community
 - Intrapersonal Relationship (Positive Sense of Self) & Development of One's Potential
 - Interpersonal Relationship (Family Solidarity & Pakikipagkapwa)
 - Local Governance
 - National Identity
 - Civil and Political Rights Corresponding Responsibilities
- Expanding One's World Vision
 - Knowledge, Acceptance, Respect and Appreciation of Diversity
 - Nonviolent Resolution of Conflict & Peace
 - Global Awareness, Interdependence and Solidarity

2.2.3.1. Mobile Teachers

Mobile teachers, or also known as facilitators, can be a high school graduate at the very least, provided they have undergone training as a facilitator. They seek out learners; learning sessions are held in Community Learning Centers (CLCs) which may be a barangay hall, church, factory, reading center, or a house. Learning materials that are user-friendly and indigenous are provided for the use of the learners.

A total of 1,861 mobile teachers are being deployed to deprived, depressed, and underserved (DDU) communities all over the country; these communities are determined by the number of non-readers in each household. This is where literacy is most wanted.

Bureau of Alternative Learning System (BALS) has collaborated with mobile teachers to deliver education to out-of-school youth and adults, especially those who live in remote areas. The Basic Literacy Program (BLP) in partnership with the Mobile Teacher Program has the objectives to eradicate illiteracy among out-of-school youths (OSY) and adults. Both programs attempt to improve the quality of life in communities by raising the level of literacy in target areas.

“Our public school teachers are doing an outstanding job in providing education for our children despite the difficulty of accessibility to schools in some areas. They are virtually heroes, crossing mountains and rivers just to provide basic education to out-of-school youth and adults who still want to learn (Former President Gloria Macapagal Arroyo, PCOO, 2007).”

2.3. Reading

Reading is defined as turning the collection of symbols seen upon a piece of paper into ‘talk.’ It is gaining the ability to read from left to right and from top to bottom of the page, the recognition of letter symbols and their grouping into words (Moyle, 1968).

According to Dr. Beverly Young (2007), *“reading is essential to success in the complex world of today and tomorrow. The ability to read is highly valued and it is important for personal, social, and economic well-being.”*

2.3.1. Reading Skills

2.3.1.1. Phonemic Awareness

Phonemic Awareness deals with the structure of sounds and words. Phonemic awareness is the understanding that words are made up of sounds which can be assembled in different ways to make different words. Once a learner has phonemic awareness, they are aware that sounds are like building blocks that can be used to build all the different words (Time4Learning, 2011). On the other hand, if a learner who cannot hear and work with the phonemes of spoken words, he or she will have a difficult time learning how to relate these phonemes to letters when they see them in written words.

2.3.1.1.1. Phonics Instructions

The primary focus of phonics instruction is to help beginning readers understand how letters are linked to sounds (phonemes) to form letter-sound correspondences and spelling patterns and to help them learn how to apply this knowledge in their reading (National Reading Panel, 2000).

2.3.1.1.1.1. Synthetic phonics

Traditional phonics instruction in which students learn how to change letters or letter combinations into speech sounds, then blend them together to form known words (i.e., sounding out) (Reutzel & Cooter, 2000).

2.3.1.1.1.2. Embedded Phonics Instruction

Embedding phonics instruction in text reading, is a more implicit approach that relies to some extent on incidental learning (National Reading Panel, 2000).

2.3.1.1.1.3. Analogy Phonics

It is an onset and rime instruction wherein students use their prior knowledge in order to identify new words that have the same word part. For example, learners know how to pronounce twig by using their prior knowledge of the -ig rime from words they already know: pig, big, and dig. (Reutzel & Cooter, 2000).

2.3.1.1.1.4. Phonics through Spelling

Teaching students to segment words into phonemes and to select letters for those phonemes (National Reading Panel, 2000).

2.3.1.1.5. Analytic phonics

Teaching students to analyze letter-sound relations in previously learned words to avoid pronouncing sounds in isolation (National Reading Panel, 2000).

2.3.1.1.2. Explicit Systematic Phonics

Phonics instruction paves the way in teaching learners the relationship of sound and spelling and how it is used to read words. The sound-spelling relationships are taught in an explicit and systematic manner; explicit because it is taught directly and systematic since it follows a scope and sequence. This allows the learner to form and read words easier and the skills taught are constantly reviewed and applied to real reading.

Systematic and early instruction in phonics verified indications of better reading as it aids in the development of word recognition. Word recognition increases fluency in reading, which then improves the learners' reading comprehension by lessening their struggle to decode meaning from text (Explicit Systematic Phonics, n.d.).

A systematic phonics instruction program concretely classifies a selected and useful set of letter-sound relationship which is organized into a logical instructional sequence. This instructional

sequence includes several letter-sound relationships, such as the relationship between the sound of its corresponding single letter (i.e. the sound of /b/ with the letter *b*), and the sound in larger units of written language (i.e. letter combinations such as *th* or *ing* or spelling patterns such as *ea* or *ie*). Moreover, the said instruction offers a setting wherein learners are provided sufficient opportunities to practice the relationships being taught to them (<http://www.reading-skills-pyramid.org/reading-phonics.htm>).

2.3.1.1.3. Phonemic Awareness Instruction

Effective phonemic awareness instruction teaches learners to notice, think about, and work with (manipulate) sounds in spoken language. The goal is to focus on and manipulate phonemes in spoken words by blending sounds to form words (/t/-/o/-/d/= “toad”) or segmenting words into phonemes (“shock” = /š/-/a/-/k/). It is most effective when it focuses on only one or two types of phoneme manipulation, rather than several types (Ehri et al, 2002).

There are phonemic awareness programs that teach learners by using the letters to manipulate phonemes in speech. This is a bit similar to phonics programs which teach to sound out and blend letter in order to decode words or segmenting words into phonemes to spell words out.

According to Reading Skills Pyramid website, the following are Phonemic Awareness Instruction:

- **Phoneme Blending** - blending is a sequence of separately spoken phonemes, and then combine the phonemes to form a word.
- **Phoneme Segmentation** – segmentation is breaking a word into its separate sounds, saying each sound as they tap out or count it.
- **Phoneme Substitution** - substituting one phoneme for another to make a new word.
- **Phoneme Deletion** - recognize the word that remains when a phoneme is removed from another word.
- **Phoneme Addition** - make a new word by adding a phoneme to an existing word.
- **Phoneme Isolation** - recognize individual sounds in a word.
- **Phoneme Identity** - recognize the same sounds in different words.

2.3.1.2. Word recognition

Word Recognition is a twofold process that includes both the identification of printed symbols by some method so that the word can be pronounced and

the association of the meaning with the word after it has been properly pronounced (Rubin, 1993).

According to Ashlock (1970), there are three facets of word recognition:

- 1.) Seeing the word correctly.
- 2.) Saying the word correctly.
- 3.) Knowing the correct meaning of the word.

2.3.1.2.1. Word Recognition Strategies

2.3.1.2.1.1. Phonic Analysis and Synthesis

Phonics is a decoding technique that depends on the student's being able to make the proper grapheme (letter) – phoneme (sound) correspondences. Analysis has to do with the breaking down of something into parts. Synthesis has to do with the building up of the parts of something usually into a whole (Rubin, 1993).

2.3.1.2.1.2. Whole Word

The whole word or sight word method has to do with having the teacher or any other individual direct a student's attention to a word and then saying the word. The students must make an association between the oral word and written word, and he or she shows this by actually saying the word (Rubin, 1993).

2.3.1.2.1.3. Context Clues

By context we mean the words surrounding a word that can shed light on its meaning. Context clues are clues that are given in the form of definitions, examples, comparisons or contrasts, explanations, and so on, which help us figure out word meanings (Rubin, 1993).

2.3.2. Explicit Reading

Explicit reading is where letters and sounds are directly taught first, moving towards the words. That is, teaching the letters and their corresponding sounds to eventually form words and then progresses to forming phrases and sentences. Explicit reading is all about the phonemes, or the sound of each letter. Research show that teaching explicit reading is most effective because it focuses on knowing how each letter sounds like which eventually leads to the knowledge of applying and combining phonemes with other phonemes to create new words. Explicit reading is basically about the phonics.

2.4. Filipino Structure

2.4.1. The Tagalog Alphabet

The Tagalog alphabet is originally composed of twenty letters. They are:

A B K D E G H I L M N N G O P R S T U W Y

Of these, five are vowels: A E I O U and 15 are consonants:

B K D G H L M N N G P R S T W Y

The consonants are pronounced with the sound of *a* at the end:

Ba Ka Da Ga Ha La Ma Na NGa Pa Ra Sa Ta Wa Ya

Letters not found in the Tagalog alphabet are: C CH F J LL Ñ Q RR V X Z but these are now being used in writing borrowed words which are commonly understood in their original spelling.

Generally, a Tagalog word is spelled just as it is pronounced. There are no diphthongs. Each vowel is pronounced separately and distinctly (Aspillera, 1985).

2.4.2. The Tagalog Phonemes

A phoneme is referred to as a significant sound in a word. The Filipino language has 22 phonemes:

16 consonants (katinig):

- Labial (sounds produced by the lips) - B, P, M
- Pangipin (sounds produced by the teeth) - D, N, T
- Panggilagid (sounds produced by the gums) - L, R, S
- Pangngalangala (sounds produced by the throat) - K, G, A, W
- Pasutsot (sounds produced by exhaling) – H, ?
- Palatal (sounds produced with the front of the tongue) - Y

5 vowels (patinig):

- A, E, I, O, U

1 length:

- :

/ ? / The glottal stop is considered a phoneme in Filipino, its occurrences in the final position of words give a chance in meaning. For example:

tubo - /tu:bo?/ - money gain in business

tubo - /tu:boh/ - a lead pipe

In written form this has only one spelling *tubo* ,but in written transcription above, one can pronounce it distinctly as a native speaker would and at the same time get the exact meaning of the word (San Miguel, 1975).

/ : / length, as seen from the examples is phonemic in Filipino, as length alone changes the meaning of the word or indicates the meaning of the word. Length occurs in long vowel sound and is produced by a short pause after the affected syllable, as in / a: so / “dog”. Words therefore without length are produced continuously as / asoh / (San Miguel, 1975).

2.4.3. Diphthongs

Diphthong is a sequence of a syllabic vowel and a semi vowel in the same syllable (San Miguel, 1975). Diphthongs are complex vowels and are articulated with the tongue and jaw starting in one position and then gliding upward toward the position for one of the semivowels /y/ and /w/. Pilipino diphthongs are /ay, ey, iy, oy, uy, aw , uw/ as in *kami'y, baboy, kasuy, kalabaw*, and *aliw* (San Miguel, 1975).

2.4.4. Consonant Clusters

Consonant cluster is a sequence of two consonant both pronounced and without the intervention of a vowel.

Since native Filipino words do not have consonant clusters, it frequently occurs in borrowed or loan words. They occur initially, medially, and finally in words.

Initial occurrences of consonant clusters:

	- s	- l	- r	- w	- y
p	--	<i>plato</i>	<i>preso</i>	<i>pwesto</i>	<i>pyano</i>
b	--	<i>blusa</i>	<i>braso</i>	<i>bwenas</i>	<i>Biyernes</i>
m	--	--	--	<i>mwelye</i>	<i>Myerkoles</i>
t	--	--	<i>trapo</i>	<i>twalya</i>	<i>tyange</i>
d	--	--	<i>drama</i>	<i>dwende</i>	<i>dyunyor</i>
k	--	<i>klima</i>	<i>krema</i>	<i>kweba</i>	<i>kyuteks</i>
g	--	<i>gloria</i>	<i>gripo</i>	<i>gwantes</i>	<i>gyera</i>
n	--	--	--	<i>nwestra</i>	--
h	--	--	--	<i>hwebes</i>	--
s	--	--	--	<i>sweater</i>	<i>syudad</i>

Medial occurrences of consonant clusters:

kontrata *ekstra* *eskwela* *bibliya* *sombrero*

Final occurrences of consonant clusters:

kyuteks *nars* *biks*

2.4.5. Syllabication

Filipino syllables are analyzed according how a word is produced in its sound representation in written form, both in the conventional form or phonemic transcription.

According to Aspirella (1085), there are four kinds of syllables in Tagalog:

1. one vowel only (V)

<i>a</i>	in	<i>paa</i>
<i>e</i>	in	<i>edad</i>
<i>i</i>	in	<i>iyak</i>
<i>o</i>	in	<i>tao</i>
<i>u</i>	in	<i>ulo</i>

2. consonant-vowel syllable (CV)

<i>ha or sa</i>	in	basa
<i>ta</i>	in	tao
<i>na</i>	in	ina
<i>lo</i>	in	ulo

3. vowel-consonant (VC)

<i>an</i>	in	antay
<i>am</i>	in	ambon
<i>ak</i>	in	akyat
<i>it</i>	in	mapait

4. consonant-vowel-consonant (CVC)

<i>tak</i>	in	takbo
<i>lak</i>	in	bulaklak
<i>lon</i>	in	talon
<i>mang</i>	in	mangga

2.5. Dual Coding Theory

Dual Coding Theory (DCT) is an established theory of general cognition that has been directly applied to literacy (Paivio, 1991). It implies that verbal and non-verbal systems are alternative internal representations of events. For example, one can think of a house by thinking of the word "house", or by forming a mental image of a house. The verbal and image systems are connected and related, for one can think of the mental image of the house and then describe it in words, or read or listen to words and then form a mental image (Paivio, 1986).

Another value offered by DCT is that it provides a combined account of decoding, comprehension, and response (Sadoski & Paivio, 2004).

2.6. Related Systems

2.6.1. Sight Words Buddy for Windows

Reading is one of the basic skills being taught to children at an early age. One of the techniques used to teach reading to children is sight words. Sight words are the commonly used words in the English language. Although it consists about only 200 words, it encompasses approximately 50 to 70 percent of the given general, non-technical text. Therefore it is considered to be a crucial part of basic education to teach sight words.

Sight Words Buddy for Windows is an educational software designed to teach children sight words by providing word exercises. The application is based on the Dual Coding Theory, wherein a word is presented in a manner which the learner can view the word and hear its pronunciation. This theory proves to be very useful especially for memory retention, thus making the application effective for the audience it caters.

When the application is started, the pronunciation of one of the sight words will be heard. The learner's task now is given three sight words, s/he must click the visual representation of the word s/he heard (refer to Figure 2.11.1-1). The learner can repeat the pronunciation of the word by clicking the speaker button (see inset).

When the learner is correct, the response is both a visual and verbal feedback. The application automatically moves to the next sight word exercise. The application contains five drills for the learners, namely Pre-Primer Drill, Primer

Drill, First Grade Level Drill, Second Grade Level Drill and Third Grade Level Drill.

Figure 2.6.1-1. Sight Words Buddy for Windows

2.6.2. Fast ForWord Language to Reading: Make the Connection from Sounds to Letters

Fast ForWord is a series of educational computer training programs that aims literacy to children and adults. Fast ForWord Language to Reading: Make the Connection from Sounds to Letters is a part of these education program series that emphasizes on associating sounds to corresponding letters of the alphabet. It practices the learners to make a connection between oral and written language, as well as take on a higher level of literacy. The following cognitive skills are developed by the said software:

- Sound-Letter Recognition
- Phonological Fluency
- Beginning Word Recognition
- Auditory & visual-spatial working memory

- Auditory & linguistic processing

The software contains several exercises to teach the learner, and some exercises are the following:

- Polar Planet is an exercise that enhances the learner's sound-letter association and phoneme identification by helping the penguin and the dog selecting the correct words to assist them in the game.
- Paint Match is an activity that increases phonological fluency, word analysis as well as the visual memory by finding and matching pairs of written and spoken words. Auditory and visual feedbacks are used to prompt the student to make the pairings.
- Cosmic Reader enhances the learner's auditory and linguistic processing through this exercise because it consists of the learner following spoken directions in order to move the items on the screen. They must also select the picture that correctly illustrates the activity.

2.6.3. Fast ForWord Reading 1: Building the Bridge to Better Reading

Fast ForWord Reading 1 is another educational program that has emphasis on developing skills involving phonics, sight words, vocabulary, spelling, sentence comprehension and paragraph comprehension. It uses the Dual Coding Theory for teaching since it is presented in a way that there is supporting image or sound to

support the word (Fast ForWord, 2008). The exercises the software contains are the following:

- Bed Time Beasties is an exercise that develops sentence comprehension by the learner since it requires the learner to complete the sentence by selecting the correct answer among the choices given (refer to Figure 2.6.3-1) (Fast ForWord, 2008).

Figure 2.6.3-1. Bed Time Beasties

- Bear Bags' objective is to sort words into the lunch bags based on first-letter basis. It starts with initial consonants, followed by final consonants, short vowels and finally long vowels. It dwells on the letters of the alphabet and most especially enhances the phonological skill of the learner (refer to Figure 2.6.3-2) (Fast ForWord, 2008).

Figure 2.6.3-2. Bear Bags

- Magic Rabbit enhances the spelling and sound-letter association skill of the learner spelling the word based on the picture given as a guide. The task only involves changing one letter to form a new word with a different meaning (refer to Figure 2.6.3-3) (Fast ForWord, 2008).

Figure 2.6.3-3. Magic Rabbit

- Quail Mail is an exercise that enhances the vocabulary of the learner. The word is presented in text and spoken at the same time. The task is to associate the word correctly to its corresponding category (refer to Figure 2.6.3-4) (Fast ForWord, 2008).

Figure 2.6.3-4. Quail Mail

2.6.4. Fast ForWord Reading 2: Connections for Better Comprehension

The software improves the learner's word recognition and reading comprehension of the reader. Previous knowledge about vocabulary and phonics is applied in the software. It develops the learner's skill in listening and reading comprehension, word analysis, linguistic processing and phonological memory (Fast ForWord, 2008). The following exercises are incorporated in Fast ForWord Reading 2:

- Ant Antics develops the sentence and reading comprehension of the learner by letting the learners match the picture in the choices of descriptive statements given (refer to Figure 2.11.4-1) (Fast ForWord, 2008).

Figure 2.6.4-1. Ant Antics

- Leaping Lizards teaches the learner proper use of capitalization, punctuation marks, prefixes, suffixes and word morphology (refer to Figure 2.6.4-2) (Fast ForWord, 2008).

Figure 2.6.4-2. Leaping Lizards

2.6.5. Fast ForWord Reading 3: Making Words and Language Fit Together

Fast ForWord Reading 3 mainly focuses on the learner's comprehension skills and reading knowledge & fluency. It builds cognitive skills in the context of reading skills. It develops the skills on logical reasoning, comprehension strategies, syntax & morphology, and linguistic, auditory & visual processing (Fast ForWord, 2008). The software contains the following exercises:

- Canine Crew is an exercise with a task of picking out the words that rhyme from the collection of words given. It practices the learner's vocabulary, spelling and automatic word recognition skills (refer to Figure 2.6.5-1) (Fast ForWord, 2008).

Figure 2.6.5-1. Canine Crew

- Chicken Dog enhances the learner's spelling and phonics skills since the learner is tasked to fill in the missing letter to complete the word presented (refer to Figure 2.6.5-2) (Fast ForWord, 2008).

Figure 2.6.5-2. Chicken Dog

- Twisted Pictures is a higher level exercise dealing with syntactic complexity; it develops syntax and vocabulary skills of the learner. The task is to describe the picture given by picking that statement that best depicts it (refer to Figure 2.6.5-3) (Fast ForWord, 2008).

Figure 2.6.5-3. Twisted Pictures

2.6.6. WYNN Literacy Software Solution

WYNN is an innovative literacy software developed by Freedom Scientific, Learning System Group. It is designed to enhance success for individuals with reading challenges and writing difficulties (Dyslexia, Auditory Processing Deficit, Visual Processing Disorder, Written Language Disorder, English Language Learners, ADD/ADHD, and struggling readers). The software makes use of Bi-modal approach that simultaneously highlights text as it is spoken. In addition, it transforms printed text into understandable information that benefits readers of all ages. Simultaneous auditory and visual presentation is available to support all learning styles (Freedom Scientific Inc., 2011).

Some of its main features include the following: talking dictionaries, word prediction, highlighters, outlining, voice notes, spell check, thesaurus, and homophones. It also makes use of natural sounding speech with two synthesizers to choose from: AT&T Natural voices (human sounding voices) and IMB ViaVoice (precise sounding speech synthesizer). Lastly, web masking, is a powerful

technology that “masks” visual clutter to help readers focus on important information (Freedom Scientific Inc., 2011).

2.6.7. Kurzweil 3000

Kurzweil 3000 is a powerful learning tool for students at any level of instruction for it is a comprehensive reading, writing and learning software solution for any struggling reader. It enables struggling readers, who are in grade three (3) and above, to learn from grade appropriate content by providing access to virtually any text or curriculum including print, electronic, and Web-based documents. Students learn the same content as their peers, develop valuable study skills and become independent learners. It gives the teachers and students freedom to work with content from different content areas (Kurzweil, 2011).

Kurzweil 3000 is built upon the core principles of Universal Design for Learning. It enables multiple means for students of all abilities to engage with digital text. It allows necessary support to scaffold instruction for learners on the go by providing a simple to use talking words processor through the creation of MP3 audio files (Kurzweil, 2011).

Kurzweil 3000 delivers a truly integrated literacy solution that can be achieved by learners.

Kurzweil 3000 has the features for the following skills:

Reading:

- Vocabulary: instant access to word meanings

- Fluency: instant access to word meanings
- Comprehension: tools to embed questions
- Reads aloud content from all subject areas

Study Skills:

- Highlighting in up to six colors
- Cornell note-taking
- Automatic or manual outline creation
- Study guide development

Writing:

- Research collection with Column Notes
- Graphic organization using Brainstorm tool
- Drafting from blank files or templates
- Review list you can customize
- Publish to multiple file types or print

2.6.8. Smart Tutor's Phonemic Awareness

Smart Tutor's Phonemic Awareness lessons will help students learn to identify and work with individual sounds in spoken words. Lessons are interactive and audio-supported that will help students master key phonemic awareness skills such as *Isolation, Identity, Categorization, Rhyming, Blending, Segmentation, Deletion, Addition, and Substitution*. Students learn common associate sounds and words with a variety of visual representations, develop listening skills, associate pictures with

text labels. These lessons are especially appropriate for students with special needs, students learning English as a second language, and struggling readers (Phonemic Awareness Lessons, 2010).

Activities Include:

- Recognizing individual sounds in a word
- Identifying the same sounds in different words
- Recognizing the word in a set of three or four words that has the “odd” sound
- After listening to a sequence of separately spoken phonemes, combining the phonemes to form a word, then writing and reading the word
- Breaking a word into its separate sounds, saying each sound as they tap out or count it, then writing and reading the word
- Recognizing the word that remains when a phoneme is removed from another word
- Making a new word by adding a phoneme to an existing word
- Substituting one phoneme for another to make a new word

2.6.8-1. Letter and Sound Isolation

2.6.8-2. Rhyming (through images)

2.6.8-3. Rhyming (through sounds)

2.6.9. A Phonics Introduction Application

A Phonics Introduction Application is an iPad/iPod touch/iPhone application developed by Hetal Shah. It lets its users learn the phonetic sound of the letters of the alphabet as well as see how the letters come together to form words. There are about 100 words that may be constructed by sounding out the letters phonetically. Through this, a child will be able to have a good grasp over how to sound out words. Lessons are interactive and audio-supported that will help a child master key phonemic awareness skills (App-Zoo, 2011).

To test the knowledge acquired in the lessons, a fun filled word construction activity is also included. This is not all, parents can further mark the words that their child can spell correctly, allowing them to concentrate on the words that need practice (App-Zoo, 2011).

2.6.9-1. Learn Phonics Menu

2.6.9-2. Alphabets

2.6.9-3. Word Construction Activity

2.6.10. I Love Phonics!

I Love Phonics! software is a fully interactive program that teaches phonics in the most fun and effective manner possible: by letting young players discover the principles of phonics for themselves. Friendly characters and colorful, animated activities introduce your child to letters, sounds, and phonemes. The activity includes multiple levels of difficulty and progress tracking. Kids will have fun with the Letter Bingo, Letter Maker, Word Builder and much more (Kindersley, 2010).

Skills Learned:

- The Alphabet
- Letter Recognition
- Sound Recognition
- Short and Long Vowel sounds
- Consonants and Their Clusters
- Phonemes
- Segmenting Words
- Blended Sounds
- Reading
- Spelling

Key Benefits:

- 5 phonics-teaching games
- 2 modes to choose from: sequential or customized
- Proven step-by-step approach
- Multiple learning levels
- Over 300 essential vocabulary words
- All 44 phonemes of the English language
- Developed by education experts
- Detailed progress tracking
- Parental control provides personalized learning

2.6.10-1. Letter Bingo Activity

2.6.10-2. Letter Maker

2.6.10-3. Rhymes and Sounds

De La Salle University

2.6.10-4. Word Builder Activity

2.6.11. Table Summary of Related Systems

System	Target Audience	Type of Application			Multimedia Components						
		Game	Drill	Tool	Animation	Images	Text	Video	Audio		
									Read Aloud	Sounds	Speech Text
1	Pre-school – Grade 3		✓			✓	✓		✓	✓	✓
2	Children – Adults	✓	✓		✓	✓	✓		✓	✓	
3	Children – Adults	✓	✓		✓	✓	✓		✓	✓	
4	Children – Adults	✓	✓		✓	✓	✓			✓	
5	Children – Adults	✓	✓		✓	✓	✓			✓	✓
6	Students, Adults, Educators			✓		✓	✓		✓		✓
7	Grade 3 – Adults, Teachers			✓		✓	✓		✓		✓
8	Students with special needs, students learning English as a second language, and struggling readers	✓	✓		✓	✓	✓		✓	✓	
9	Pre-school – Grade 2	✓	✓			✓	✓		✓	✓	
10	Children ages 3-7	✓	✓		✓	✓	✓		✓	✓	

Table 2.6.11-1: Summary of Related Systems

Systems:

1 Sight Words Buddy for Windows	6 WYNN Literacy Software Solution
2 Fast ForWord Language to Reading: Make the Connection from Sounds to Letters	7 Kurzweil 3000
3 Fast ForWord Reading 1: Building the Bridge to Better Reading	8 Smart Tutor's Phonemic Awareness
4 Fast ForWord Reading 2: Connections for Better Comprehension	9 Phonics Introduction Application
5 Fast ForWord Reading 3: Making Words and Language Fit Together	10 I Love Phonics!

De La Salle University

Chapter 3 Methodology

3.1. Analysis

The initial phase of development was the Analysis phase, wherein the proponents had to identify teaching problem/s in order to move on to the next phases. The outputs for this phase were the final topic, target audience and partner institution, teaching problem/s, objectives, learning theories, and the content itself. Processes involved in this phase were data and information gathering, conceptualization of the topic, interview with the content expert/s, and the establishment of the teaching problems.

3.1.1. Overview of the Current Learning Situation / Environment

Department of Education has a sector called the Bureau of Alternative Learning System (BALS) that provides non-formal education program to both children and adults. A learning program developed by BALS is the Alternative Learning System (ALS) which is an alternative learning opportunity to those who desire to learn, especially who are either out of school or illiterate youth & adults.

The QCPD Station 10 and Barangay Loyola Heights have tapped ALS to provide volunteers in teaching illiterate adults basic literacy. Instructional managers, better known as mobile teachers, are the people who teach these illiterate adults. They usually teach their learners in groups, and in some cases, one-on-one.

The mobile teacher typically asks their learners what words are they familiar with, or what words they want to learn how to read. The mobile teacher then begins to teach them with the given set of words. The main problem encountered here is

that the mobile teachers lack a strong foundation in associating letters to its corresponding sounds. What they usually do is start from the given words and then sound out by syllable and not by letter. The letter-sound relationship is deemed to be the most basic in teaching basic reading as this will pave the way in manipulating sounds in other words.

3.1.2. Target User

The target users of the teachware are the mobile teachers of ALS who teach basic literacy to the inmates of QCPD Station 10 and adult learners of Barangay Loyola Heights. These mobile teachers are licensed public school teachers that have a bachelor's degree in Education. Before becoming ALS volunteers, they have trained under DepEd to become certified ALS teachers. They are not trained to specialize to teach a specific group of learners rather, they are very versatile because they can teach a group of kids, teens, and adult learners.

The teachware served as the mobile teachers' aid in their lessons about the letters of the alphabet, syllabication, and word manipulation.

3.1.3. Problem Discussion

- **Teachers do not have a systematic reading program material.**

The teachers do not follow a definite flow of lessons and their material varies and depends on the students' whims. This makes it difficult for the learners because the teacher jumps from topic to topic, resulting in a poor foundation and consequently, inadequate retention of topics for literacy.

- **Teachers lack consistency in speech sounds over repetitive periods of time.**

Phonemes and words are inconsistently pronounced due to the wide variation of dialects in the Filipino language. This leads to a lack of distinction between the phonemes. With such inconsistency, it negatively affects their ability to recognize, read and verbalize individual letters and words correctly.

- **Teachers have difficulty incorporating sound-to-symbol relationships due to the lack of means in mapping out letters to words and sounds.**

Teachers also have difficulty in manipulating words and sounds.

Words are immediately taught as a whole and are not broken down to its individual components. Teachers neglect to break down the word into syllables, letters and sound thereby causing the learners to poorly map out each letter to its corresponding sound, and end up simply memorizing the words. This makes it difficult for them to decode, manipulate and read the words presented to them. They are unable to read new words they have not yet handled before despite having similar patterns with the previously introduced words.

3.1.4. Content Analysis

Main Topic	Lessons	Artifact (Fact, Concept, Process, Procedure, Principle)
Alpabeto	Letter Recognition <ul style="list-style-type: none">• Patinig• Katinig	Concept Fact Fact
Pantig	Letter-Sound Association <ul style="list-style-type: none">• 1-titik pantig• 2-titik pantig<ul style="list-style-type: none">▪ katinig-patinig pantig▪ patinig-katinig pantig• 3-titik pantig<ul style="list-style-type: none">▪ katinig-patinig-katinig pantig	Concept Process/Procedure Concept Process/Procedure Process/Procedure Concept Process/Procedure
Salita	Word Recognition <ul style="list-style-type: none">• Phoneme Recognition• Awareness of Syllables• Phoneme Spelling	Concept Process/Procedure Process/Procedure Concept

Table 3.1.4-1: Topic – Artifact Matrix

3.1.5. Mode of Delivery

The proponents created a Flash program that was burned in a compact disc (CD). The mobile teacher was able to run it using a laptop or personal computer. If the mobile teachers will be teaching in groups, they may opt to use a projector for larger screen display.

The proponents chose this mode of delivery because it was the most practical way both for the mobile teachers and learners. Since mobile teacher travel from one place to another, it was easy for him/her to carry his/her own laptop. Another reason was that, the place where they conducted their session was only a small venue but in some cases or situations, the mobile teachers held their session in a classroom of a public school, a part of a barangay hall or any ALS centers. Also when the program was projected on a screen or plain wall, it was a great help for the mobile teachers as they conducted their lesson.

Lastly, audio speakers, which were connected to either the laptop or personal computer, was needed for sound projection since there was a voice over function in the teachware that speaks out the letters and words in order to support the learning of the learners.

3.1.6. Gantt Chart

YEAR	2011												2012							
ACTIVITY \ MONTH	01	02	03	04	05	06	07	08	09	10	11	12	01	02	03	04	05	06	07	08
Conceptualization of Topic	●	●																		
Interview / Consultation	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Gathering of Reference materials	●	●	●			●	●	●	●											
Taking of Photos										●	●	●	●	●					●	
Voice Recording													●	●					●	
Module integration and interface design									●	●	●	●								
Coding and Development												●	●	●	●	●	●	●		
Debugging															●	●	●	●		
Prototype Testing															●	●	●	●		
System Testing and Analysis of Results																●	●	●	●	
Documentation	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Table 3.1.6-1: Gantt Chart

3.1.7. Problems Encountered

The biggest problem the proponents encountered during the analysis phase was composing the theoretical framework. Aside from understanding how a person learns to read, particularly adults, they also incorporated how the mobile teachers conducted their basic reading class. In addition, there were times when the proponents overanalyzed the things or processes they were studying, thus missing out on the small details that were important. The proponents also had a hard time contacting and meeting their content expert due to conflict of schedule. Lastly, they also encountered problems in choosing and grouping the words included in the program.

3.1.8. Analysis Cost

Expenses included for the analysis cost was divided between the transportation cost, labor cost, and printing cost. For the transportation cost, an average of Php100.00 per proponent was paid for every visit. The proponents visited ALS, DepEd, eSkewela, Barangay Loyola Heights, as well as the content experts for approximately 30 times, back and forth. The estimated total transportation cost was Php3000.00. The labor cost which included food supplies summed up to an average of Php6,000.00.

The printing for the proponent's documents cost Php1.00 per page, and the total printing cost was Php2495.00. The breakdown for the printing cost from ISTRSME, AY 10-11 T3 up to THS-IS1 AY 11-12 T1 are the following:

Course, Academic Year, & Term	Number of Copies	Number of Pages	Total Cost
ISTRSME, AY 10-11, Term 3	7	60	Php420.00
ISTRSME, AY 10-11, Summer Term	4	65	Php260.00
THS-IS1, AY 11-12, Term 1 (Mock Evaluation)	3	80	Php240.00
THS-IS1, AY 11-12, Term 1 (Final Evaluation)	3	250	Php750.00
THS-IS1, AY 11-12, Term 2 (Final Evaluation)	3	275	Php825.00
TOTAL PRINTING COST			Php2495.00

Table 3.1.8-1: List of Printing Expenses

Breakdown of Analysis Cost:

Description	Quantity	Cost	Total Cost
Printing Expenses	2495	Php1.00	Php2495.00
Ring Bind Cost	9	Php80.00	Php720.00
Transportation	30	Php100.00	Php3000.00
Labor Cost			Php6000.00
TOTAL ANALYSIS COST			Php12,215.00

Table 3.1.8-2: Breakdown of Analysis Cost

3.2. Design

The Design phase was responsible for the content and appropriate media used; storyboards and prototypes were examined to decide whether it was appropriate for the development of the teachware. The teachware was also designed in such a way that it was suitable for the target audience, which is in this case are adult learners. How the teachware will be delivered and how it will teach the adults were also finalized. Processes involved in this phase were the module integration, theories and instructional strategies to be used, multimedia selection, storyboarding, interface design, and scriptwriting.

3.2.1. Topic Outline

- I. Alpabeto
 - a. Patinig
 - i. a
 - ii. e
 - iii. i
 - iv. o
 - v. u
 - b. Katinig
 - i. b
 - ii. k
 - iii. d
 - iv. g
 - v. h
 - vi. l
 - vii. m
 - viii. n
 - ix. ng
 - x. p
 - xi. r
 - xii. s

- xiii. t
- xiv. w
- xv. y

- II. Pantig (unlapi, gitlapi, hulapi)
 - a. 1-Titik Pantig
 - b. 2-Titik Pantig
 - i. Katinig-Patinig Pantig
 - ii. Patinig-Katinig Pantig
 - c. 3-Titik Pantig
 - i. Katinig-Patinig-Katinig Pantig
- III. Salita
 - a. Hulapi-Unlapi/Unlapi-Hulapi
 - b. Simpleng Manipulasyon
 - c. Mga Saltia

3.2.2. Instructional Objectives

3.2.2.1. General Objective

The general objective of the teachware is to serve as a tool for mobile teachers in teaching the different basic literacy skills such as letter recognition, sound recognition, phonemes, word segmentation, blending sounds, and basic reading.

3.2.2.2. Specific Objectives

The specific instructional objectives are the following:

- The teachware will serve as a tool for mobile teachers to teach how to associate letters with its respective sound while presenting it simultaneously (text + sound);

- The teachware will serve as a tool for mobile teachers to teach how to recognize the letter based on the sound heard (audio only);
- The teachware will serve as a tool for mobile teachers to teach how to have a better understanding and memory retention by presenting letter/s and pictures concurrently (text + image); and
- The teachware will serve as a tool for mobile teachers to teach how to verbalize a word without audio or visual support (text only).

3.2.3. Theories and Instructional Strategies

3.2.3.1. Multimedia (The Seven Principles of the Cognitive Theory of Multimedia Learning)

People learn better from *words and pictures* than from words alone. When *words and pictures are both presented*, people have an opportunity to construct verbal and pictorial mental models and to build connections between them. When *words alone are presented*, people have an opportunity to build a verbal mental model but are less likely to build a pictorial mental model and make connections between the verbal and the pictorial mental models (Mayer, 2001).

3.2.3.2. Spatial Contiguity (The Seven Principles of the Cognitive Theory of Multimedia Learning)

People learn better when *corresponding words and pictures are presented near rather than far from each other* on the page or screen (Mayer, 2001).

When *corresponding words and pictures are near each other on the page or screen*, learners do not have to use cognitive resources to visually search the page or screen and learners are more likely to be able to hold them both in working memory at the same time. When *corresponding words and pictures are far from each other on the page or screen*, learners have to use cognitive resources to visually search the page or screen for corresponding words and pictures. Thus, the learner is less likely to be able to hold them both in working memory at the same time (Mayer, 2001).

3.2.3.3. Temporal Contiguity (The Seven Principles of the Cognitive Theory of Multimedia Learning)

People learn better when *corresponding words and pictures are presented simultaneously* rather than successively (Mayer, 2001).

When *corresponding portions of narration and animation are presented at the same time*, the learner is more likely to be able to hold mental representations of both in working memory at the same time, and thus the learner is more likely to be able to build mental connections between verbal and visual representations. When *corresponding portions of narration and animation are separated in time*, the learner is less likely to

be able to hold mental representations of both in working memory at the same time and thus less likely to be able to build mental connections between verbal and visual representations (Mayer, 2001).

If the time between hearing a sentence and seeing the corresponding portion of animation is short, then the learner may still be able to build connections between words and pictures. However, if the learner hears a long passage and views an entire animation at separate times, then the learner is less likely to build connections between words and pictures (Mayer, 2001).

3.2.3.4. Repeated Reading

Formulated by Dahl and Samuels, repeated reading is an instructional strategy with an objective of helping readers develop word identification skills automatically by reading words repeatedly until the desired fluency level of reading is achieved. The Automatic Information Processing theory is the basis for the repeated reading method. The aforementioned theory explains a learner reads and decodes text.

The method is said to be effective because requiring the struggling learner to read the same word over and over again will provide them practice. In turn, because of the iterative cycles of reading of the said method, it decreases errors in word recognition and at the same time,

increase reading speed. At the same time, the abilities and skills gained from repeated reading is carried over to future readings (Roundy & Round, 2009).

3.2.3.5. Echo Reading

Echo reading is another strategy with the concept of “I read, you read.” The teacher reads a word while the students follow along by reading the word by pointing to it. The students then ‘echoes’ what the teacher had read while pointing to the word to ensure that they are actually reading. The said strategy is a good practice and support that aims to develop greater reading proficiencies (Roundy & Round, 2009).

3.2.4. Multimedia Selection

3.2.4.1. Text

The letters and words in the teachware were primarily presented in text form since it is about teaching basic reading. Text form of the words together with its corresponding voice over component were presented together to help the students visualize and see the words while it is being read out loud. This would help and train the students in verbalizing the words they see. Letters of the alphabets, list of words, and the definition of the words in the dictionary are examples of the teachware components that were presented in text.

3.2.4.2. Visuals

Since these students are illiterate, letters will appear foreign to them. To avoid confusion, a visual representation alongside audio representation of the letters and words was simultaneously presented together to the students to support their learning. These pictures were used all throughout the teachware in representing the letters of the alphabet and the words list visually. The visuals or pictures were used in teaching the *Alpabeto* and *Pantig* lessons. Most pictures were taken by the proponents themselves.

3.2.4.3. Audio

The Filipino language has a wide variation of dialects thus the result of inconsistency in pronouncing words. With such misconception, the ability of the students to recognize and verbalize the words correctly will be affected.

To avoid this, the teachware integrated a voice over function wherein all the letters and words were read out loud so that the students knew the sound of the letters and the pronunciation of the word. It is very essential to have consistency in sounding out and pronouncing the letters and words respectively for uniformity.

The proponents hired a talent to achieve uniformity. While the voice talent was reading the letters of the alphabet and the list of Tagalog words used for the *Alpabeto* and *Pantig* lessons, it was recorded to incorporate it to the teachware.

3.2.4.4. Interactive Components

Buttons were used throughout the teachware in order to navigate among the modules or the lessons namely *Alpabeto*, *Pantig*, and *Salita*. Also, these buttons were integrated mainly to traverse through each topic in the lessons, particularly in proceeding from one letter to another or from one word to another in order to progress in the lessons.

For the *Pantig* lesson, each of the fifteen consonants were paired up with each of the five vowels consonants in order to form words that illustrated the consonant-vowel syllable, vowel-consonant syllable, and consonant-vowel-consonant syllable in the beginning, middle, and end of the words. The syllables were divided depending on the grouping of the pairing of the syllables – 1 consonant to 5 five syllables.

3.2.5. Instructional Design Matrix

Main Topic	Instructional Objective	Instructional Strategy	Media
Alpabeto (Letter Recognition)	The teachware will serve as a tool for mobile teachers to teach how to recognize the letter based on the sound heard (audio only);	<i>Echo Reading</i>	Text, Image, Sound
Pantig (Letter-Sound Association)	The teachware will serve as a tool for mobile teachers to teach how to associate letters with its respective sound and present it simultaneously (text + sound);	<i>Echo Reading</i>	Text, Image, Sound

Salita (Word Recognition)	The teachware will serve as a tool for mobile teachers to teach how to verbalize a word without audio or visual support (text only).	<i>Repeated Reading</i>	Text, Sound
--	--	-----------------------------	-------------

Table 3.2.5-1: Instructional Design Matrix

3.2.6. Storyboard

A	B	C				
3.2.1.8 na, ne, ni, no, nu	3.2.2.1 ab, eb, ib, ob, ub	3.3.1.16 <i>bal</i>	3.3.1.36 <i>git</i>	3.3.1.56 <i>kar</i>	3.3.1.76 <i>lim</i>	3.3.1.96 <i>nis</i>
3.2.1.9 nga, nge, ngi, ngo, ngu	3.2.2.2 ak, ek, ik, ok, uk	3.3.1.17 <i>bang</i>	3.3.1.37 <i>gol</i>	3.3.1.57 <i>kas</i>	3.3.1.77 <i>ling</i>	3.3.1.97 <i>nit</i>
3.2.1.10 pa, pe, pi, po, pu	3.2.2.3 ad, ed, id, od, ud	3.3.1.18 <i>bid</i>	3.3.1.38 <i>gos</i>	3.3.1.58 <i>ken</i>	3.3.1.78 <i>lit</i>	3.3.1.98 <i>nog</i>
3.2.1.11 ra, re, ri, ro, ru	3.2.2.4 ag, eg, ig, og, ug	3.3.1.19 <i>big</i>	3.3.1.39 <i>gri</i>	3.3.1.59 <i>kid</i>	3.3.1.79 <i>long</i>	3.3.1.99 <i>nok</i>
3.2.1.12 sa, se, si, so, su	3.2.2.5 al, el, il, ol, ul	3.3.1.20 <i>bin</i>	3.3.1.40 <i>gun</i>	3.3.1.60 <i>kit</i>	3.3.1.80 <i>lung</i>	3.3.1.100 <i>nom</i>
3.2.1.13 ta, te, ti, to, tu	3.2.2.6 am, em, im, om, um	3.3.1.21 <i>bing</i>	3.3.1.41 <i>hag</i>	3.3.1.61 <i>kod</i>	3.3.1.81 <i>man</i>	3.3.1.101 <i>pag</i>
3.2.1.14 wa, we, wi, wo, wu	3.2.2.7 an, en, in, on, un	3.3.1.22 <i>bol</i>	3.3.1.42 <i>hal</i>	3.3.1.62 <i>kot</i>	3.3.1.82 <i>mat</i>	3.3.1.102 <i>pal</i>
3.2.1.15 ya, ye, yi, yo, yu	3.2.2.8 ang, eng, ing, ong, ung	3.3.1.23 <i>bom</i>	3.3.1.43 <i>ham</i>	3.3.1.63 <i>kut</i>	3.3.1.83 <i>men</i>	3.3.1.103 <i>pan</i>
	3.2.2.9 ap, ep, ip, op, up	3.3.1.24 <i>bon</i>	3.3.1.44 <i>han</i>	3.3.1.64 <i>lag</i>	3.3.1.84 <i>mig</i>	3.3.1.104 <i>pas</i>
	3.2.2.10 ar, er, ir, or, ur	3.3.1.25 <i>bong</i>	3.3.1.45 <i>har</i>	3.3.1.65 <i>lak</i>	3.3.1.85 <i>min</i>	3.3.1.105 <i>pat</i>
	3.2.2.11 as, es, is, os, us	3.3.1.26 <i>bra</i>	3.3.1.46 <i>has</i>	3.3.1.66 <i>lam</i>	3.3.1.86 <i>mok</i>	3.3.1.106 <i>pel</i>
	3.2.2.12 at, et, it, ot, ut	3.3.1.27 <i>bre</i>	3.3.1.47 <i>hig</i>	3.3.1.67 <i>lan</i>	3.3.1.87 <i>muk</i>	3.3.1.107 <i>pen</i>
	3.2.2.13 aw, ew, iw, ow, uw	3.3.1.28 <i>dad</i>	3.3.1.48 <i>hin</i>	3.3.1.68 <i>lap</i>	3.3.1.88 <i>nag</i>	3.3.1.108 <i>pet</i>
	3.2.2.14 ay, ey, iy, oy, uy	3.3.1.29 <i>dan</i>	3.3.1.49 <i>hod</i>	3.3.1.69 <i>lek</i>	3.3.1.89 <i>nak</i>	3.3.1.109 <i>pil</i>
		3.3.1.30 <i>den</i>	3.3.1.50 <i>hok</i>	3.3.1.70 <i>len</i>	3.3.1.90 <i>nan</i>	3.3.1.110 <i>pin</i>
		3.3.1.31 <i>der</i>	3.3.1.51 <i>kad</i>	3.3.1.71 <i>leng</i>	3.3.1.91 <i>nas</i>	3.3.1.111 <i>ping</i>
		3.3.1.32 <i>dok</i>	3.3.1.52 <i>kal</i>	3.3.1.72 <i>ler</i>	3.3.1.92 <i>ngan</i>	3.3.1.112 <i>pis</i>
		3.3.1.33 <i>gan</i>	3.3.1.53 <i>kam</i>	3.3.1.73 <i>les</i>	3.3.1.93 <i>ngis</i>	3.3.1.113 <i>pit</i>
		3.3.1.34 <i>gas</i>	3.3.1.54 <i>kan</i>	3.3.1.74 <i>lib</i>	3.3.1.94 <i>nig</i>	3.3.1.114 <i>pla</i>
		3.3.1.35 <i>ging</i>	3.3.1.55 <i>kap</i>	3.3.1.75 <i>lid</i>	3.3.1.95 <i>nin</i>	3.3.1.115 <i>ple</i>

C-1

De La Salle University

3.2.7. Screen Designs

3.2.7.1. General Theme

Figure 3.2.7.1-1. General Theme

Color scheme of the teachware is yellow as this is most evident when being projected to a screen. 2 main images take up majority of the screen to promote dual coding and association.

3.2.7.2. Main Menu

Figure 3.2.7.2-1. Main Menu

The main screen showed the topic choices for the user namely **Alpabeto**, **Pantig**, and **Salita**. The teacher may choose a topic by clicking their respective button.

3.2.7.3. Lessons

3.2.7.3.1. Alpabeto Menu

Figure 3.2.7.3.1-1. Alpabeto Menu

The various letters were presented for the teacher to easily access from the Alpabeto Menu. Hovering on the Patinig/Katinig buttons on the upper right hand highlighted the corresponding letters.

3.2.7.3.2. Alpabeto (Patinig)

Figure 3.2.7.3.2-1. Alpabeto (Patinig)

The letter, together with at most 3 graphic representations was shown side by side. Their corresponding audio was played on mouse click. The user shifted between images by clicking the circular buttons found on the lower part of the image. The dictionary button below is used for easy access to the words in the teachware.

3.2.7.3.3. Pantig Menu

Pantig

1-titik	ba, be, bi, bo, bu	nga, nge, ngi, ngo, ngu
katinig-patinig	ka, ke, ki, ko, ku	pa, pe, pi, po, pu
patinig-katinig	da, de, di, do, du	ra, re, ri, ro, ru
katinig-patinig-katinig	ga, ge, gi, go, gu	sa, se, si, so, su
kluster	ha, he, hi, ho, hu	ta, te, ti, to, tu
4 o higit pang titik pantig	la, le, li, lo, lu	wa, we, wi, wo, wu
	ma, me, mi, mo, mu	ya, ye, yi, yo, yu
	na, ne, ni, no, nu	

■ Diptonggo: may katinig sa unahan
■ pantig lamang

Figure 3.2.7.3.3-1. Pantig Menu

The teacher had the liberty to choose the set of syllables he/she would like to discuss via the Pantig Menu. It classified the syllables with respect to the number of letters they contained and the order in which the vowel and consonants blended.

3.2.7.3.4. Pantig

Figure 3.2.7.3.4-1 Pantig

Similar to Alpabeto, syllables together with graphic representation were shown side by side. However, the syllable need not necessarily be the first syllable of the word. They may be the syllable in the middle (gitlapi) or the syllable at the end (hulapi) of the word.

3.2.7.3.5 Salita

Figure 3.2.7.3.5-1. Salita

This portion of the teachware served as an aid for the teacher for assessing the learner's current aptitude in reading. It should enhance the learners' ability to recognize phonemes & syllables, phoneme spelling, identify sight words and concurrently develop their vocabulary. Each syllable of a word can be given emphasis by hovering on it. Clicking on the sound icon below plays the word's corresponding audio. This screen design was the same for phoneme recognition, awareness of syllables, and phoneme spelling.

3.2.7.4. Dictionary

Figure 3.2.7.4-1. Dictionary

Dictionary contained all the words used in the teachware and were segregated by the letter they begin with. The list of words under each letter can be browsed on the left of the screen. A dictation of the chosen word is heard by clicking the speaker icon found beside the word on the main screen. The words' respective definitions can be found on the lower half of the right partition.

3.2.8. Script

Storyboard	Text	Visuals	Audio	Interactions
<p>Reference Number = 1.0 home/main menu</p>	<p>Title = “PAGBASA”</p>	<p>Photograph</p> <p>Filipino Alphahabet Flashcards Description = A-B-K-D flashcards on white background</p>		<p>Button</p> <p>Alpabeto Label = “alpabeto” Link = Goes to “2.0” Rollover Animation = button glow</p> <p>Pantig Label = “pantig” Link = Goes to “3.0” Rollover Animation = button glow</p> <p>Salita Label = “salita” Link = Goes to “4.0” Rollover Animation = button glow</p>

<div>Reference Number = 2.0 Abakada</div> <div><table><tr><td>Alpabeto</td><td colspan="5">Patinig Katinig</td></tr><tr><td>a</td><td>b</td><td>k</td><td>d</td><td>e</td></tr><tr><td>g</td><td>h</td><td>i</td><td>l</td><td>m</td></tr><tr><td>n</td><td>ng</td><td>o</td><td>p</td><td>r</td></tr><tr><td>s</td><td>t</td><td>u</td><td>w</td><td>y</td></tr></table></div>	Alpabeto	Patinig Katinig					a	b	k	d	e	g	h	i	l	m	n	ng	o	p	r	s	t	u	w	y	<div>Title="Alpabeto"</div>			<div>Button</div> <div>Patinig Label = "Patinig" Link = Goes to "2.1.1" Rollover Animation = change color, a, e, i, o, u, buttons will also glow</div> <div>Katinig Label = "Katinig" Link = Goes to "2.2.1" Rollover Animation = change color, b, k, d, g, h, l, m, n, ng, p, r, s, t, w, y, buttons will also glow</div> <div>a Label = "a" Link = Goes to "2.1.1, a" Rollover Animation = change color</div> <div>b Label = "b" Link = Goes to "2.2.1, b" Rollover Animation = change color</div> <div>k Label = "k" Link = Goes to "2.2.1, k" Rollover Animation = change color</div> <div>d Label = "d" Link = Goes to "2.2.1, d" Rollover Animation = change color</div> <div>e Label = "e" Link = Goes to "2.1.1, e"</div>
Alpabeto	Patinig Katinig																													
a	b	k	d	e																										
g	h	i	l	m																										
n	ng	o	p	r																										
s	t	u	w	y

				<p>Rollover Animation = change color</p> <p>g Label = “g” Link = Goes to “2.2.1, g” Rollover Animation = change color</p> <p>h Label = “h” Link = Goes to “2.2.1, h” Rollover Animation = change color</p> <p>i Label = “i” Link = Goes to “2.1.1, i” Rollover Animation = change color</p> <p>l Label = “l” Link = Goes to “2.2.1, l” Rollover Animation = change color</p> <p>m Label = “m” Link = Goes to “2.2.1, m” Rollover Animation = change color</p> <p>n Label = “n” Link = Goes to “2.2.1, n” Rollover Animation = change color</p>
--	--	--	--	---

				<p>ng Label = “ng” Link = Goes to “2.2.1, ng” Rollover Animation = change color</p> <p>o Label = “o” Link = Goes to “2.1.1, o” Rollover Animation = change color</p> <p>p Label = “p” Link = Goes to “2.2.1, p” Rollover Animation = change color</p> <p>r Label = “r” Link = Goes to “2.2.1, r” Rollover Animation = change color</p> <p>s Label = “s” Link = Goes to “2.2.1, s” Rollover Animation = change color</p> <p>t Label = “t” Link = Goes to “2.2.1, t” Rollover Animation = change color</p> <p>u Label = “u” Link = Goes to “2.1.1, u” Rollover Animation = change color</p>
--	--	--	--	--

				<p>w Label = “w” Link = Goes to “2.2.1, w” Rollover Animation = change color</p> <p>y Label = “y” Link = Goes to “2.2.1, y” Rollover Animation = change color</p> <p> Label = “ ” Link = Goes to “1.0” Rollover Animation = button glow</p> <p>Dictionary Label = “ ” Link = Goes to “5.0” Rollover Animation = button glow</p>
--	--	--	--	--

<p>Reference Number = 2.1.1</p> <p>Titik a</p>	<p>Content</p> <p>“a”</p>	<p>Photograph</p> <p>aso Description = medium or full body shot of a dog Link = aso voice over</p> <p>aklat Description = open book Link = aklat voice over</p> <p>apoy Description = fire on dark background Link = apoy voice over</p>	<p>Voice over</p> <p>A Gender = female Level = adult Script = “a”</p> <p>Aso Gender = female Level = adult Script = “aso”</p> <p>Aklat Gender = female Level = adult Script = “aklat”</p> <p>Apoy Gender = female Level = adult Script = “apoy”</p>	<p>Button</p> <p>a1 Label = “●” Link = shows Aso photograph</p> <p>a2 Label = “●” Link = shows Aklat photograph</p> <p>a3 Label = “●” Link = shows Apoy photograph</p>
<p>Titik e</p>	<p>Content</p> <p>“e”</p>	<p>Photograph</p> <p>Elepante Description = medium or full body shot of an elephant Link = elepante voice over</p> <p>Eruplano Description = frontal shot of a local airplane Link = eruplano voice over</p> <p>Estudiante Description = students in uniform Link = estudiante voice over</p>	<p>Voice over</p> <p>E Gender = female Level = adult Script = “e”</p> <p>Elepante Gender = female Level = adult Script = “elepante”</p> <p>Eruplano Gender = female Level = adult Script = “eruplano”</p> <p>Estudiante Gender = female Level = adult Script = “estudiante”</p>	<p>Button</p> <p>e1 Label = “●” Link = shows Elepante photograph</p> <p>e2 Label = “●” Link = shows Eruplano photograph</p> <p>e3 Label = “●” Link = shows Estudiante photograph</p>

<p>Titik i</p>	<p>Content</p> <p>“i”</p>	<p>Photograph</p> <p>Ilog Description = river Link = Ilog voice over</p> <p>Ibon Description = medium or full body shot of a bird Link = Ibon voice over</p> <p>Itlog Description = egg (including shell) Link = Itlog voice over</p>	<p>Voice over</p> <p>I Gender = female Level = adult Script = “i”</p> <p>Ilog Gender = female Level = adult Script = “eruplano”</p> <p>Ibon Gender = female Level = adult Script = “ibon”</p> <p>Itlog Gender = female Level = adult Script = “itlog”</p>	<p>Button</p> <p>i1 Label = “●” Link = shows Ilog photograph</p> <p>i2 Label = “●” Link = shows Ibon photograph</p> <p>i3 Label = “●” Link = shows Itlog photograph</p>
<p>Titik o</p>	<p>Content</p> <p>“o”</p>	<p>Photograph</p> <p>Orasan Description = photo of a wall clock Link = Orasan voice over</p> <p>Ospital Description = photo of a hospital building Link = Ospital voice over</p> <p>Okra Description = okras on a plate Link = Okra voice over</p>	<p>Voice over</p> <p>O Gender = female Level = adult Script = “o”</p> <p>Orasan Gender = female Level = adult Script = “orasan”</p> <p>Ospital Gender = female Level = adult Script = “ospital”</p> <p>Okra Gender = female Level = adult Script = “okra”</p>	<p>Button</p> <p>o1 Label = “●” Link = shows Orasan photograph</p> <p>o2 Label = “●” Link = shows Ospital photograph</p> <p>o3 Label = “●” Link = shows Okra photograph</p>

<p>Titik u</p>	<p>Content</p> <p>“u”</p>	<p>Photograph</p> <p>Ulap Description = white clouds Link = Ulap voice over</p> <p>Uling Description = charcoal Link = Uling voice over</p> <p>Usok Description = smoke from a grill Link = Usok voice over</p>	<p>Voice over</p> <p>U Gender = female Level = adult Script = “u”</p> <p>Ulap Gender = female Level = adult Script = “ulap”</p> <p>Uling Gender = female Level = adult Script = “uling”</p> <p>Usok Gender = female Level = adult Script = “usok”</p>	<p>Button</p> <p>u1 Label = “●” Link = shows Ulap photograph</p> <p>u2 Label = “●” Link = shows Uling photograph</p> <p>u3 Label = “●” Link = shows Usok photograph</p>
				<p>*Standard buttons below for Patinig Lesson</p> <p>a Label = “a” Link = Goes to “2.1.1, a” Rollover Animation = change color</p> <p>e Label = “e” Link = Goes to “2.1.1, e” Rollover Animation = change color</p> <p>i Label = “i” Link = Goes to “2.1.1, i” Rollover Animation = change color</p>

o
Label = “o”
Link = Goes to “2.1.1, o”
Rollover Animation = change color

u
Label = “u”
Link = Goes to “2.1.1, u”
Rollover Animation = change color

Toggle
Label = “ ”
Link = Displays white box
Rollover Animation = glow

Home
Label = “ ”
Link = Goes to “1.0”
Rollover Animation = glow

Topic Menu
Label = “ ”
Link = Goes to “2.0”
Rollover Animation = change color

Dictionary
Label = “ ”
Link = Goes to “5.0”
Rollover Animation = button glow

***bullet buttons for photos:**
○ white – current selected bullet
● dark brown – with content
● gray – no content

<p>Reference Number = 2.2.1 (katinig set 1)</p> <p>Titik b</p>	<p>Content</p> <p>“b”</p>	<p>Photograph</p> <p>Balde Description = whole body shot of a pail Link = Balde voice over</p> <p>Bintana Description = photo of window taken from the outside Link = Bintana voice over</p> <p>Buto Description = dog chew bone Link = Buto voice over</p>	<p>Voice over</p> <p>B Gender = female Level = adult Script = “ba”</p> <p>Balde Gender = female Level = adult Script = “balde”</p> <p>Bintana Gender = female Level = adult Script = “bintana”</p> <p>Buto Gender = female Level = adult Script = “buto”</p>	<p>Button</p> <p>b1 Label = “●” Link = shows Balde photograph</p> <p>b2 Label = “●” Link = shows Bintana photograph</p> <p>b3 Label = “●” Link = shows Buto photograph</p>
<p>Titik k</p>	<p>Content</p> <p>“k”</p>	<p>Photograph</p> <p>Kalye Description = any street Link = Kalye voice over</p> <p>Kasal Description = wedding ceremony Link = Kasal voice over</p> <p>Kusina Description = a small simple kitchen Link = Kusina voice over</p>	<p>Voice over</p> <p>K Gender = female Level = adult Script = “ka”</p> <p>Kalye Gender = female Level = adult Script = “kalye”</p> <p>Kasal Gender = female Level = adult Script = “kasal”</p> <p>Kusina Gender = female Level = adult Script = “kusina”</p>	<p>Button</p> <p>k1 Label = “●” Link = shows Kalye photograph</p> <p>k2 Label = “●” Link = shows Kasal photograph</p> <p>k3 Label = “●” Link = shows Kusina photograph</p>

<p>Titik d</p>	<p>Content</p> <p>“d”</p>	<p>Photograph</p> <p>Dasal Description = person praying Link = Dasal voice over</p> <p>Drayber Description = jeepney driver Link = Drayber voice over</p> <p>Daga Description = small rat caught in flypaper Link = Daga voice over</p>	<p>Voice over</p> <p>D Gender = female Level = adult Script = “da”</p> <p>Dasal Gender = female Level = adult Script = “dasal”</p> <p>Drayber Gender = female Level = adult Script = “drayber”</p> <p>Daga Gender = female Level = adult Script = “daga”</p>	<p>Button</p> <p>d1 Label = “●” Link = shows Dasal photograph</p> <p>d2 Label = “●” Link = shows Drayber photograph</p> <p>d3 Label = “●” Link = shows Daga photograph</p>
<p>Titik g</p>	<p>Content</p> <p>“g”</p>	<p>Photograph</p> <p>Gatas Description = milk in a glass Link = Gatas voice over</p> <p>Gulay Description = various vegetables Link = Gulay voice over</p> <p>Gupit Description = cutting a piece of paper Link = Gupit voice over</p>	<p>Voice over</p> <p>G Gender = female Level = adult Script = “ga”</p> <p>Gatas Gender = female Level = adult Script = “gatas”</p> <p>Gulay Gender = female Level = adult Script = “gulay”</p> <p>Gupit Gender = female Level = adult Script = “gupit”</p>	<p>Button</p> <p>g1 Label = “●” Link = shows Gatas photograph</p> <p>g2 Label = “●” Link = shows Gulay photograph</p> <p>g3 Label = “●” Link = shows Gupit photograph</p>

<p>Titik h</p>	<p>Content = “h”</p>	<p>Photograph</p> <p>Hagdan Description = topview photo of a staircase Link = Hagdan voice over</p> <p>Halaman Description = various plants Link = Halaman voice over</p> <p>Hulog Description = ball drop Link = Hulog voice over</p>	<p>Voice over</p> <p>H Gender = female Level = adult Script = “ha”</p> <p>Hagdan Gender = female Level = adult Script = “hagdan”</p> <p>Halaman Gender = female Level = adult Script = “halaman”</p> <p>Hulog Gender = female Level = adult Script = “hulog”</p>	<p>Button</p> <p>h1 Label = “●” Link = shows Hagdan photograph</p> <p>h2 Label = “●” Link = shows Halaman photograph</p> <p>g3 Label = “●” Link = shows Hulog photograph</p>
				<p>*Standard buttons for 2.2.1 Katinig set 1</p> <p>b Label = “b” Link = Goes to “2.2.1, b” Rollover Animation = change color</p> <p>k Label = “k” Link = Goes to “2.2.1, k” Rollover Animation = change color</p> <p>d Label = “d” Link = Goes to “2.2.1, d” Rollover Animation = change color</p>

				<p>g Label = “g” Link = Goes to “2.2.1, g” Rollover Animation = change color</p> <p>h Label = “h” Link = Goes to “2.2.1, h” Rollover Animation = change color</p> <p>Toggle Label = “ ” Link = Displays white box Rollover Animation = glow</p> <p>Home Label = “ ” Link = Goes to “1.0” Rollover Animation = glow</p> <p>Topic Menu Label = “ ” Link = Goes to “2.0” Rollover Animation = change color</p> <p>Dictionary Label = “ ” Link = Goes to “5.0” Rollover Animation = button glow</p> <p>Next Label = “ ” Link = 2.2.2, goes to the next set of katinig letters (l, m, n, ng, p) Rollover Animation = change color</p>
--	--	--	--	--

De La Salle University

De La Salle University

Previous
Label = “◀”
Link = disabled
Rollover Animation = none

***bullet buttons for photos:**
○ white – current selected bullet
● dark brown – with content
● gray – no content

<p>Reference Number = 2.2.2.2 (katinig set 2)</p> <p>Titik I</p>	<p>Content</p> <p>“I”</p>	<p>Photograph</p> <p>Luha Description = tears falling from the eyes Link = Luha voice over</p> <p>Lolo Description = old man Link = Lolo voice over</p> <p>Liwanag Description = sun flare Link = Liwanag voice over</p>	<p>Voice over</p> <p>L Gender = female Level = adult Script = “Ia”</p> <p>Luha Gender = female Level = adult Script = “luha”</p> <p>Lolo Gender = female Level = adult Script = “lolo”</p> <p>Liwanag Gender = female Level = adult Script = “Liwanag”</p>	<p>11 Label = “●” Link = shows Luha photograph</p> <p>12 Label = “●” Link = shows Lolo photograph</p> <p>13 Label = “●” Link = shows Liwanag photograph</p>
<p>Reference Number = 2.2.2.2</p> <p>Titik M</p>	<p>Content</p> <p>“m”</p>	<p>Photograph</p> <p>Mesa Description = simple wood table Link = Manok voice over</p> <p>Mukha Description = tight shot of a person’s face Link = Mukha voice over</p> <p>Manok Description = used for cockfighting Link = Manok voice over</p>	<p>Voice over</p> <p>M Gender = female Level = adult Script = “ma”</p> <p>Mesa Gender = female Level = adult Script = “mesa”</p> <p>Mukha Gender = female Level = adult Script = “mukha”</p> <p>Manok Gender = female Level = adult Script = “manok”</p>	<p>m1 Label = “●” Link = shows Mesa photograph</p> <p>m2 Label = “●” Link = shows Mukha photograph</p> <p>m3 Label = “●” Link = shows Manok photograph</p>

<p>Reference Number = 2.2.2</p> <p>Titik N</p>	<p>Content</p> <p>“n”</p>	<p>Photograph</p> <p>Noo Description = tight shot of a forehead Link = Noo voice over</p> <p>Nanay Description = mother with a child Link = Nanay voice over</p> <p>Nood Description = person watching a performance Link = Nood voice over</p>	<p>Voice over</p> <p>N Gender = female Level = adult Script = “na”</p> <p>Noo Gender = female Level = adult Script = “noo”</p> <p>Nanay Gender = female Level = adult Script = “nanay”</p> <p>Nood Gender = female Level = adult Script = “nood”</p>	<p>n1 Label = “●” Link = shows Noo photograph</p> <p>n2 Label = “●” Link = shows Nanay photograph</p> <p>n3 Label = “●” Link = shows Nood photograph</p>
<p>Reference Number = 2.2.2</p> <p>Titik Ng</p>	<p>Content</p> <p>“ng”</p>	<p>Photograph</p> <p>Ngipin Description = tight shot of a smile with teeth Link = Ngipin voice over</p> <p>Ngiti Description = girl smiling Link = Ngiti voice over</p> <p>Ngawa Description = infant crying Link = Ngawa voice over</p>	<p>Voice over</p> <p>Ng Gender = female Level = adult Script = “na”</p> <p>Ngipin Gender = female Level = adult Script = “ngipin”</p> <p>Ngiti Gender = female Level = adult Script = “ngiti”</p> <p>Ngawa Gender = female Level = adult Script = “ngawa”</p>	<p>ng1 Label = “●” Link = shows Ngipin photograph</p> <p>ng2 Label = “●” Link = shows Ngiti photograph</p> <p>ng3 Label = “●” Link = shows Ngawa photograph</p>

<p>Reference Number = 2.2.2</p> <p>Titik P</p>	<p>Content</p> <p>“p”</p>	<p>Photograph</p> <p>Pagkain Description = various food Link = Pagkain voice over</p> <p>Pera Description = different denominations of Philippine peso Link = Pera voice over</p> <p>Prutas Description = various fruits Link = Prutas voice over</p>	<p>Voice over</p> <p>P Gender = female Level = adult Script = “pa”</p> <p>Pagkain Gender = female Level = adult Script = “pagkain”</p> <p>Pera Gender = female Level = adult Script = “pera”</p> <p>Prutas Gender = female Level = adult Script = “prutas”</p>	<p>p1 Label = “●” Link = shows Pagkain photograph</p> <p>p2 Label = “●” Link = shows Pera photograph</p> <p>p3 Label = “●” Link = shows Prutas photograph</p>
				<p>*Standard buttons for 2.2.2 Katinig set 2</p> <p>l Label = “l” Link = Goes to “2.2.2, l” Rollover Animation = change color</p> <p>m Label = “m” Link = Goes to “2.2.2, m” Rollover Animation = change color</p> <p>n Label = “n” Link = Goes to “2.2.2, n” Rollover Animation = change color</p>

				<p>ng Label = “ng” Link = Goes to “2.2.2, ng” Rollover Animation = change color</p> <p>p Label = “p” Link = Goes to “2.2.2, p” Rollover Animation = change color</p> <p>Toggle Label = “ ” Link = Displays white box Rollover Animation = glow</p> <p>Home Label = “ ” Link = Goes to “1.0” Rollover Animation = glow</p> <p>Topic Menu Label = “ ” Link = 2.0 Rollover Animation = change color</p> <p>Dictionary Label = “ ” Link = Goes to “5.0” Rollover Animation = button glow</p> <p>Next Label = “ ” Link = 2.2.3, goes to the next set of katinig letters (r, s, t, w, y) Rollover Animation = change color</p>
--	--	--	--	--

De La Salle University

Previous
Label = “◀”
Link = 2.2.1, goes back to the previous set of katinig letters (b, k, d, g, h)
Rollover Animation = none

***bullet buttons for photos:**
○ white – current selected bullet
● dark brown – with content
● gray – no content

<p>Reference Number = 2.2.3 (Katinig set 3)</p> <p>Titik R</p>	<p>Content</p> <p>“r”</p>	<p>Photograph</p> <p>Resibo Description = any receipt Link = Resibo voice over</p> <p>Regalo Description = a wrapped present Link = Regalo voice over</p> <p>Relo Description = wrist watch Link = Relos voice over</p>	<p>Voice over</p> <p>R Gender = female Level = adult Script = “ra”</p> <p>Resibo Gender = female Level = adult Script = “resibo”</p> <p>Regalo Gender = female Level = adult Script = “regalo”</p> <p>Relos Gender = female Level = adult Script = “relas”</p>	<p>r1 Label = “●” Link = shows Resibo photograph</p> <p>r2 Label = “●” Link = shows Regalo photograph</p> <p>r3 Label = “●” Link = shows Relos photograph</p>
<p>Reference Number = 2.2.3</p> <p>Titik S</p>	<p>Content</p> <p>“s”</p>	<p>Photograph</p> <p>Saging Description = a bunch of bananas Link = Saging voice over</p> <p>Sayaw Description = group of people dancing Link = Sayaw voice over</p> <p>Sipilyo Description = close-up shot of a toothbrush Link = Sipilyo voice over</p>	<p>Voice over</p> <p>S Gender = female Level = adult Script = “sa”</p> <p>Saging Gender = female Level = adult Script = “saging”</p> <p>Sayaw Gender = female Level = adult Script = “sayaw”</p> <p>Sipilyo Gender = female Level = adult Script = “sipilyo”</p>	<p>s1 Label = “●” Link = shows Saging photograph</p> <p>s2 Label = “●” Link = shows Sayaw photograph</p> <p>s3 Label = “●” Link = shows Sipilyo photograph</p>

<p>Reference Number = 2.2.3</p> <p>Titik T</p>	<p>Content</p> <p>“t”</p>	<p>Photograph</p> <p>Tao Description = full body silhouette shot of people Link = Tao voice over</p> <p>Tawid Description = person crossing a street Link = Tawid voice over</p> <p>Traysikel Description = photo of a tricycle Link = Traysikel voice over</p>	<p>Voice over</p> <p>T Gender = female Level = adult Script = “ta”</p> <p>Tao Gender = female Level = adult Script = “tao”</p> <p>Tawid Gender = female Level = adult Script = “tawid”</p> <p>Traysikel Gender = female Level = adult Script = “traysikel”</p>	<p>t1 Label = “●” Link = shows Saging photograph</p> <p>t2 Label = “●” Link = shows Tawid photograph</p> <p>t3 Label = “●” Link = shows Traysikel photograph</p>
<p>Reference Number = 2.2.3</p> <p>Titik W</p>	<p>Content</p> <p>“w”</p>	<p>Photograph</p> <p>Walis Description = photo of a broom and walis ting-ting Link = Walis voice over</p> <p>Welga Description = people on rally Link = Welga voice over</p> <p>Watawat Description = tight shot of the Philippine flag Link = Watawat voice over</p>	<p>Voice over</p> <p>W Gender = female Level = adult Script = “wa”</p> <p>Walis Gender = female Level = adult Script = “walis”</p> <p>Welga Gender = female Level = adult Script = “welga”</p> <p>Watawat Gender = female Level = adult Script = “watawat”</p>	<p>w1 Label = “●” Link = shows Walis photograph</p> <p>w2 Label = “●” Link = shows Welga photograph</p> <p>w3 Label = “●” Link = shows Watawat photograph</p>

<p>Reference Number = 2.2.3</p> <p>Titik Y</p>	<p>Content</p> <p>“y”</p>	<p>Photograph</p> <p>Yakap Description = two people hugging each other Link = Yakap voice over</p> <p>Yero Description = iron sheets used as roof Link = Yero voice over</p> <p>Yelo Description = bucket of ice Link = Yelo voice over</p>	<p>Voice over</p> <p>Y Gender = female Level = adult Script = “ya”</p> <p>Yakap Gender = female Level = adult Script = “yakap”</p> <p>Yero Gender = female Level = adult Script = “yero”</p> <p>Yelo Gender = female Level = adult Script = “yelo”</p>	<p>y1 Label = “●” Link = shows Yakap photograph</p> <p>y2 Label = “●” Link = shows Yero photograph</p> <p>y3 Label = “●” Link = shows Yelo photograph</p>
				<p>*Standard buttons for 2.2.2 Katinig set 3</p> <p>r Label = “r” Link = Goes to “2.2.3, r” Rollover Animation = change color</p> <p>s Label = “s” Link = Goes to “2.2.3, s” Rollover Animation = change color</p> <p>t Label = “t” Link = Goes to “2.2.3, t” Rollover Animation = change color</p>

				<p>w Label = “w” Link = Goes to “2.2.1, w” Rollover Animation = change color</p> <p>y Label = “y” Link = Goes to “2.2.3, y” Rollover Animation = change color</p> <p>Toggle Label = “ The logo of De La Salle University, featuring a circular seal with a star in the center and the words "DE LA SALLE UNIVERSITY" around the perimeter. </p>
--	--	--	--	---

De La Salle University

previous set of katinig letters (l, m, n, ng, p)

Rollover Animation = change color

***bullet buttons for photos:**

○ white – current selected bullet

● dark brown – with content

● gray – no content

Reference Number = 3.0	Title = “Pantig” Content = “1-Titik” “Katinig-Patinig” “Patinig- Katinig” “Katinig-Patinig-Katinig”			Button 1-Titik Label = “1-Titik” Link = 3.1 Rollover Action = darken 1Pantig Label = “a, e, i, o, u” Link = 3.1.1 Rollover Action = change color ----- Kat-Pat Label = “Katinig-Patinig” Link = 3.2.1 Rollover Action = darken KP-B Label = “ba, be, bi, bo, bu” Link = 3.2.1.1 Rollover Action = change color KP-K Label = “ka, ke, ki, ko, ku” Link = 3.2.1.2 Rollover Action = change color KP-D Label = “da, de, di, do, du” Link = 3.2.1.3 Rollover Action = change color KP-G Label = “ga, ge, gi, go, gu” Link = 3.2.1.4 Rollover Action = change color KP-H Label = “ha, he, hi, ho, hu” Link = 3.2.1.5 Rollover Action = change color
-------------------------------	--	--	--	--

			<p>KP-L Label = “la, le, li, lo, lu” Link = 3.2.1.6 Rollover Action = change color</p> <p>KP-M Label = “ma, me, mi, mo, mu” Link = 3.2.1.7 Rollover Action = change color</p> <p>KP-N Label = “na, ne, ni, no, nu” Link = 3.2.1.8 Rollover Action = change color</p> <p>KP-NG Label = “nga, nge, ngi, ngo, ngu” Link = 3.2.1.9 Rollover Action = change color</p> <p>KP-P Label = “pa, pe, pi, po, pu” Link = 3.2.1.10 Rollover Action = change color</p> <p>KP-R Label = “ra, re, ri, ro, ru” Link = 3.2.1.11 Rollover Action = change color</p> <p>KP-S Label = “sa, se, si, so, su” Link = 3.2.1.12 Rollover Action = change color</p> <p>KP-T Label = “ta, te, ti, to, tu” Link = 3.2.1.13 Rollover Action = change color</p> <p>KP-W Label = “wa, we, wi, wo, wu” Link = 3.2.1.14 Rollover Action = change color</p>
--	--	--	---

			<p>KP-Y Label = “ya, ye, yi, yo, yu” Link = 3.2.1.15 Rollover Action = change color</p> <hr/> <p>Pat-Kat Label = “Patinig-Katinig” Link = 3.2.2 Rollover Action = darken</p> <p>PK-B Label = “ab, eb, ib, ob, ub” Link = 3.2.2.1 Rollover Action = change color</p> <p>PK-K Label = “ak, ek, ik, ok, uk” Link = 3.2.2.2 Rollover Action = change color</p> <p>PK-D Label = “ad, ed, id, od, ud” Link = 3.2.2.3 Rollover Action = change color</p> <p>PK-G Label = “ag, eg, ig, og, ug” Link = 3.2.2.4 Rollover Action = change color</p> <p>PK-L Label = “al, el, il, ol, ul” Link = 3.2.2.5 Rollover Action = change color</p> <p>PK-M Label = “am, em, im, om, um” Link = 3.2.2.6 Rollover Action = change color</p> <p>PK-N Label = “an, en, in, on, un” Link = 3.2.2.7</p>
--	--	--	--

				<p>Rollover Action = change color</p> <p>PK-NG Label = “ang, eng, ing, ong, ung” Link = 3.2.2.8 Rollover Action = change color</p> <p>PK-P Label = “ap, ep, ip, op, up” Link = 3.2.2.9 Rollover Action = change color</p> <p>PK-R Label = “ar, er, ir, or, ur” Link = 3.2.2.10 Rollover Action = change color</p> <p>PK-S Label = “as, es, is, os, us” Link = 3.2.2.11 Rollover Action = change color</p> <p>PK-T Label = “at, et, it, ot, ut” Link = 3.2.2.12 Rollover Action = change color</p> <p>PK-W Label = “aw, ew, iw, ow, uw” Link = 3.2.2.13 Rollover Action = change color</p> <p>Label = “ay, ey, iy, oy, uy” Link = 3.2.2.14 Rollover Action = change color</p> <p>-----</p> <p>3-Titik Label = “Katinig-Patinig-Katinig” Link = 3.3.1 Rollover Action = darken</p> <p>KPK1 Label = “bun”</p>
--	--	--	--	--

			<p>Link = 3.3.1.1 Rollover Action = change color</p> <p>KPK2 Label = “lat” Link = 3.3.1.2 Rollover Action = change color</p> <p>KPK3 Label = “lay” Link = 3.3.1.3 Rollover Action = change color</p> <p>KPK4 Label = “lis” Link = 3.3.1.4 Rollover Action = change color</p> <p>KPK5 Label = “log” Link = 3.3.1.5 Rollover Action = change color</p> <p>KPK6 Label = “hon” Link = 3.3.1.6 Rollover Action = change color</p> <p>KPK6 Label = “may” Link = 3.3.1.7 Rollover Action = change color</p> <p>KPK8 Label = “mit” Link = 3.3.1.8 Rollover Action = change color</p> <p>KPK9 Label = “mot” Link = 3.3.1.9 Rollover Action = change color</p>
--	--	--	---

				<p>KPK10 Label = “min” Link = 3.3.1.10 Rollover Action = change color</p> <p>KPK11 Label = “ril” Link = 3.3.1.11 Rollover Action = change color</p> <p>KPK12 Label = “sin” Link = 3.3.1.12 Rollover Action = change color</p> <p>KPK13 Label = “tak” Link = 3.3.1.13 Rollover Action = change color</p> <p>KPK14 Label = “tas” Link = 3.3.1.14 Rollover Action = change color</p> <p>KPK15 Label = “tin” Link = 3.3.1.15 Rollover Action = change color</p> <p>**KPK16 – KPK160 refer to the storyboard (3.3.1.16 - 3.3.1.160)</p> <p>Label = Link = Goes to “1.0” Rollover Animation = button glow</p> <p>Dictionary Label = Link = Goes to “5.0” Rollover Animation = button glow</p>
--	--	--	--	---

Reference Number = 3.1.1 Pantig a	Content “a”	Photograph Abo Description = picture of ashes Link = abo voice over Apoy Description = a picture of fire Link = apoy voice over Araw Description = a picture of the sun Link = araw voice over	Voice over a Gender = female Level = adult Script = “a” Abo Gender = female Level = adult Script = “abo” Apoy Gender = female Level = adult Script = “apoy” Araw Gender = female Level = adult Script = “araw”	Button Ta1 Label = “ ” Link = shows “abo” word a1 Label = “●” Link = shows Abo photograph Ta2 Label = “ ” Link = shows “apoy” word a2 Label = “●” Link = shows Apoy photograph Ta3 Label = “ ” Link = shows “araw” word a3 Label = “●” Link = shows Araw photograph
Reference Number = 3.1.1 Pantig e	Content “e”	Photograph Eleksiyon Description = picture of a person voting Link = eleksiyon voice over	Voice over e Gender = female Level = adult Script = “e” Eleksiyon Gender = female Level = adult Script = “eleksiyon”	Te1 Label = “ ” Link = shows “eleksiyon” word

		<p>Elepante Description = a picture of an elephant Link = elepante voice over</p> <p>Eroplano Description = a picture of an airplane Link = eruplano voice over</p>	<p>Elepante Gender = female Level = adult Script = “elepante”</p> <p>Eroplano Gender = female Level = adult Script = “eroplano”</p>	<p>e1 Label = “●” Link = shows Eleksiyon photograph</p> <p>Te2 Label = “□” Link = shows “elepante” word</p> <p>e2 Label = “●” Link = shows Elepante photograph</p> <p>Te3 Label = “□” Link = shows “eroplano” word</p> <p>e3 Label = “●” Link = shows Eroplano photograph</p>
<p>Reference Number = 3.1.1</p> <p>Pantig i</p>	<p>Content</p> <p>“i”</p>	<p>Photograph</p> <p>Ilog Description = picture of a river Link = ilog voice over</p> <p>Ilong Description = a picture of a person’s nose Link = ilong voice over</p>	<p>Voice over</p> <p>i Gender = female Level = adult Script = “i”</p> <p>Ilog Gender = female Level = adult Script = “ilog”</p> <p>Ilong Gender = female Level = adult Script = “ilong”</p>	<p>Ti1 Label = “□” Link = shows “ilog” word</p> <p>i1 Label = “●” Link = shows Ilog photograph</p> <p>Ti2 Label = “□” Link = shows “ilong” word</p>

		<p>Iyak Description = a picture of a person crying Link = iyak voice over</p>	<p>Iyak Gender = female Level = adult Script = “iyak”</p>	<p>i2 Label = “●” Link = shows Ilong photograph</p> <p>Ti3 Label = “□” Link = shows “iyak” word</p> <p>i3 Label = “●” Link = shows Iyak photograph</p>
<p>Reference Number = 3.1.1</p> <p>Pantig o</p>	<p>Content</p> <p>“o”</p>	<p>Photograph</p> <p>Okra Description = picture of an okra Link = okra voice over</p> <p>Opisina Description = a picture of an office Link = opisina voice over</p> <p>Orasan Description = a picture of a clock Link = orasan voice over</p>	<p>Voice over</p> <p>o Gender = female Level = adult Script = “o”</p> <p>Okra Gender = female Level = adult Script = “okra”</p> <p>Opisina Gender = female Level = adult Script = “opisina”</p> <p>Orasan Gender = female Level = adult Script = “orasan”</p>	<p>To1 Label = “□” Link = shows “okra” word</p> <p>o1 Label = “●” Link = shows Okra photograph</p> <p>To2 Label = “□” Link = shows “opisina” word</p> <p>o2 Label = “●” Link = shows Opisina photograph</p> <p>To3 Label = “□” Link = shows “orasan” word</p> <p>o3 Label = “●” Link = shows Orasan photograph</p>

Reference Number = 3.1.1	Content	Photograph	Voice over	
Pantig u	“u”	<p>Ulap Description = picture of the clouds Link = ulap voice over</p> <p>Unan Description = a picture of a pillow Link = unan voice over</p> <p>Upo Description = a picture of a person sitting down Link = upo voice over</p>	<p>u Gender = female Level = adult Script = “u”</p> <p>Ulap Gender = female Level = adult Script = “ulap”</p> <p>Unan Gender = female Level = adult Script = “unan”</p> <p>Upo Gender = female Level = adult Script = “upo”</p>	<p>Tu1 Label = “ ” Link = shows “ulap” word</p> <p>u1 Label = “●” Link = shows Ulap photograph</p> <p>Tu2 Label = “ ” Link = shows “unan” word</p> <p>u2 Label = “●” Link = shows Unan photograph</p> <p>Tu3 Label = “ ” Link = shows “upo” word</p> <p>u3 Label = “●” Link = shows Upo photograph</p>

				<p>*Standard buttons below for Isang Pantig Lesson</p> <p>a Label = “a” Link = Goes to “3.1.1, a” Rollover Animation = change color</p> <p>e Label = “e” Link = Goes to “3.1.1, e” Rollover Animation = change color</p> <p>i Label = “i” Link = Goes to “3.1.1, i” Rollover Animation = change color</p> <p>o Label = “o” Link = Goes to “3.1.1, o” Rollover Animation = change color</p> <p>u Label = “u” Link = Goes to “3.1.1, u” Rollover Animation = change color</p> <p>Home Label = Link = Goes to “1.0” Rollover Animation = glow</p>
--	--	--	--	--

				<p>Topic Menu Label = Link = 3.0 Rollover Animation = change color</p> <p>Dictionary Label = Link = Goes to “5.0” Rollover Animation = button glow</p> <p>*bullet buttons for photos: ○ white – current selected bullet ● dark brown – with content ● gray – no content</p>
Reference Number = 3.2.1.1 Pantig ba	Content “ba”	Photograph Bahay Description = picture of a house Link = bahay voice over Babae Description = a picture of a girl Link = babae voice over	Voice over ba Gender = female Level = adult Script = “ba” Bahay Gender = female Level = adult Script = “bahay” Babae Gender = female Level = adult Script = “babae”	Button Tba1 Label = Link = shows “bahay” word ba1 Label = “●” Link = shows Bahay photograph Tba2 Label = Link = shows “babae” word ba2 Label = “●” Link = shows Babae photograph

		<p>Mataba Description = a picture of a chubby person Link = mataba voice over</p>	<p>Mataba Gender = female Level = adult Script = “mataba”</p>	<p>Tba3 Label = “ ” Link = shows “mataba” word</p> <p>ba3 Label = “●” Link = shows Mataba photograph</p>
<p>Reference Number = 3.2.1.1</p> <p>Pantig be</p>	<p>Content</p> <p>“be”</p>	<p>Photograph</p> <p>Belo Description = two people hugging each other Link = belo voice over</p> <p>Bombero Description = a picture of a fireman Link = bombero voice over</p> <p>Bibe Description = a picture of a duck Link = bibe voice over</p>	<p>Voice over</p> <p>be Gender = female Level = adult Script = “be”</p> <p>Belo Gender = female Level = adult Script = “belo”</p> <p>Bombero Gender = female Level = adult Script = “bombero”</p> <p>Bibe Gender = female Level = adult Script = “bibe”</p>	<p>Tbe1 Label = “ ” Link = shows “belo” word</p> <p>be1 Label = “●” Link = shows Belo photograph</p> <p>Tbe2 Label = “ ” Link = shows “bombero” word</p> <p>be2 Label = “●” Link = shows Bombero photograph</p> <p>Tbe3 Label = “ ” Link = shows “bibe” word</p> <p>be3 Label = “●” Link = shows Bibe photograph Rollover Animation = change color</p>

Reference Number = 3.2.1.1 Pantig bi	Content “bi”	Photograph Bilog Description = a picture of a circle Link = bilog voice over Kabibe Description = a picture of a shell Link = kabibe voice over Gabi Description = a night picture Link = gabi voice over	Voice over bi Gender = female Level = adult Script = “bi” Bilog Gender = female Level = adult Script = “bilog” Kabibe Gender = female Level = adult Script = “kabibe” Gabi Gender = female Level = adult Script = “gabi”	 Tbi1 Label = “ ” Link = shows “bilog” word bi1 Label = “●” Link = shows Bilog photograph Tbi2 Label = “ ” Link = shows “kabibe” word bi2 Label = “●” Link = shows Kabibe photograph Tbi3 Label = “ ” Link = shows “gabi” word bi3 Label = “●” Link = shows Gabi photograph
Reference Number = 3.2.1.1 Pantig bo	Content “bo”	Photograph Bola Description = a picture of a ball Link = bola voice over	Voice over bo Gender = female Level = adult Script = “bo” Bola Gender = female Level = adult Script = “bola”	 Tbo1 Label = “ ” Link = shows “bola” word bo1 Label = “●”

		<p>Abokado Description = a picture of an avocado Link = abokado voice over</p> <p>Takbo Description = a picture of a running person Link = takbo voice over</p>	<p>Abokado Gender = female Level = adult Script = “abokado”</p> <p>Takbo Gender = female Level = adult Script = “takbo”</p>	<p>Link = shows Bola photograph</p> <p>Tbo2 Label = “ ” Link = shows “abokado” word</p> <p>bo2 Label = “ ” Link = shows Abokado photograph</p> <p>Tbo3 Label = “ ” Link = shows “takbo” word</p> <p>bo3 Label = “ ” Link = shows Takbo photograph</p>
<p>Reference Number = 3.2.1.1 Pantig bu</p>	<p>Content “bu”</p>	<p>Photograph</p> <p>Buhok Description = a picture of a hair Link = buhok voice over</p> <p>Sibuyas Description = a picture of an onion Link = sibuyas voice over</p>	<p>Voice over</p> <p>bu Gender = female Level = adult Script = “bu”</p> <p>Buhok Gender = female Level = adult Script = “buhok”</p> <p>Sibuyas Gender = female Level = adult Script = “sibuyas”</p>	<p>Tbu1 Label = “ ” Link = shows “buhok” word</p> <p>bu1 Label = “ ” Link = shows Buhok photograph</p> <p>Tbu2 Label = “ ” Link = shows “sibuyas” word</p> <p>bu2 Label = “ ” Link = shows Sibuyas photograph</p>

		Standard photo Description = gray scale sound		bu3 Label = “●” Link = disabled
				<p>*Standard buttons below for 2-titikPantig (Katinig-Patinig) Lesson</p> <p>ba Label = “ba” Link = Goes to “3.2.1.1, b a” Rollover Animation = change color</p> <p>be Label = “be” Link = Goes to “3.2.1.1, be” Rollover Animation = change color</p> <p>bi Label = “bi” Link = Goes to “3.2.1.1, bi” Rollover Animation = change color</p> <p>bo Label = “bo” Link = Goes to “3.2.1.1, bo” Rollover Animation = change color</p> <p>bu Label = “bu” Link = Goes to “3.2.1.1, bu” Rollover Animation = change color</p> <p>Home Label = Link = Goes to “1.0” Rollover Animation = glow</p>

				<p>Topic Menu Label = ” Link = 3.0 Rollover Animation = change color</p> <p>Dictionary Label = ” Link = Goes to “5.0” Rollover Animation = button glow</p> <p>Next Label = “ ” Link = 3.2.1.2 Rollover Animation = change color</p> <p>Previous Label = “ ” Link = disabled Rollover Animation = none</p> <p>*bullet buttons for photos: ☐ white – current selected bullet ☒ dark brown – with content ☐ gray – no content</p>
--	--	--	--	---

Reference Number = 3.2.1.2 Pantig ka	Content “ka”	Photograph Kahoy Description = photo of a wood texture Link = kahoy voice over Pagkain Description = a picture of a food or viand Link = pagkain voice over Baka Description = a picture of a cow Link = baka voice over	Voice over ka Gender = female Level = adult Script = “ka” Kahoy Gender = female Level = adult Script = “kahoy” Pagkain Gender = female Level = adult Script = “pagkain” Baka Gender = female Level = adult Script = “baka”	 Tka1 Label = “ ☐ ” Link = shows “kahoy” word ka1 Label = “●” Link = shows Kahoy photograph Tka2 Label = “ ☐ ” Link = shows “pagkain” word ka2 Label = “●” Link = shows Pagkain photograph Tka3 Label = “ ☐ ” Link = shows “baka” word ka3 Label = “●” Link = shows Baka photograph
Reference Number = 3.2.1.2 Pantig ke	Content “ke”	Photograph Standard photo Description = gray scale sound Raketa Description = a picture of a	Voice over ke Gender = female Level = adult Script = “ke” Raketa Gender = female	 ke1 Label = “●” Link = disabled Tke2 Label = “ ☐ ”

		badminton or tennis racket Link = raketa voice over Palengke Description = a picture of a public market Link = palengke voice over	Level = adult Script = “raketa” Palengke Gender = female Level = adult Script = “palengke”	Link = shows “raketa” word Ke2 Label = “●” Link = shows Raketa photograph Tke3 Label = “□” Link = shows “palengke” word ke3 Label = “●” Link = shows Palengke photograph
Reference Number = 3.2.1.2 Pantig ki	Content “ki”	Photograph Kilay Description = a picture of an eyebrow Link = kilay voice over Standard photo Description = gray scale sound Lalaki Description = a picture of a boy Link = lalaki voice over	Voice over ki Gender = female Level = adult Script = “ki” Kilay Gender = female Level = adult Script = “kilay” Lalaki Gender = female Level = adult Script = “lalaki”	Tki1 Label = “□” Link = shows “kilay” word ki1 Label = “●” Link = shows Kilay photograph ki2 Label = “●” Link = disabled Tki3 Label = “□” Link = shows “lalaki” word ki3 Label = “●” Link = shows Lalaki photograph

Reference Number = 3.2.1.2 Pantig ko	Content “ko”	Photograph Standard photo Description = gray scale sound Standard photo Description = gray scale sound Bangko Description = a picture of a bank Link = bangko voice over	Voice over ko Gender = female Level = adult Script = “ko” Bangko Gender = female Level = adult Script = “bangko”	ko1 Label = “●” Link = disabled ko2 Label = “●” Link = disabled Tko3 Label = “□” Link = shows “bangko” word ko3 Label = “●” Link = shows Bangko photograph
Reference Number = 3.2.1.2 Pantig ku	Content “ku”	Photograph Kubo Description = a picture of a nipa hut Link = kubo voice over Eskuwelahan Description = a picture of a school Link = eskuwelahan voice over	Voice over ku Gender = female Level = adult Script = “ku” Kubo Gender = female Level = adult Script = “kubo” Eskuwelahan Gender = female Level = adult Script = “eskuwelahan”	Tku1 Label = “□” Link = shows “kubo” word ku1 Label = “●” Link = shows Kubo photograph Tku2 Label = “□” Link = shows “eskuwelahan” word

		Standard photo Description = gray scale sound	<p>ku2 Label = “●” Link = shows Eskuwelahan photograph</p> <p>ku3 Label = “●” Link = disabled</p>
			<p>*Standard buttons below for 2-titikPantig (Katinig-Patinig) Lesson</p> <p>ka Label = “ka” Link = Goes to “3.2.1.2, ka” Rollover Animation = change color</p> <p>ke Label = “ke” Link = Goes to “3.2.1.2, ke” Rollover Animation = change color</p> <p>ki Label = “ki” Link = Goes to “3.2.1.2, ki” Rollover Animation = change color</p> <p>ko Label = “ko” Link = Goes to “3.2.1.2, ko” Rollover Animation = change color</p> <p>ku Label = “ku” Link = Goes to “3.2.1.2, ku” Rollover Animation = change color</p>

				<p>Home Label = Link = Goes to “1.0” Rollover Animation = glow</p> <p>Topic Menu Label = Link = 3.0 Rollover Animation = change color</p> <p>Dictionary Label = Link = Goes to “5.0” Rollover Animation = button glow</p> <p>Next Label = “ ” Link = 3.2.1.3 Rollover Animation = change color</p> <p>Previous Label = “ ” Link = 3.2.1.1 Rollover Animation = none</p> <p>*bullet buttons for photos: ○ white – current selected bullet ● dark brown – with content ● gray – no content</p>
--	--	--	--	--

<p>Reference Number = 3.2.1.3</p> <p>Pantig da</p>	<p>Content = “da”</p>	<p>Photograph</p> <p>Dahon Description = a picture of a leaf Link = dahon voice over</p> <p>Tindahan Description = a picture of a small store Link = tindahan voice over</p> <p>Isda Description = a picture of a fish Link = isda voice over</p>	<p>Voice over</p> <p>da Gender = female Level = adult Script = “da”</p> <p>Dahon Gender = female Level = adult Script = “dahon”</p> <p>Tindahan Gender = female Level = adult Script = “tindahan”</p> <p>Isda Gender = female Level = adult Script = “isda”</p>	<p>Tda1 Label = “ ” Link = shows “dahon” word</p> <p>da1 Label = “●” Link = shows Dahon photograph</p> <p>Tda2 Label = “ ” Link = shows “tindahan” word</p> <p>da2 Label = “●” Link = shows Tindahan photograph</p> <p>Tda3 Label = “ ” Link = shows “isda” word</p> <p>da3 Label = “●” Link = shows Isda photograph</p>
<p>Reference Number = 3.2.1.3</p> <p>Pantig de</p>	<p>Content = “de”</p>	<p>Photograph</p> <p>Standard photo Description = gray scale sound</p>	<p>Voice over</p> <p>de Gender = female Level = adult Script = “de”</p>	<p>del Label = “●” Link = disabled</p>

		<p>Pandesal Description = a picture of a bread Link = pandesal voice over</p> <p>Balde Description = a picture of a pail Link = balde voice over</p>	<p>Pandesal Gender = female Level = adult Script = “pandesal”</p> <p>Balde Gender = female Level = adult Script = “balde”</p>	<p>Tde2 Label = “ ” Link = shows “pandesal” word</p> <p>de2 Label = “●” Link = shows Pandesal photograph</p> <p>Tde3 Label = “ ” Link = shows “balde” word</p> <p>de3 Label = “●” Link = shows Balde photograph</p>
<p>Reference Number = 3.2.1.3</p> <p>Pantig di</p>	<p>Content = “di”</p>	<p>Photograph</p> <p>Dila Description = tight shot of a tongue Link = dila voice over</p> <p>Kandila Description = tight shot of a lit candle Link = kandila voice over</p> <p>Sindi Description = tight shot of a lit lighter</p>	<p>Voice over di Gender = female Level = adult Script = “di”</p> <p>Dila Gender = female Level = adult Script = “dila”</p> <p>Kandila Gender = female Level = adult Script = “kandila”</p> <p>Sindi Gender = female Level = adult</p>	<p>Tdi1 Label = “ ” Link = shows “dila” word</p> <p>di1 Label = “●” Link = shows Dila photograph</p> <p>Tdi2 Label = “ ” Link = shows “kandila” word</p> <p>di2 Label = “●” Link = shows Kandila photograph</p> <p>Tdi3 Label = “ ” Link = shows “sindi” word</p>

		Link = sindi voice over	Script = “sindi”	di3 Label = “●” Link = shows Sindi photograph
Reference Number = 3.2.1.3 Pantig do	Content = “do”	Photograph Standard photo Description = gray scale sound Standard photo Description = gray scale sound Sarado Description = a picture comparing open and closed door Link = sarado voice over	Voice over do Gender = female Level = adult Script = “do” Sarado Gender = female Level = adult Script = “sarado”	do1 Label = “●” Link = disabled do2 Label = “●” Link = disabled Tdo3 Label = “ ☐ ” Link = shows “sarado” word do3 Label = “●” Link = shows sarado photograph
Reference Number = 3.2.1.3 Pantig du	Content = “du”	Photograph Dugo Description = a picture of a blood Link = dugo voice over Madulas Description = photo of a “caution	Voice over du Gender = female Level = adult Script = “du” Dugo Gender = female Level = adult Script = “dugo” Madulas Gender = female	Tdu1 Label = “ ☐ ” Link = shows “dugo” word du1 Label = “●” Link = shows Dugo photograph Tdu2 Label = “ ☐ ”

		<p>wet floor” yellow cone on a slippery floor Link = madulas voice over</p> <p>Standard photo Description = gray scale sound</p>	<p>Level = adult Script = “madulas”</p>	<p>Link = shows “madulas” word</p> <p>du2 Label = “●” Link = shows Madulas photograph</p> <p>du3 Label = “●” Link = disabled</p>
				<p>*Standard buttons below for 2-titikPantig (Katinig-Patinig) Lesson</p> <p>da Label = “da” Link = Goes to “3.2.1.3, da” Rollover Animation = change color</p> <p>de Label = “de” Link = Goes to “3.2.1.3, de” Rollover Animation = change color</p> <p>di Label = “di” Link = Goes to “3.2.1.3, di” Rollover Animation = change color</p> <p>do Label = “do” Link = Goes to “3.2.1.3, do” Rollover Animation = change color</p> <p>du Label = “du” Link = Goes to “3.2.1.3, du” Rollover Animation = change color</p>

				<p>Home Label = Link = Goes to “1.0” Rollover Animation = glow</p> <p>Topic Menu Label = Link = 3.0 Rollover Animation = change color</p> <p>Dictionary Label = Link = Goes to “5.0” Rollover Animation = button glow</p> <p>Next Label = “ ” Link = 3.2.1.4 Rollover Animation = change color</p> <p>Previous Label = “ ” Link = 3.2.1.2 Rollover Animation = none</p> <p>*bullet buttons for photos: ○ white – current selected bullet ● dark brown – with content ● gray – no content</p>
--	--	--	--	--

<p>Reference Number = 3.2.1.4</p> <p>Pantig ga</p>	<p>Content</p> <p>“ga”</p>	<p>Photograph</p> <p>Gabi Description = a night picture Link = gabi voice over</p> <p>Sigarilyo Description = a picture of a cigarette Link = sigarilyo voice over</p> <p>Umaga Description = a morning picture Link = umaga voice over</p>	<p>Voice over</p> <p>ga Gender = female Level = adult Script = “ga”</p> <p>Gabi Gender = female Level = adult Script = “gabi”</p> <p>Sigarilyo Gender = female Level = adult Script = “sigarilyo”</p> <p>Umaga Gender = female Level = adult Script = “umaga”</p>	<p>Tga1 Label = “ ” Link = shows “gabi” word</p> <p>ga1 Label = “●” Link = shows Gabi photograph</p> <p>Tga2 Label = “ ” Link = shows “sigarilyo” word</p> <p>ga2 Label = “●” Link = shows Sigarilyo photograph</p> <p>Tga3 Label = “ ” Link = shows “umaga” word</p> <p>ga3 Label = “●” Link = shows Umaga photograph</p>
<p>Reference Number = 3.2.1.4</p> <p>Pantig ge</p>	<p>Content</p> <p>“ge”</p>	<p>Photograph</p> <p>Standard photo Description = gray scale sound</p>	<p>Voice over</p> <p>ge Gender = female Level = adult Script = “ge”</p>	<p>ge1 Label = “●” Link = disabled</p>

		<p>Standard photo Description = gray scale sound</p> <p>Tiangge Description = a picture of a small store Link = tiangge voice over</p>	<p>Tiangge Gender = female Level = adult Script = “tiangge”</p>	<p>ge2 Label = “●” Link = disabled</p> <p>Tge3 Label = “□” Link = shows “tiangge” word</p> <p>ge3 Label = “●” Link = shows Tiangge photograph</p>
<p>Reference Number = 3.2.1.4</p> <p>Pantig gi</p>	<p>Content</p> <p>“gi”</p>	<p>Photograph</p> <p>Gitara Description = a picture of a guitar Link = gitara voice over</p> <p>Agila Description = photo of an eagle Link = gitara voice over</p> <p>Standard photo Description = gray scale sound</p>	<p>Voice over</p> <p>gi Gender = female Level = adult Script = “gi”</p> <p>Gitara Gender = female Level = adult Script = “gitara”</p> <p>Agila Gender = female Level = adult Script = “agila”</p>	<p>Tgi1 Label = “□” Link = shows “gitara” word</p> <p>gil Label = “●” Link = shows Gitara photograph</p> <p>Tgi2 Label = “□” Link = shows “agila” word</p> <p>gi2 Label = “●” Link = shows Agila photograph</p> <p>gi3 Label = “●” Link = disabled</p>

Reference Number = 3.2.1.4 Pantig go	Content “go”	Photograph Goma Description = photo of colored rubber bands Link = goma voice over Negosyante Description = a picture of a businessman Link = negosyante voice over Dugo Description = a picture of a blood Link = dugo voice over	Voice over go Gender = female Level = adult Script = “go” Goma Gender = female Level = adult Script = “goma” Negosyante Gender = female Level = adult Script = “negosyante” Dugo Gender = female Level = adult Script = “dugo”	Tgo1 Label = “ ☐ ” Link = shows “goma” word go1 Label = “●” Link = shows Goma photograph Tgo2 Label = “ ☐ ” Link = shows “negosyante” word go2 Label = “●” Link = shows Negosyante photograph Tgo3 Label = “ ☐ ” Link = shows “dugo” word go3 Label = “●” Link = shows Dugo photograph
Reference Number = 3.2.1.4 Pantig gu	Content “gu”	Photograph Guro Description = photo of a teacher during class Link = guro voice over	Voice over gu Gender = female Level = adult Script = “gu” Guro Gender = female Level = adult Script = “guro”	Tgu1 Label = “ ☐ ” Link = shows “guro” word

		<p>Standard photo Description = gray scale sound</p> <p>Standard photo Description = gray scale sound</p>	<p>gu1 Label = “●” Link = shows Guro photograph</p> <p>gu2 Label = “●” Link = disabled</p> <p>gu3 Label = “●” Link = disabled</p>
			<p>*Standard buttons below for 2- titikPantig (Katinig-Patinig) Lesson</p> <p>ga Label = “ga” Link = Goes to “3.2.1.4, ga” Rollover Animation = change color</p> <p>ge Label = “ge” Link = Goes to “3.2.1.4, ge” Rollover Animation = change color</p> <p>gi Label = “gi” Link = Goes to “3.2.1.4, gi” Rollover Animation = change color</p> <p>go Label = “go” Link = Goes to “3.2.1.4, go” Rollover Animation = change color</p> <p>gu Label = “gu” Link = Goes to “3.2.1.4, gu” Rollover Animation = change color</p>

				<p>Home Label = Link = Goes to “1.0” Rollover Animation = glow</p> <p>Topic Menu Label = Link = 3.0 Rollover Animation = change color</p> <p>Dictionary Label = Link = Goes to “5.0” Rollover Animation = button glow</p> <p>Next Label = “➡” Link = 3.2.1.5 Rollover Animation = change color</p> <p>Previous Label = “⬅” Link = 3.2.1.3 Rollover Animation = none</p> <p>*bullet buttons for photos: ○ white – current selected bullet ● dark brown – with content ● gray – no content</p>
--	--	--	--	--

<p>Reference Number = 3.2.1.5</p> <p>Pantig ha</p>	<p>Content</p> <p>“ha”</p>	<p>Photograph</p> <p>Halaman Description = photo of various plants Link = halaman voice over</p> <p>Mahaba Description = a picture of something long Link = mahaba voice over</p> <p>Baraha Description = scattered playing cards Link = baraha voice over</p>	<p>Voice over</p> <p>ha Gender = female Level = adult Script = “ha”</p> <p>Halaman Gender = female Level = adult Script = “halaman”</p> <p>Mahaba Gender = female Level = adult Script = “mahaba”</p> <p>Baraha Gender = female Level = adult Script = “baraha”</p>	<p>Tha1 Label = “ ” Link = shows “halaman” word</p> <p>ha1 Label = “●” Link = shows Halaman photograph</p> <p>Tha2 Label = “ ” Link = shows “mahaba” word</p> <p>ha2 Label = “●” Link = shows Mahaba photograph</p> <p>Tha3 Label = “ ” Link = shows “baraha” word</p> <p>ha3 Label = “●” Link = shows Barah photograph</p>
<p>Reference Number = 3.2.1.5</p> <p>Pantig he</p>	<p>Content</p> <p>“he”</p>	<p>Photograph</p> <p>Hepe Description = a picture of a chief police Link = hepe voice over</p>	<p>Voice over</p> <p>he Gender = female Level = adult Script = “he”</p> <p>Hepe Gender = female Level = adult Script = “hepe”</p>	<p>The1 Label = “ ” Link = shows “hepe” word</p>

		<p>Kahera Description = a picture of a cashier Link = kahera voice over</p> <p>Garahe Description = a morning garage Link = garahe voice over</p>	<p>Kahera Gender = female Level = adult Script = “kahera”</p> <p>Garahe Gender = female Level = adult Script = “garahe”</p>	<p>he1 Label = “●” Link = shows Hepe photograph</p> <p>The2 Label = “□” Link = shows “kahera” word</p> <p>he2 Label = “●” Link = shows Kahera photograph</p> <p>The3 Label = “□” Link = shows “garahe” word</p> <p>he3 Label = “●” Link = shows Garahe photograph</p>
<p>Reference Number = 3.2.1.5</p> <p>Pantig hi</p>	<p>Content</p> <p>“hi”</p>	<p>Photograph</p> <p>Higa Description = a picture of a person lying down on the grass Link = higa voice over</p> <p>Mahirap Description = a photo of a slum area Link = mahirap voice over</p>	<p>Voice over</p> <p>hi Gender = female Level = adult Script = “hi”</p> <p>Higa Gender = female Level = adult Script = “higa”</p> <p>Mahirap Gender = female Level = adult Script = “mahirap”</p>	<p>Thi1 Label = “□” Link = shows “higa” word</p> <p>hi1 Label = “●” Link = shows Higa photograph</p> <p>Thi2 Label = “□” Link = shows “mahirap” word</p> <p>hi2 Label = “●” Link = shows Mahirap photograph</p>

		<p>Mananahi Description = old woman sewing a cloth Link = mananahi voice over</p>	<p>Mananahi Gender = female Level = adult Script = “mananahi”</p>	<p>Thi3 Label = “ ” Link = shows “mananahi” word</p> <p>hi3 Label = “●” Link = shows Mananahi photograph</p>
<p>Reference Number = 3.2.1.5 Pantig ho</p>	<p>Content “ho”</p>	<p>Photograph</p> <p>Holen Description = picture of marble marbles Link = holén voice over</p> <p>Standard photo Description = gray scale sound</p> <p>Trabaho Description = a picture of a person working Link = trabaho voice over</p>	<p>Voice over</p> <p>ho Gender = female Level = adult Script = “ho”</p> <p>Holen Gender = female Level = adult Script = “holén”</p> <p>Trabaho Gender = female Level = adult Script = “trabaho”</p>	<p>Tho1 Label = “ ” Link = shows “holén” word</p> <p>ho1 Label = “●” Link = shows Holén photograph</p> <p>ho2 Label = “●” Link = disabled</p> <p>Tho3 Label = “ ” Link = shows “trabaho” word</p> <p>ho3 Label = “●” Link = shows Trabaho photograph</p>
<p>Reference Number = 3.2.1.5 Pantig hu</p>	<p>Content “hu”</p>	<p>Photograph</p>	<p>Voice over</p> <p>hu Gender = female Level = adult Script = “hu”</p>

		<p>Hulog Description = a picture of a ball drop Link = hulog voice over</p> <p>Standard photo Description = gray scale sound</p> <p>Standard photo Description = gray scale sound</p>	<p>Hulog Gender = female Level = adult Script = “hulog”</p>	<p>Thu1 Label = “ ” Link = shows “hulog” word</p> <p>hu1 Label = “●” Link = shows Hulog photograph hu2 Label = “●” Link = disabled</p> <p>hu3 Label = “●” Link = disabled</p>
				<p>*Standard buttons below for 2-titikPantig (Katinig-Patinig) Lesson</p> <p>ha Label = “ha” Link = Goes to “3.2.1.5, ha” Rollover Animation = change color</p> <p>he Label = “he” Link = Goes to “3.2.1.5, he” Rollover Animation = change color</p> <p>hi Label = “hi” Link = Goes to “3.2.1.5, hi” Rollover Animation = change color</p> <p>ho Label = “ho” Link = Goes to “3.2.1.5, ho” Rollover Animation = change color</p>

				<p>hu Label = “hu” Link = Goes to “3.2.1.5, hu” Rollover Animation = change color</p> <p>Home Label = “ <p>De La Salle University</p> </p>
--	--	--	--	---

<p>Reference Number = 3.2.1.6</p> <p>Pantig la</p>	<p>Content</p> <p>“la”</p>	<p>Photograph</p> <p>Labi Description = tight shot of a person’s lips Link = labi voice over</p> <p>Salamin Description = a picture of a mirror girl using a mirror Link = salamin voice over</p> <p>Bala Description = a picture of bullet Link = bala voice over</p>	<p>Voice over</p> <p>la Gender = female Level = adult Script = “la”</p> <p>Labi Gender = female Level = adult Script = “labi”</p> <p>Salamin Gender = female Level = adult Script = “salamin”</p> <p>Bala Gender = female Level = adult Script = “bala”</p>	<p>Tla1 Label = “ ” Link = shows “labi” word</p> <p>la1 Label = “●” Link = shows Labi photograph</p> <p>Tla2 Label = “ ” Link = shows “salamin” word</p> <p>la2 Label = “●” Link = shows Salamin photograph</p> <p>Tla3 Label = “ ” Link = shows “labi” word</p> <p>la3 Label = “●” Link = shows Bala photograph</p>
<p>Reference Number = 3.2.1.6</p> <p>Pantig le</p>	<p>Content</p> <p>“le”</p>	<p>Photograph</p> <p>Standard photo Description = gray scale sound</p>	<p>Voice over</p> <p>le Gender = female Level = adult Script = “le”</p>	<p>le1 Label = “●” Link = disabled</p>

		<p>Elepante Description = full body shot of an elephant Link = elepante voice over</p> <p>Standard photo Description = gray scale sound</p>	<p>Elepante Gender = female Level = adult Script = “elepante”</p>	<p>Tle2 Label = “ ” Link = shows “elepante” word</p> <p>le2 Label = “●” Link = shows Elepante photograph</p> <p>le3 Label = “●” Link = disabled</p>
<p>Reference Number = 3.2.1.6</p> <p>Pantig li</p>	<p>Content “li”</p>	<p>Photograph</p> <p>Ligo Description = a picture of a person guy taking a shower Link = ligo voice over</p> <p>Daliri Description = a picture of a person’s finger Link = daliri voice over</p> <p>Gusali Description = a picture of a building Link = gusali voice over</p>	<p>Voice over</p> <p>li Gender = female Level = adult Script = “li”</p> <p>Ligo Gender = female Level = adult Script = “ligo”</p> <p>Daliri Gender = female Level = adult Script = “daliri”</p> <p>Gusali Gender = female Level = adult Script = “gusali”</p>	<p>Thi1 Label = “ ” Link = shows “ligo” word</p> <p>li1 Label = “●” Link = shows Ligo photograph</p> <p>Thi2 Label = “ ” Link = shows “daliri” word</p> <p>li2 Label = “●” Link = shows Daliri photograph</p> <p>Thi3 Label = “ ” Link = shows “gusali” word</p> <p>li3 Label = “●” Link = shows Gusali photograph</p>

Reference Number = 3.2.1.6 Pantig lo	Content “lo”	Photograph Lobo Description = a picture of a balloon Link = lobo voice over Standard photo Description = gray scale sound Ulo Description = a picture of the head of a person Link = ulo voice over	Voice over lo Gender = female Level = adult Script = “lo” Lobo Gender = female Level = adult Script = “lobo” Ulo Gender = female Level = adult Script = “ulo”	Tlo1 Label = “ ” Link = shows “lobo” word lo1 Label = “●” Link = shows Lobophotograph lo2 Label = “●” Link = shows Tulog photograph Tlo3 Label = “ ” Link = shows “ulo” word lo3 Label = “●” Link = shows Ulo photograph
Reference Number = 3.2.1.6 Pantig lu	Content “lu”	Photograph Luha Description = a picture of a person crying with tears Link = luha voice over Standard photo Description = gray scale sound	Voice over lu Gender = female Level = adult Script = “lu” Luha Gender = female Level = adult Script = “luha”	Tlu1 Label = “ ” Link = shows “luha” word lu1 Label = “●” Link = shows Luha photograph lu2 Label = “●” Link = disabled

		Standard photo Description = gray scale sound		lu3 Label = “●” Link = disabled
				<p>*Standard buttons below for 2-titikPantig (Katinig-Patinig) Lesson</p> <p>la Label = “la” Link = Goes to “3.2.1.6, la” Rollover Animation = change color</p> <p>le Label = “le” Link = Goes to “3.2.1.6, le” Rollover Animation = change color</p> <p>li Label = “li” Link = Goes to “3.2.1.6, li” Rollover Animation = change color</p> <p>lo Label = “lo” Link = Goes to “3.2.1.6, lo” Rollover Animation = change color</p> <p>lu Label = “lu” Link = Goes to “3.2.1.4, lu” Rollover Animation = change color</p> <p>Home Label = Link = Goes to “1.0” Rollover Animation = glow</p>

				<p>Topic Menu Label = ” Link = 3.0 Rollover Animation = change color</p> <p>Dictionary Label = ” Link = Goes to “5.0” Rollover Animation = button glow</p> <p>Next Label = “ ” Link = 3.2.1.7 Rollover Animation = change color</p> <p>Previous Label = “ ” Link = 3.2.1.5 Rollover Animation = none</p> <p>*bullet buttons for photos: ○ white – current selected bullet ● dark brown – with content ● gray – no content</p>
--	--	--	--	---

<p>Reference Number = 3.2.1.7</p> <p>Pantig ma</p>	<p>Content</p> <p>“ma”</p>	<p>Photograph</p> <p>Masaya Description = a picture of a person smiling/laughing Link = masaya voice over</p> <p>Kamatis Description = a picture of a tomato Link = kamatis voice over</p> <p>Kama Description = a picture of a bed Link = kama voice over</p>	<p>Voice over</p> <p>ma Gender = female Level = adult Script = “ma”</p> <p>Masaya Gender = female Level = adult Script = “masaya”</p> <p>Kamatis Gender = female Level = adult Script = “kamatis”</p> <p>Kama Gender = female Level = adult Script = “kama”</p>	<p>Tma1 Label = “ ” Link = shows “masaya” word</p> <p>ma1 Label = “●” Link = shows Masaya photograph</p> <p>Tma2 Label = “ ” Link = shows “kamatis” word</p> <p>ma2 Label = “●” Link = shows Kamatis photograph</p> <p>Tma3 Label = “ ” Link = shows “kama” word</p> <p>ma3 Label = “●” Link = shows Kama photograph</p>
<p>Reference Number = 3.2.1.7</p> <p>Pantig me</p>	<p>Content</p> <p>“me”</p>	<p>Photograph</p> <p>Mesa Description = a picture of a table Link = mesa voice over</p>	<p>Voice over</p> <p>me Gender = female Level = adult Script = “me”</p> <p>Mesa Gender = female Level = adult Script = “mesa”</p>	<p>Tme1 Label = “ ” Link = shows “mesa” word</p>

		<p>Standard photo Description = gray scale sound</p> <p>Standard photo Description = gray scale sound</p>		<p>me1 Label = “●” Link = shows Mesa photograph</p> <p>me2 Label = “●” Link = disabled</p> <p>me3 Label = “●” Link = disabled</p>
<p>Reference Number = 3.2.1.7</p> <p>Pantig mi</p>	<p>Content</p> <p>“mi”</p>	<p>Photograph</p> <p>Standard photo Description = gray scale sound</p> <p>Standard photo Description = gray scale sound</p> <p>Dumi Description = a photo of a hand with dirty fingers Link = dumi voice over</p>	<p>Voice over</p> <p>mi Gender = female Level = adult Script = “mi”</p> <p>Dumi Gender = female Level = adult Script = “dumi”</p>	<p>mi1 Label = “●” Link = disabled</p> <p>mi2 Label = “●” Link = disabled</p> <p>Tmi3 Label = “□” Link = shows “dumi” word</p> <p>mi3 Label = “●” Link = shows Dumi photograph</p>
<p>Reference Number = 3.2.1.7</p> <p>Pantig mo</p>	<p>Content</p> <p>“mo”</p>	<p>Photograph</p>	<p>Voice over</p> <p>mo Gender = female Level = adult Script = “mo”</p>

		<p>Modelo Description = a picture of a girl ramp model Link = modelo voice over</p> <p>Standard photo Description = gray scale sound</p> <p>Damo Description = a picture of grasses Link = damo voice over</p>	<p>Modelo Gender = female Level = adult Script = “modelo”</p> <p>Damo Gender = female Level = adult Script = “damo”</p>	<p>Tmo1 Label = “☐” Link = shows “modelo” word</p> <p>mo1 Label = “●” Link = shows Modelo photograph</p> <p>mo2 Label = “●” Link = disabled</p> <p>Tmo3 Label = “☐” Link = shows “damo” word</p> <p>mo3 Label = “●” Link = shows Damo photograph</p>
<p>Reference Number = 3.2.1.7 Pantig mu</p>	<p>Content “mu”</p>	<p>Photograph</p> <p>Standard photo Description = gray scale sound</p> <p>Almusal Description = a picture of a breakfast set in a table (fried rice, tuyo, coffee) Link = almusal voice over</p> <p>Standard photo Description = gray scale sound</p>	<p>Voice over</p> <p>mu Gender = female Level = adult Script = “mu”</p> <p>Almusal Gender = female Level = adult Script = “almusal”</p>	<p>mu1 Label = “●” Link = disabled</p> <p>Tmu2 Label = “☐” Link = shows “almusal” word</p> <p>mu2 Label = “●” Link = shows Almusal photograph</p> <p>mu3 Label = “●” Link = disabled</p>

				<p>*Standard buttons below for 2-titikPantig (Katinig-Patinig) Lesson</p> <p>ma Label = “ma” Link = Goes to “3.2.1.7, ma” Rollover Animation = change color</p> <p>me Label = “me” Link = Goes to “3.2.1.7, me” Rollover Animation = change color</p> <p>mi Label = “mi” Link = Goes to “3.2.1.7, mi” Rollover Animation = change color</p> <p>mo Label = “mo” Link = Goes to “3.2.1.7, mo” Rollover Animation = change color</p> <p>mu Label = “mu” Link = Goes to “3.2.1.7, mu” Rollover Animation = change color</p> <p>Home Label = “ ” Link = Goes to “1.0” Rollover Animation = glow</p> <p>Topic Menu Label = “ ” Link = 3.0 Rollover Animation = change</p>
--	--	--	--	--

				<p>color</p> <p>Dictionary Label = “ ” Link = Goes to “5.0” Rollover Animation = button glow</p> <p>Next Label = “ ” Link = 3.2.1.8 Rollover Animation = change color</p> <p>Previous Label = “ ” Link = 3.2.1.6 Rollover Animation = none</p> <p>*bullet buttons for photos: white – current selected bullet dark brown – with content gray – no content</p>
<p>Reference Number = 3.2.1.8</p> <p>Pantig na</p>	<p>Content</p> <p>“na”</p>	<p>Photograph</p> <p>Nanay Description = picture of a mother with child Link = nanay voice over</p> <p>Mananahi Description = a picture of an old woman sewing Link = mananahi voice over</p>	<p>Voice over</p> <p>na Gender = female Level = adult Script = “na”</p> <p>Nanay Gender = female Level = adult Script = “nanay”</p> <p>Mananahi Gender = female Level = adult Script = “mananahi”</p>	<p>Tna1 Label = “ ” Link = shows “nanay” word</p> <p>na1 Label = “ ” Link = shows Nanay photograph</p> <p>Tna2 Label = “ ” Link = shows “mananahi” word</p>

		<p>Gitna Description = photo depicting something in the middle Link = gitna voice over</p>	<p>Gitna Gender = female Level = adult Script = “gitna”</p>	<p>na2 Label = “●” Link = shows Mananahi photograph</p> <p>Tna3 Label = “□” Link = shows “gitna” word</p> <p>na3 Label = “●” Link = shows Gitna photograph</p>
<p>Reference Number = 3.2.1.8</p> <p>Pantig ne</p>	<p>Content</p> <p>“ne”</p>	<p>Photograph</p> <p>Negosyante Description = a picture of a businessman Link = negosyante voice over</p> <p>Hardinero Description = a picture of a gardener Link = hardinero voice over</p> <p>Standard photo Description = gray scale sound</p>	<p>Voice over</p> <p>ne Gender = female Level = adult Script = “ne”</p> <p>Negosyante Gender = female Level = adult Script = “negosyante”</p> <p>Hardinero Gender = female Level = adult Script = “hardinero”</p>	<p>Tne1 Label = “□” Link = shows “negosyante” word</p> <p>ne1 Label = “●” Link = shows Negosyante photograph</p> <p>Tne2 Label = “□” Link = shows “hardinero” word</p> <p>ne2 Label = “●” Link = shows Hardinero photograph</p> <p>ne3 Label = “●” Link = disabled</p>

Reference Number = 3.2.1.8 Pantig ni	Content “ni”	Photograph Niyog Description = picture of a grated coconut Link = niyog voice over Manika Description = a picture of a doll Link = manika voice over Mani Description = a bowl of peanuts Link = mani voice over	Voice over n Gender = female Level = adult Script = “ne” Niyog Gender = female Level = adult Script = “niyog” Manika Gender = female Level = adult Script = “manika” Mani Gender = female Level = adult Script = “mani”	Tni1 Label = “ ” Link = shows “niyog” word ni1 Label = “●” Link = shows Niyog photograph Tni2 Label = “ ” Link = shows “manika” word ni2 Label = “●” Link = shows Manika photograph Tni3 Label = “ ” Link = shows “mani” word ni3 Label = “●” Link = shows Mani photograph
Reference Number = 3.2.1.8 Pantig no	Content “no”	Photograph Noo Description = a picture of a person’s forehead Link = noo voice over	Voice over no Gender = female Level = adult Script = “no” Noo Gender = female Level = adult Script = “noo”	Tno1 Label = “ ” Link = shows “noo” word no1 Label = “●”

		<p>Standard photo Description = gray scale sound</p> <p>Telepono Description = a picture of a telephone Link = telepono voice over</p>	<p>Telepono Gender = female Level = adult Script = “telepono”</p>	<p>Link = shows Noo photograph</p> <p>no2 Label = “●” Link = disabled</p> <p>Tno3 Label = “□” Link = shows “telepono” word</p> <p>no3 Label = “●” Link = shows Telepono photograph</p>
<p>Reference Number = 3.2.1.8</p> <p>Pantig nu</p>	<p>Content</p> <p>“nu”</p>	<p>Photograph</p> <p>Nunal Description = tight shot of a mole Link = nunal voice over</p> <p>Sinulid Description = close-up shot of a thread Link = sinulid voice over</p> <p>Standard photo Description = gray scale sound</p>	<p>Voice over</p> <p>nu Gender = female Level = adult Script = “nu”</p>	<p>Tnu Label = “□” Link = shows “nunal” word</p> <p>nu1 Label = “●” Link = shows Nunal photograph</p> <p>Tnu Label = “□” Link = shows “sinulid” word</p> <p>nu2 Label = “●” Link = shows Sinulid photograph</p> <p>nu3 Label = “●” Link = disabled</p>

				<p>*Standard buttons below for 2-titikPantig (Katinig-Patinig) Lesson</p> <p>na Label = “na” Link = Goes to “3.2.1.8, na” Rollover Animation = change color</p> <p>ne Label = “ne” Link = Goes to “3.2.1.8, ne” Rollover Animation = change color</p> <p>ni Label = “ni” Link = Goes to “3.2.1.8, ni” Rollover Animation = change color</p> <p>no Label = “no” Link = Goes to “3.2.1.8, no” Rollover Animation = change color</p> <p>nu Label = “nu” Link = Goes to “3.2.1.8, nu” Rollover Animation = change color</p> <p>Home Label = Link = Goes to “1.0” Rollover Animation = glow</p> <p>Topic Menu Label = Link = 3.0 Rollover Animation = change</p>
--	--	--	--	---

De La Salle University

				<p>color</p> <p>Dictionary Label = "■" Link = Goes to "5.0" Rollover Animation = button glow</p> <p>Next Label = "➡" Link = 3.2.1.9 Rollover Animation = change color</p> <p>Previous Label = "⬅" Link = 3.2.1.7 Rollover Animation = none</p> <p>*bullet buttons for photos: ○ white – current selected bullet ● dark brown – with content ● gray – no content</p>
<p>Reference Number = 3.2.1.9</p> <p>Pantig nga</p>	<p>Content</p> <p>"nga"</p>	<p>Photograph</p> <p>Ngawa Description = a picture of a child crying hard Link = ngawa voice over</p> <p>Standard photo Description = gray scale sound</p>	<p>Voice over</p> <p>nga Gender = female Level = adult Script = "nga"</p> <p>Ngawa Gender = female Level = adult Script = "ngawa"</p>	<p>Tnga1 Label = "□" Link = shows "ngawa" word</p> <p>nga1 Label = "●" Link = shows Ngawa photograph</p> <p>nga2 Label = "●" Link = disabled</p>

		Tainga Description = a picture of a person's ear Link = tainga voice over	Tainga Gender = female Level = adult Script = "tainga"	Tnga3 Label = "□" Link = shows "tainga" word nga3 Label = "●" Link = shows Tainga photograph
Reference Number = 3.2.1.9 Pantig nge	Content "nge"	Photograph Standard photo Description = gray scale sound Standard photo Description = gray scale sound Standard photo Description = gray scale sound	Voice over nge Gender = female Level = adult Script = "nge"	nge1 Label = "●" Link = disabled nge2 Label = "●" Link = disabled nge3 Label = "●" Link = disabled
Reference Number = 3.2.1.9 Pantig ngi	Content "ngi"	Photograph Ngipin Description = a picture of a person's teeth Link = ngipin voice over Mangingisda Description = a picture of a fisherman Link = mangingisda voice over	Voice over ngi Gender = female Level = adult Script = "ngi" Ngipin Gender = female Level = adult Script = "ngipin" Mangingisda Gender = female Level = adult Script = "mangingisda"	Tngi1 Label = "□" Link = shows "ngipin" word ngi1 Label = "●" Link = shows Ngipin photograph Tngi2 Label = "□" Link = shows "mangingisda" word

		Standard photo Description = gray scale sound		ngi2 Label = “●” Link = shows Mangingisda photograph ngi3 Label = “●” Link = disabled
Reference Number = 3.2.1.9 Pantig ngo	Content “ngo”	Photograph Standard photo Description = gray scale sound Standard photo Description = gray scale sound Alimango Description = a picture of a crab Link = alimango voice over	Voice over ngo Gender = female Level = adult Script = “ngo” Alimango Gender = female Level = adult Script = “alimango”	ngo1 Label = “●” Link = disabled ngo2 Label = “●” Link = disabled Tngo3 Label = “ ☐ ” Link = shows “alimango” word ngo3 Label = “●” Link = shows Alimango photograph
Reference Number = 3.2.1.9 Pantig ngu	Content “ngu”	Photograph Nguso Description = a picture of the lower lip Link = nguso voice over	Voice over ngu Gender = female Level = adult Script = “ngu” Nguso Gender = female Level = adult Script = “nguso”	Tngu1 Label = “ ☐ ” Link = shows “nguso” word

		Standard photo Description = gray scale sound		ngu1 Label = “●” Link = shows Nguso photograph ngu2 Label = “●” Link = disabled ngu3 Label = “●” Link = disabled
		Standard photo Description = gray scale sound		*Standard buttons below for 2- titikPantig (Katinig-Patinig) Lesson nga Label = “nga” Link = Goes to “3.2.1.9, nga” Rollover Animation = change color nge Label = “nge” Link = Goes to “3.2.1.9, nge” Rollover Animation = change color ngi Label = “ngi” Link = Goes to “3.2.1.9, ngi” Rollover Animation = change color ngo Label = “ngo” Link = Goes to “3.2.1.9, ngo” Rollover Animation = change color ngu Label = “gu” Link = Goes to “3.2.1.9, ngu” Rollover Animation = change color

				<p>Home Label = Link = Goes to “1.0” Rollover Animation = glow</p> <p>Topic Menu Label = Link = 3.0 Rollover Animation = change color</p> <p>Dictionary Label = Link = Goes to “5.0” Rollover Animation = button glow</p> <p>Next Label = “➡” Link = 3.2.1.10 Rollover Animation = change color</p> <p>Previous Label = “⬅” Link = 3.2.1.8 Rollover Animation = none</p> <p>*bullet buttons for photos: ○ white – current selected bullet ● dark brown – with content ● gray – no content</p>
--	--	--	--	---

Reference Number = 3.2.1.10 Pantig pa	Content “pa”	Photograph Paa Description = a picture of a person’s feet Link = paa voice over Sapatos Description = a pair of rubber shoes Link = sapatos voice over Apa Description = a picture of a cone Link = apa voice over	Voice over pa Gender = female Level = adult Script = “pa” Paa Gender = female Level = adult Script = “paa” Sapatos Gender = female Level = adult Script = “sapatos” Apa Gender = female Level = adult Script = “apa”	 Tpa1 Label = “ ” Link = shows “paa” word pa1 Label = “●” Link = shows Paa photograph Tpa2 Label = “ ” Link = shows “sapatos” word pa2 Label = “●” Link = shows Sapatos photograph Tpa3 Label = “ ” Link = shows “apa” word pa3 Label = “●” Link = shows Apa photograph
Reference Number = 3.2.1.10 Pantig pe	Content “pe”	Photograph Pera Description = Pesos in different denominations Link = pera voice over	Voice over pe Gender = female Level = adult Script = “pe” Pera Gender = female Level = adult Script = “pera”	 Tpe1 Label = “ ” Link = shows “pera” word

		<p>Propesor Description = a picture of a professor Link = propesor voice over</p> <p>Kape Description = a picture of a coffee Link = kape voice over</p>	<p>Propesor Gender = female Level = adult Script = “propesor”</p> <p>Kape Gender = female Level = adult Script = “kape”</p>	<p>pe1 Label = “●” Link = shows Pera photograph</p> <p>Tpe2 Label = “□” Link = shows “propesor” word</p> <p>pe2 Label = “●” Link = shows Propesor photograph</p> <p>Tpe3 Label = “□” Link = shows “kape” word</p> <p>pe3 Label = “●” Link = shows Kape photograph</p>
<p>Reference Number = 3.2.1.10</p> <p>Pantig pi</p>	<p>Content</p> <p>“pi”</p>	<p>Photograph</p> <p>Piso Description = close-up shot of a one peso coin Link = piso voice over</p> <p>Ospital Description = a picture of a hospital Link = ospital voice over</p>	<p>Voice over</p> <p>pi Gender = female Level = adult Script = “pi”</p> <p>Piso Gender = female Level = adult Script = “piso”</p> <p>Ospital Gender = female Level = adult Script = “ospital”</p>	<p>Tpi1 Label = “□” Link = shows “piso” word</p> <p>pi1 Label = “●” Link = shows Piso photograph</p> <p>Tpi2 Label = “□” Link = shows “ospital” word</p> <p>pi2 Label = “●” Link = shows Ospital photograph</p>

		Standard photo Description = gray scale sound		pi3 Label = “●” Link = disabled
Reference Number = 3.2.1.10 Pantig po	Content “po”	Photograph Posas Description = a picture of handcuffs Link = posas voice over Telepono Description = a picture of a telephone Link = telepono voice over Gripo Description = a picture of a faucet Link = gripo voice over	Voice over po Gender = female Level = adult Script = “po” Posas Gender = female Level = adult Script = “posas” Telepono Gender = female Level = adult Script = “telepono” Gripo Gender = female Level = adult Script = “gripo”	Tpo1 Label = “ ☐ ” Link = shows “posas” word po1 Label = “●” Link = shows Posas photograph Tpo2 Label = “ ☐ ” Link = shows “telepono” word po2 Label = “●” Link = shows Telepono photograph Tpo3 Label = “ ☐ ” Link = shows “gripo” word po3 Label = “●” Link = shows Gripo photograph
Reference Number = 3.2.1.10 Pantig pu	Content “pu”	Photograph	Voice over pu Gender = female Level = adult Script = “pu”

		<p>Pulis Description = a picture of a police Link = pulis voice over</p> <p>Maputi Description = a picture of a white clothing Link = maputi voice over</p> <p>Sampu Description = photo of hands both open Link = sampu voice over</p>	<p>Pulis Gender = female Level = adult Script = “pulis”</p> <p>Maputi Gender = female Level = adult Script = “maputi”</p> <p>Sampu Gender = female Level = adult Script = “sampu”</p>	<p>Tpu1 Label = “ ” Link = shows “pulis” word</p> <p>pu1 Label = “●” Link = shows Pulis photograph</p> <p>Tpu2 Label = “ ” Link = shows “maputi” word</p> <p>pu2 Label = “●” Link = shows Maputi photograph</p> <p>Tpu3 Label = “ ” Link = shows “sampu” word</p> <p>pu3 Label = “●” Link = shows Sampu photograph</p>
				<p>*Standard buttons below for 2-titikPantig (Katinig-Patinig) Lesson</p> <p>pa Label = “pa” Link = Goes to “3.2.1.10, pa” Rollover Animation = change color</p> <p>pe Label = “pe” Link = Goes to “3.2.1.10, pe” Rollover Animation = change color</p> <p>pi Label = “pi” Link = Goes to “3.2.1.10, pi” Rollover Animation = change</p>

				<p>color</p> <p>po Label = “po” Link = Goes to “3.2.1.10, po” Rollover Animation = change color</p> <p>pu Label = “pu” Link = Goes to “3.2.1.10, pu” Rollover Animation = change color</p> <p>Home Label = “ ” Link = Goes to “1.0” Rollover Animation = glow</p> <p>Topic Menu Label = “ ” Link = 3.0 Rollover Animation = change color</p> <p>Dictionary Label = “ ” Link = Goes to “5.0” Rollover Animation = button glow</p> <p>Next Label = “ ” Link = 3.2.1.11 Rollover Animation = change color</p> <p>Previous Label = “ ” Link = 3.2.1.9 Rollover Animation = none</p>
--	--	--	--	---

				*bullet buttons for photos: ○ white – current selected bullet ● dark brown – with content ● gray – no content
Reference Number = 3.2.1.11 Pantig ra	Content “ra”	Photograph Raketa Description = a picture of a badminton racket Link = raketa oice over Paaralan Description = a picture of a school Link = paaralan voice over Lampara Description = a picture of a lamp Link = lampara voice over	Voice over ra Gender = female Level = adult Script = “ra” Raketa Gender = female Level = adult Script = “raketa” Paaralan Gender = female Level = adult Script = “paaralan” Lampara Gender = female Level = adult Script = “lampara”	 Tra1 Label = “ ” Link = shows “ raketa ” word ra1 Label = “ ” Link = shows Raketa photograph Tra2 Label = “ ” Link = shows “ paaralan ” word ra2 Label = “ ” Link = shows Paaralan photograph Tra3 Label = “ ” Link = shows “ lampara ” word ra3 Label = “ ” Link = shows Lampara photograph

Reference Number = 3.2.1.11 Pantig re	Content “re”	Photograph Regalo Description = a picture of a wrapped present Link = regalo voice over Standard photo Description = gray scale sound Standard photo Description = gray scale sound	Voice over re Gender = female Level = adult Script = “re” Regalo Gender = female Level = adult Script = “regalo”	 Tre1 Label = “ ” Link = shows “regalo” word re1 Label = “●” Link = shows Regalo photograph re2 Label = “●” Link = disabled re3 Label = “●” Link = disabled
Reference Number = 3.2.1.11 Pantig ri	Content “ri”	Photograph Riles Description = a picture of a train railway Link = riles voice over Standard photo Description = gray scale sound	Voice over ri Gender = female Level = adult Script = “ri” Riles Gender = female Level = adult Script = “riles”	 Tri1 Label = “ ” Link = shows “riles” word ri1 Label = “●” Link = shows Riles photograph ri2 Label = “●” Link = disabled

		Pari Description = a picture of a priest Link = pari voice over	Pari Gender = female Level = adult Script = “pari”	Tra3 Label = “ ” Link = shows “pari” word ri3 Label = “●” Link = shows Pari photograph Rollover Animation = change color
Reference Number = 3.2.1.11 Pantig ro	Content “ro”	Photograph Rosas Description = a picture of red roses Link = rosas voice over Eroplano Description = a picture of a local airplane Link = eroplano voice over Laro Description = a picture of kids playing on the street Link = laro voice over	Voice over ro Gender = female Level = adult Script = “ro” Rosas Gender = female Level = adult Script = “rosas” Eroplano Gender = female Level = adult Script = “eroplano” Laro Gender = female Level = adult Script = “laro”	Tro1 Label = “ ” Link = shows “rosas” word ro1 Label = “●” Link = shows Rosas photograph Tro2 Label = “ ” Link = shows “eroplano” word ro2 Label = “●” Link = disabled Tro3 Label = “ ” Link = shows “laro” word ro3 Label = “●” Link = shows Laro photograph

Reference Number = 3.2.1.11 Pantig ru	Content “ru”	Photograph Ruler Description = a picture of a ruler Link = ruler voice over Standard photo Description = gray scale sound Standard photo Description = gray scale sound	Voice over ru Gender = female Level = adult Script = “ru” Ruler Gender = female Level = adult Script = “ruler”	Tru1 Label = “ ” Link = shows “ruler” word ru1 Label = “●” Link = shows Ruler photograph ru2 Label = “●” Link = disabled ru3 Label = “●” Link = disabled
				*Standard buttons below for 2-titikPantig (Katinig-Patinig) Lesson ra Label = “ra” Link = Goes to “3.2.1.11, ra” Rollover Animation = change color re Label = “re” Link = Goes to “3.2.1.11, re” Rollover Animation = change color ri Label = “ri” Link = Goes to “3.2.1.11, ri” Rollover Animation = change

				<p>color</p> <p>ro Label = “ro” Link = Goes to “3.2.1.11, ro” Rollover Animation = change color</p> <p>ru Label = “ru” Link = Goes to “3.2.1.11, ru” Rollover Animation = change color</p> <p>Home Label = Link = Goes to “1.0” Rollover Animation = glow</p> <p>Topic Menu Label = Link = 3.0 Rollover Animation = change color</p> <p>Dictionary Label = Link = Goes to “5.0” Rollover Animation = button glow</p> <p>Next Label = “➡” Link = 3.2.1.12 Rollover Animation = change color</p> <p>Previous Label = “⬅” Link = 3.2.1.10 Rollover Animation = none</p>
--	--	--	--	--

				*bullet buttons for photos: ○ white – current selected bullet ● dark brown – with content ● gray – no content
Reference Number = 3.2.1.12 Pantig sa	Content “sa”	Photograph Sapatos Description = a pair of rubber shoes Link = sapatos voice over Mansanas Description = a picture of an apple Link = mansanas voice over Isa Description = index finger pointed upward Link = isa voice over	Voice over sa Gender = female Level = adult Script = “sa” Sapatos Gender = female Level = adult Script = “sapatos” Mansanas Gender = female Level = adult Script = “mansanas” Isa Gender = female Level = adult Script = “isa”	 Tsa1 Label = “ ☐ ” Link = shows “sapatos” word sa1 Label = “●” Link = shows Sapatos photograph Tsa2 Label = “ ☐ ” Link = shows “mansanas” word sa2 Label = “●” Link = shows Mansanas photograph Rollover Animation = change color Tsa3 Label = “ ☐ ” Link = shows “isa” word sa3 Label = “●” Link = shows Isa photograph Rollover Animation = change color

<p>Reference Number = 3.2.1.12</p> <p>Pantig se</p>	<p>Content</p> <p>“se”</p>	<p>Photograph</p> <p>Semento Description = a picture of cement Link = semento voice over</p> <p>Standard photo Description = gray scale sound</p> <p>Klase Description = classroom scene with students Link = klase voice over</p>	<p>Voice over</p> <p>se Gender = female Level = adult Script = “se”</p> <p>Semento Gender = female Level = adult Script = “semento”</p> <p>Klase Gender = female Level = adult Script = “klase”</p>	<p>Tse1 Label = “ ” Link = shows “semento” word</p> <p>se1 Label = “●” Link = shows Eleksiyon photograph</p> <p>se2 Label = “●” Link = disabled</p> <p>Tse3 Label = “ ” Link = shows “klase” word</p> <p>se3 Label = “●” Link = shows Klase photograph Rollover Animation = change color</p>
<p>Reference Number = 3.2.1.12</p> <p>Pantig si</p>	<p>Content</p> <p>“si”</p>	<p>Photograph</p> <p>Sibuyas Description = a picture of an onion Link = sibuyas voice over</p>	<p>Voice over</p> <p>si Gender = female Level = adult Script = “si”</p> <p>Sibuyas Gender = female Level = adult Script = “sibuyas”</p>	<p>Tsi1 Label = “ ” Link = shows “sibuyas” word</p> <p>si1 Label = “●” Link = shows Sibuyas photograph</p>

		<p>Traysikel Description = a picture of a tricycle Link = traysikel voice over</p> <p>Susi Description = bundle of keys Link = susi voice over</p>	<p>Traysikel Gender = female Level = adult Script = “traysikel”</p> <p>Susi Gender = female Level = adult Script = “susi”</p>	<p>Tsi2 Label = “ ” Link = shows “traysikel” word</p> <p>si2 Label = “●” Link = shows Traysikel photograph</p> <p>Tsi3 Label = “ ” Link = shows “susi” word</p> <p>si3 Label = “●” Link = shows Susi photograph</p>
<p>Reference Number = 3.2.1.12</p> <p>Pantig so</p>	<p>Content = “so”</p>	<p>Photograph</p> <p>Sobre Description = a picture of a white envelop Link = sobre voice over</p> <p>Standard photo Description = gray scale sound</p> <p>Baso Description = a picture of a glass Link = baso voice over</p>	<p>Voice over</p> <p>so Gender = female Level = adult Script = “so”</p> <p>Sobre Gender = female Level = adult Script = “sobre”</p> <p>Baso Gender = female Level = adult Script = “baso”</p>	<p>Tso1 Label = “ ” Link = shows “sobre” word</p> <p>so1 Label = “●” Link = shows Sobre photograph</p> <p>so2 Label = “●” Link = disabled</p> <p>Tso3 Label = “ ” Link = shows “baso” word</p> <p>so3 Label = “●” Link = shows Baso photograph</p>

Reference Number = 3.2.1.12 Pantig su	Content “su”	Photograph Sulat Description = a picture of a person writing Link = sulat voice over Asukal Description = a picture of a sugar on spoon Link = asukal voice over Standard photo Description = gray scale sound	Voice over su Gender = female Level = adult Script = “su” Sulat Gender = female Level = adult Script = “sulat” Asukal Gender = female Level = adult Script = “asukal” Standard photo Description = gray scale sound	 Tsu1 Label = “ ” Link = shows “sulat” word su1 Label = “●” Link = shows Sulat photograph Tsu2 Label = “ ” Link = shows “asukal” word su2 Label = “●” Link = shows Asukal photograph su3 Label = “●” Link = disabled
				*Standard buttons below for 2-titikPantig (Katinig-Patinig) Lesson sa Label = “sa” Link = Goes to “3.2.1.12, sa” Rollover Animation = change color se Label = “se” Link = Goes to “3.2.1.12, se” Rollover Animation = change color

				<p>si Label = “si” Link = Goes to “3.2.1.12, si” Rollover Animation = change color</p> <p>so Label = “so” Link = Goes to “3.2.1.12. so” Rollover Animation = change color</p> <p>su Label = “su” Link = Goes to “3.2.1.12, su” Rollover Animation = change color</p> <p>Home Label = Link = Goes to “1.0” Rollover Animation = glow</p> <p>Topic Menu Label = Link = 3.0 Rollover Animation = change color</p> <p>Dictionary Label = Link = Goes to “5.0” Rollover Animation = button glow</p> <p>Next Label = “➡” Link = 3.2.1.13 Rollover Animation = change color</p>
--	--	--	--	--

De La Salle University

				Previous Label = “◀” Link = 3.2.1.11 Rollover Animation = none *bullet buttons for photos: ○ white – current selected bullet ● dark brown – with content ● gray – no content
Reference Number = 3.2.1.13 Pantig ta	Content “ta”	Photograph Tatay Description = a picture of a father Link = tatay voice over Watawat Description = a picture of the Philippine flag Link = watawat voice over Bata Description = a picture of a child Link = bata voice over	Voice over ta Gender = female Level = adult Script = “ta” Tatay Gender = female Level = adult Script = “tatay” Watawat Gender = female Level = adult Script = “watawat” Bata Gender = female Level = adult Script = “bata”	Tta1 Label = “◻” Link = shows “tatay” word ta1 Label = “●” Link = shows Tatay photograph Tta2 Label = “◻” Link = shows “watawat” word ta2 Label = “●” Link = shows Watawat photograph Tta3 Label = “◻” Link = shows “bata” word ta3 Label = “●” Link = shows Bata photograph

<p>Reference Number = 3.2.1.13</p> <p>Pantig te</p>	<p>Content</p> <p>“te”</p>	<p>Photograph</p> <p>Telepono Description = a picture of a telephone Link = telepono voice over</p> <p>Karpintero Description = a picture of a carpenter Link = karpintero voice over</p> <p>Bote Description = a picture of a bottle Link = bote voice over</p>	<p>Voice over</p> <p>te Gender = female Level = adult Script = “te”</p> <p>Telepono Gender = female Level = adult Script = “telepono”</p> <p>Karpintero Gender = female Level = adult Script = “karpintero”</p> <p>Bote Gender = female Level = adult Script = “bote”</p>	<p>Tte1 Label = “ ” Link = shows “telepono” word</p> <p>te1 Label = “●” Link = shows Telepono photograph</p> <p>Tte2 Label = “ ” Link = shows “karpintero” word</p> <p>te2 Label = “●” Link = shows Karpintero photograph</p> <p>Tte3 Label = “ ” Link = shows “bote” word</p> <p>te3 Label = “●” Link = shows Bote photograph</p>
<p>Reference Number = 3.2.1.13</p> <p>Pantig ti</p>	<p>Content</p> <p>“ti”</p>	<p>Photograph</p> <p>Tinidor Description = a picture of a fork Link = tinidor voice over</p>	<p>Voice over</p> <p>ti Gender = female Level = adult Script = “ti”</p> <p>Tinidor Gender = female Level = adult Script = “tinidor”</p>	<p>Tti1 Label = “ ” Link = shows “tinidor” word</p>

		<p>Botika Description = a picture of a drugstore counter Link = botika voice over</p> <p>Kalapati Description = a photo of a dove Link = kalahati voice over</p>	<p>Botika Gender = female Level = adult Script = “botika”</p> <p>Kalapati Gender = female Level = adult Script = “kalapati”</p>	<p>ti1 Label = “●” Link = shows Tinidor photograph</p> <p>Tti2 Label = “□” Link = shows “botika” word</p> <p>ti2 Label = “●” Link = shows Botika photograph</p> <p>Tti3 Label = “□” Link = shows “kalapati” word</p> <p>ti3 Label = “●” Link = shows Kalapati photograph</p>
<p>Reference Number = 3.2.1.13 Pantig to</p>	<p>Content “to”</p>	<p>Photograph</p> <p>Toyo Description = a picture of a soy sauce Link = toyo voice over</p> <p>Standard photo Description = gray scale sound</p> <p>Bato Description = a picture of a stone Link = bato voice over</p>	<p>Voice over to Gender = female Level = adult Script = “to”</p> <p>Toyo Gender = female Level = adult Script = “toyo”</p> <p>Bato Gender = female Level = adult Script = “bato”</p>	<p>Tto1 Label = “□” Link = shows “toyo” word</p> <p>to1 Label = “●” Link = shows Toyo photograph</p> <p>to2 Label = “●” Link = disabled</p> <p>Tto3 Label = “□” Link = shows “bato” word</p>

				to3 Label = “●” Link = shows Bato photograph
Reference Number = 3.2.1.13 Pantig tu	Content “tu”	Photograph Tulay Description = a picture of a bridge Link = tulay voice over Estudyante Description = group photo of students in uniform Link = estudyante voice over Standard photo Description = gray scale sound	Voice over tu Gender = female Level = adult Script = “tu” Tulay Gender = female Level = adult Script = “tulay” Estudyante Gender = female Level = adult Script = “estudyante”	Ttu1 Label = “ ” Link = shows “tulay” word tu1 Label = “●” Link = shows Tulay photograph Ttu2 Label = “ ” Link = shows “estudyante” word tu2 Label = “●” Link = shows Estudyante photograph tu3 Label = “●” Link = disabled
				*Standard buttons below for 2-titikPantig (Katinig-Patinig) Lesson ta Label = “ta” Link = Goes to “3.2.1.13, ta” Rollover Animation = change color te Label = “te” Link = Goes to “3.2.1.13, te”

				<p>Rollover Animation = change color</p> <p>ti</p> <p>Label = “ti”</p> <p>Link = Goes to “3.2.1.13, ti”</p> <p>Rollover Animation = change color</p> <p>to</p> <p>Label = “to”</p> <p>Link = Goes to “3.2.1.13, to”</p> <p>Rollover Animation = change color</p> <p>tu</p> <p>Label = “tu”</p> <p>Link = Goes to “3.2.1.13, tu”</p> <p>Rollover Animation = change color</p> <p>Home</p> <p>Label = “ ”</p> <p>Link = Goes to “1.0”</p> <p>Rollover Animation = glow</p> <p>Topic Menu</p> <p>Label = “ ”</p> <p>Link = 3.0</p> <p>Rollover Animation = change color</p> <p>Dictionary</p> <p>Label = “ ”</p> <p>Link = Goes to “5.0”</p> <p>Rollover Animation = button glow</p> <p>Next</p> <p>Label = “ ”</p> <p>Link = 3.2.1.14</p> <p>Rollover Animation = change color</p>
--	--	--	--	--

				Previous Label = “◀” Link = 3.2.1.12 Rollover Animation = none *bullet buttons for photos: ○ white – current selected bullet ● dark brown – with content ● gray – no content
Reference Number = 3.2.1.14 Pantig wa	Content “wa”	Photograph Walo Description = hands showing 8 fingers Link = walo voice over Liwanag Description = a picture of a student Link = liwanag voice over Dalawa Description = hand showing 2 fingers Link = dalawa voice over	Voice over wa Gender = female Level = adult Script = “wa” Walo Gender = female Level = adult Script = “walo” Liwanag Gender = female Level = adult Script = “liwanag” Dalawa Gender = female Level = adult Script = “dalawa”	Twa1 Label = “□” Link = shows “walo” word wa1 Label = “●” Link = shows Walo photograph Twa2 Label = “□” Link = shows “liwanag” word wa2 Label = “●” Link = shows Liwanag photograph Twa3 Label = “□” Link = shows “dalawa” word wa3 Label = “●” Link = shows Dalawa photograph

De La Salle University

Reference Number = 3.2.1.14 Pantig we	Content “we”	Photograph Standard photo Description = gray scale sound Standard photo Description = gray scale sound Standard photo Description = gray scale sound	Voice over we Gender = female Level = adult Script = “we”	 we1 Label = “●” Link = disabled we2 Label = “●” Link = disabled we3 Label = “●” Link = disabled Tw1 Label = “□” Link = shows plain box (to cover the sound icon photo)
Reference Number = 3.2.1.14 Pantig wi	Content = “wi”	Photograph Wisik Description = sprinkle water from the hand Link = wisik voice over Standard photo Description = gray scale sound	Voice over wi Gender = female Level = adult Script = “wi” Wisik Gender = female Level = adult Script = “wisik”	 Tw1 Label = “□” Link = shows “wisik” text wi1 Label = “●” Link = shows Wisik photograph wi2 Label = “●” Link = disabled

		Standard photo Description = gray scale sound		wi3 Label = “●” Link = disabled
Reference Number = 3.2.1.14 Pantig wo	Content “wo”	Photograph Standard photo Description = gray scale sound Standard photo Description = gray scale sound Standard photo Description = gray scale sound	Voice over wo Gender = female Level = adult Script = “wo”	 wo1 Label = “●” Link = disabled wo2 Label = “●” Link = disabled wo3 Label = “●” Link = disabled Two1 Label = “ ☐ ” Link = shows plain box (to cover the sound icon photo)
Reference Number = 3.2.1.14 Pantig wu	Content “wu”	Photograph Standard photo Description = gray scale sound Standard photo Description = gray scale sound Standard photo Description = gray scale sound	Voice over wu Gender = female Level = adult Script = “wu”	 wu1 Label = “●” Link = disabled wu2 Label = “●” Link = disabled wu3 Label = “●” Link = disabled

				<p>Twu1 Label = “ ” Link = shows plain box (to cover the sound icon photo)</p>
				<p>*Standard buttons below for 2- titikPantig (Katinig-Patinig) Lesson</p> <p>wa Label = “wa” Link = Goes to “3.2.1.14, wa” Rollover Animation = change color</p> <p>we Label = “we” Link = Goes to “3.2.1.14, we” Rollover Animation = change color</p> <p>wi Label = “wi” Link = Goes to “3.2.1.14, wi” Rollover Animation = change color</p> <p>wo Label = “wo” Link = Goes to “3.2.1.14, wo” Rollover Animation = change color</p> <p>wu Label = “wu” Link = Goes to “3.2.1.14, wu” Rollover Animation = change color</p> <p>Home Label = “ ” Link = Goes to “1.0” Rollover Animation = glow</p>

				<p>Topic Menu Label = Link = 3.0 Rollover Animation = change color</p> <p>Dictionary Label = Link = Goes to “5.0” Rollover Animation = button glow</p> <p>Next Label = “➡” Link = 3.2.1.15 Rollover Animation = change color</p> <p>Previous Label = “⬅” Link = 3.2.1.13 Rollover Animation = none</p> <p>*bullet buttons for photos: ☐ white – current selected bullet ☒ dark brown – with content ☐ gray – no content</p>
Reference Number = 3.2.1.15 Pantig ya	Content “ya”	Photograph Yakap Description = a picture of two people hugging Link = yakap voice over	Voice over ya Gender = female Level = adult Script = “ya” Yakap Gender = female Level = adult Script = “yakap”	Tya1 Label = “ ” Link = shows “yakap” word ya1 Label = “ ” Link = shows Yakap photograph

		<p>Standard photo Description = gray scale sound</p> <p>Silya Description = a picture of a chair Link = silya voice over</p>	<p>Silya Gender = female Level = adult Script = “silya”</p>	<p>ya2 Label = “●” Link = disabled</p> <p>Tya3 Label = “□” Link = shows “silya” word</p> <p>ya3 Label = “●” Link = shows Silya photograph</p>
<p>Reference Number = 3.2.1.15</p> <p>Pantig ye</p>	<p>Content “ye”</p>	<p>Photograph</p> <p>Yero Description = iron sheets used as roof Link = yero voice over</p> <p>Standard photo Description = gray scale sound</p> <p>Kalye Description = a picture of a street Link = kalye voice over</p>	<p>Voice over</p> <p>ye Gender = female Level = adult Script = “ye”</p> <p>Yero Gender = female Level = adult Script = “yero”</p> <p>Kalye Gender = female Level = adult Script = “kalye”</p>	<p>Tye1 Label = “□” Link = shows “yero” word</p> <p>ye1 Label = “●” Link = shows Yero photograph</p> <p>ye2 Label = “●” Link = disabled</p> <p>Tye3 Label = “□” Link = shows “silya” word</p> <p>ye3 Label = “●” Link = shows Kalye photograph</p>
<p>Reference Number = 3.2.1.15</p> <p>Pantig yi</p>	<p>Content “yi”</p>	<p>Photograph</p>	<p>Voice over</p> <p>yi Gender = female Level = adult Script = “yi”</p>

		<p>Standard photo Description = gray scale sound</p> <p>Standard photo Description = gray scale sound</p> <p>Standard photo Description = gray scale sound</p>		<p>yi1 Label = “●” Link = disabled</p> <p>yi2 Label = “●” Link = disabled</p> <p>yi3 Label = “●” Link = disabled</p> <p>Tyi1 Label = “☐” Link = shows plain box (to cover the sound icon photo)</p>
<p>Reference Number = 3.2.1.15</p> <p>Pantig yo</p>	<p>Content</p> <p>“yo”</p>	<p>Photograph</p> <p>Standard photo Description = gray scale sound</p> <p>Standard photo Description = gray scale sound</p> <p>Bagyo Description = a picture of a storm Link = bagyo voice over</p>	<p>Voice over</p> <p>yo Gender = female Level = adult Script = “yo”</p> <p>Bagyo Gender = female Level = adult Script = “bagyo”</p>	<p>yo1 Label = “●” Link = disabled</p> <p>yo2 Label = “●” Link = disabled</p> <p>Tyo1 Label = “☐” Link = shows “bagyo” text</p> <p>yo3 Label = “●” Link = shows Bagyo photograph</p>
<p>Reference Number = 3.2.1.15</p> <p>Pantig yu</p>	<p>Content</p> <p>“yu”</p>	<p>Photograph</p>	<p>Voice over</p> <p>yu Gender = female Level = adult Script = “yu”</p>

		<p>Yuko Description = a picture of a person bowing down his head Link = yuko voice over</p> <p>Standard photo Description = gray scale sound</p> <p>Standard photo Description = gray scale sound</p>	<p>Yuko Gender = female Level = adult Script = “yuko”</p>	<p>Tyu1 Label = “ ” Link = shows “yuko” text</p> <p>yu1 Label = “●” Link = shows Yuko photograph</p> <p>yu2 Label = “●” Link = disabled</p> <p>yu3 Label = “●” Link = disabled</p>
				<p>*Standard buttons below for 2-titikPantig (Katinig-Patinig) Lesson</p> <p>ya Label = “ya” Link = Goes to “3.2.1.15, ya” Rollover Animation = change color</p> <p>ye Label = “ye” Link = Goes to “3.2.1.15, ye” Rollover Animation = change color</p> <p>yi Label = “yi” Link = Goes to “3.2.1.15, gi” Rollover Animation = change color</p> <p>yo Label = “yo” Link = Goes to “3.2.1.15, yo” Rollover Animation = change color</p>

yu
Label = “yu”
Link = Goes to “3.2.1.15, yu”
Rollover Animation = change color
Home

Label =
Link = Goes to “1.0”
Rollover Animation = glow

Topic Menu
Label =
Link = 3.0
Rollover Animation = change color

Dictionary
Label =
Link = Goes to “5.0”
Rollover Animation = button glow

Next
Label = “ ”
Link = disabled
Rollover Animation = change color

Previous
Label = “ ”
Link = 3.2.1.14
Rollover Animation = none

***bullet buttons for photos:**
○ white – current selected bullet
● dark brown – with content
● gray – no content

Reference Number = 3.2.2.1 Pantig ab	Content “ab”	Photograph Standard photo Description = gray scale sound Standard photo Description = gray scale sound Liab Description = sudden boost of fire Link = liab voiceover	Voice over ab Gender = female Level = adult Script = “ab”	Button ab1 Label = “●” Link = disabled ab2 Label = “●” Link = disabled Tab3 Label = “□” Link = shows “liab” text ab3 Label = “●” Link = shows Liab photograph
Reference Number = 3.2.2.1 Pantig eb	Content “eb”	Photograph Standard photo Description = gray scale sound Standard photo Description = gray scale sound Standard photo Description = gray scale sound	Voice over eb Gender = female Level = adult Script = “eb”	eb1 Label = “●” Link = disabled eb2 Label = “●” Link = disabled eb3 Label = “●” Link = disabled Teb1 Label = “□” Link = shows plain box (to cover the sound icon photo)

Reference Number = 3.2.2.1 Pantig ib	Content “ib”	Photograph Ib-ib Description = inhale smoke Link = ibib voice over Standard photo Description = gray scale sound Ilaib Description = making something hot Link = ilaib voice over	Voice over ib Gender = female Level = adult Script = “ib” Ib-ib Gender = female Level = adult Script = “ib-ib” Ilaib Gender = female Level = adult Script = “ilaib”	Tib1 Label = “ ” Link = shows “ib-ib” text ib1 Label = “●” Link = shows Ib-ib photograph ib2 Label = “●” Link = disabled Tib3 Label = “ ” Link = shows “ib-ib” text ib3 Label = “●” Link = shows Ilaib photograph
Reference Number = 3.2.2.1 Pantig ob	Content “ob”	Photograph Standard photo Description = gray scale sound Standard photo Description = gray scale sound Loob Description = shot outside an open door showing room	Voice over ob Gender = female Level = adult Script = “ob” Loob Gender = female Level = adult Script = “loob”	ob1 Label = “●” Link = disabled ob2 Label = “●” Link = disabled Tob3 Label = “ ” Link = shows “loob” text

				ob3 Label = “●” Link = shows Loob photograph
Reference Number = 3.2.2.1 Pantig ub	Content “ub”	Photograph Standard photo Description = gray scale sound Standard photo Description = gray scale sound Standard photo Description = gray scale sound	Voice over ub Gender = female Level = adult Script = “ub”	ub1 Label = “●” Link = disabled ub2 Label = “●” Link = disabled ub3 Label = “●” Link = disabled Tub1 Label = “□” Link = shows plain box (to cover the sound icon photo)
				*Standard buttons below for 2- titik Pantig (Patinig-Katinig) Lesson ab Label = “ab” Link = Goes to “3.2.2.1, ab” Rollover Animation = change color eb Label = “eb” Link = Goes to “3.2.2.1, eb” Rollover Animation = change color

				<p>ib Label = “ib” Link = Goes to “3.2.2.1, ib” Rollover Animation = change color</p> <p>ob Label = “ob” Link = Goes to “3.2.2.1, ob” Rollover Animation = change color</p> <p>ub Label = “ub” Link = Goes to “3.2.2.1, ub” Rollover Animation = change color</p> <p>Home Label = Link = Goes to “1.0” Rollover Animation = glow</p> <p>Topic Menu Label = Link = 3.0 Rollover Animation = change color</p> <p>Dictionary Label = Link = Goes to “5.0” Rollover Animation = button glow</p> <p>Next Label = “ ” Link = 3.2.2.2 Rollover Animation = change color</p>
--	--	--	--	--

De La Salle University

				Previous Label = “◀” Link = disabled Rollover Animation = none *bullet buttons for photos: ○ white – current selected bullet ● dark brown – with content ● gray – no content
Reference Number = 3.2.2.2 Pantig ak	Content “ak”	Photograph Aklat Description = a picture of an open book Link = aklat voice over Standard photo Description = gray scale sound Standard photo Description = gray scale sound	Voice over ak Gender = female Level = adult Script = “ak” Aklat Gender = female Level = adult Script = “aklat”	Tak1 Label = “□” Link = shows “aklat” text ak1 Label = “●” Link = shows Aklat photograph ak2 Label = “●” Link = disabled ak3 Label = “●” Link = disabled
Reference Number = 3.2.2.2 Pantig ek	Content “ek”	Photograph Eksam Description = a picture of a student taking a test Link = eksam voice over	Voice over ek Gender = female Level = adult Script = “ek” Eksam Gender = female Level = adult Script = “eksam”	Tek1 Label = “□” Link = shows “eksam”

		<p>Standard photo Description = gray scale sound</p> <p>Standard photo Description = gray scale sound</p>		<p>ek1 Label = “●” Link = shows Eksam photograph</p> <p>ek2 Label = “●” Link = disabled</p> <p>ek3 Label = “●” Link = disabled</p>
<p>Reference Number = 3.2.2.2</p> <p>Pantig ik</p>	<p>Content</p> <p>“ik”</p>	<p>Photograph</p> <p>Standard photo Description = gray scale sound</p> <p>Maikli Description = a picture of a comparison between something long and short Link = maikli voice over</p> <p>Standard photo Description = gray scale sound</p>	<p>Voice over</p> <p>ik Gender = female Level = adult Script = “ik”</p> <p>Standard photo Description = gray scale sound</p> <p>Maikli Gender = female Level = adult Script = “maikli”</p>	<p>ik1 Label = “●” Link = disabled</p> <p>Tik2 Label = “☐” Link = shows “maikli” text</p> <p>ik2 Label = “●” Link = shows Maikli photograph</p> <p>ik3 Label = “●” Link = disabled</p>
<p>Reference Number = 3.2.2.2</p> <p>Pantig ok</p>	<p>Content</p> <p>“ok”</p>	<p>Photograph</p> <p>Oktubre Description = halloween event Link = oktubre voice over</p>	<p>Voice over</p> <p>ok Gender = female Level = adult Script = “ok”</p> <p>Oktubre Gender = female Level = adult Script = “oktubre”</p>	<p>Tok1 Label = “☐” Link = shows “oktubre” text</p>

		<p>Standard photo Description = gray scale sound</p> <p>Look Description = photo of an ocean Link = look voice over</p>	<p>Look Gender = female Level = adult Script = “look”</p>	<p>Ok1 Label = “●” Link = shows Oktubre photograph</p> <p>ok2 Label = “●” Link = disabled</p> <p>Tok3 Label = “☐” Link = shows “look” text</p> <p>Ok3 Label = “●” Link = shows Look photograph</p>
<p>Reference Number = 3.2.2.2</p> <p>Pantig uk</p>	<p>Content</p> <p>“uk”</p>	<p>Photograph</p> <p>Ukbot Description = person sitting with a curved body position Link = ukbot voice over</p> <p>Ukdo Description = person leaping Link = ukdo voice over</p> <p>Standard photo Description = gray scale sound</p>	<p>Voice over uk Gender = female Level = adult Script = “uk”</p> <p>Ukbot Gender = female Level = adult Script = “ukbot”</p> <p>Ukdo Gender = female Level = adult Script = “ukdo”</p>	<p>Tuk1 Label = “☐” Link = shows “ukbot” text</p> <p>uk1 Label = “●” Link = shows Look photograph</p> <p>Tuk2 Label = “☐” Link = shows “ukdo” text</p> <p>uk2 Label = “●” Link = shows Look photograph</p> <p>uk3 Label = “●” Link = disabled</p>

				<p>*Standard buttons below for 2-titik Pantig (Patinig-Katinig) Lesson</p> <p>ak Label = “ak” Link = Goes to “3.2.2.2, ak” Rollover Animation = change color</p> <p>ek Label = “ek” Link = Goes to “3.2.2.2, ek” Rollover Animation = change color</p> <p>ik Label = “ik” Link = Goes to “3.2.2.2, ik” Rollover Animation = change color</p> <p>ok Label = “ok” Link = Goes to “3.2.2.2, ok” Rollover Animation = change color</p> <p>uk Label = “uk” Link = Goes to “3.2.2.2, uk” Rollover Animation = change color</p> <p>Home Label = Link = Goes to “1.0” Rollover Animation = glow</p> <p>Topic Menu Label = Link = 3.0 Rollover Animation = change color</p>
--	--	--	--	--

				<p>Dictionary Label = “ ” Link = Goes to “5.0” Rollover Animation = button glow</p> <p>Next Label = “ ” Link = 3.2.2.3 Rollover Animation = change color</p> <p>Previous Label = “ ” Link = 3.2.2.1 Rollover Animation = none</p> <p>*bullet buttons for photos: ○ white – current selected bullet ● dark brown – with content ● gray – no content</p>
<p>Reference Number = 3.2.2.3</p> <p>Pantig d</p>	<p>Content</p> <p>“ad”</p>	<p>Photograph</p> <p>Standard photo Description = gray scale sound</p> <p>Standard photo Description = gray scale sound</p> <p>Standard photo Description = gray scale sound</p>	<p>Voice over</p> <p>ad Gender = female Level = adult Script = “ad”</p>	<p>ad1 Label = “●” Link = disabled</p> <p>ad2 Label = “●” Link = disabled</p> <p>ad3 Label = “●” Link = disabled</p> <p>Tad1 Label = “ ” Link = shows plain box (to cover the sound icon photo)</p>

De La Salle University

Reference Number = 3.2.2.3 Pantig ed	Content “ed”	Photograph Standard photo Description = gray scale sound Standard photo Description = gray scale sound Standard photo Description = gray scale sound	Voice over ed Gender = female Level = adult Script = “ed”	ed1 Label = “●” Link = disabled ed2 Label = “●” Link = disabled ed3 Label = “●” Link = disabled Ted1 Label = “□” Link = shows plain box (to cover the sound icon photo)
Reference Number = 3.2.2.3 Pantig id	Content “id”	Photograph Idlip Description = person taking a nap Link = idlip voice over Standard photo Description = gray scale sound Standard photo Description = gray scale sound	Voice over id Gender = female Level = adult Script = “id” Idlip Gender = female Level = adult Script = “idlip”	Tid1 Label = “□” Link = shows “idlip” text id1 Label = “●” Link = shows Look photograph id2 Label = “●” Link = disabled id3 Label = “●” Link = disabled

Reference Number = 3.2.2.3 Pantig od	Content “od”	Photograph Standard photo Description = gray scale sound Standard photo Description = gray scale sound Nood Description = people watching a performance Link = nood voice over	Voice over wo Gender = female Level = adult Script = “od” Nood Gender = female Level = adult Script = “nood”	od1 Label = “●” Link = disabled od2 Label = “●” Link = disabled Tod3 Label = “□” Link = shows “nood” text od3 Label = “●” Link = show Nood photograph
Reference Number = 3.2.2.3 Pantig ud	Content “ud”	Photograph Udlot Description = something cut/stopped from happening Link = udlot voice over Standard photo Description = gray scale sound Standard photo Description = gray scale sound	Voice over ud Gender = female Level = adult Script = “ud” Udlot Gender = female Level = adult Script = “udlot”	Tud1 Label = “□” Link = shows “udlot” text ud1 Label = “●” Link = shows udlot photograph ud2 Label = “●” Link = disabled ud3 Label = “●” Link = disabled

				<p>*Standard buttons below for 2-titik Pantig (Patinig-Katinig) Lesson</p> <p>ad Label = “ad” Link = Goes to “3.2.2.3, ad” Rollover Animation = change color</p> <p>ed Label = “ed” Link = Goes to “3.2.2.3, ed” Rollover Animation = change color</p> <p>id Label = “id” Link = Goes to “3.2.2.3, id” Rollover Animation = change color</p> <p>od Label = “od” Link = Goes to “3.2.2.3, od” Rollover Animation = change color</p> <p>ud Label = “ud” Link = Goes to “3.2.2.3, ud” Rollover Animation = change color</p> <p>Home Label = Link = Goes to “1.0” Rollover Animation = glow</p> <p>Topic Menu Label = Link = 3.0 Rollover Animation = change color</p>
--	--	--	--	--

				<p>Dictionary Label = “ ” Link = Goes to “5.0” Rollover Animation = button glow</p> <p>Next Label = “ ” Link = 3.2.2.4 Rollover Animation = change color</p> <p>Previous Label = “ ” Link = 3.2.2.3 Rollover Animation = none</p> <p>*bullet buttons for photos: white – current selected bullet dark brown – with content gray – no content</p>
<p>Reference Number = 3.2.2.4</p> <p>Pantig ag</p>	<p>Content</p> <p>“ag”</p>	<p>Photograph</p> <p>Agham Description = depicts science Link = agham voice over</p> <p>Standard photo Description = gray scale sound</p> <p>Standard photo Description = gray scale sound</p>	<p>Voice over</p> <p>ag Gender = female Level = adult Script = “ag”</p> <p>Agham Gender = female Level = adult Script = “agham”</p>	<p>Tag1 Label = “ ” Link = shows “agham” text</p> <p>ag1 Label = “ ” Link = show Agham photograph</p> <p>ag2 Label = “ ” Link = disabled</p> <p>ag3 Label = “ ” Link = disabled</p>

Reference Number = 3.2.2.4 Pantig eg	Content “eg”	Photograph Egnog Description = gray scale sound Link = egnog voice over Standard photo Description = gray scale sound Leeg Description = tight shot of person’s neck Link = leeg voice over	Voice over eg Gender = female Level = adult Script = “eg” Egnog Gender = female Level = adult Script = “egnog” Leeg Gender = female Level = adult Script = “leeg”	Teg1 Label = “ ” Link = shows “egnog” text eg1 Label = “●” Link = show Egnog photograph eg2 Label = “●” Link = disabled Teg3 Label = “ ” Link = shows “leeg” text eg3 Label = “●” Link = show Leeg photograph
Reference Number = 3.2.2.4 Pantig ig	Content “ig”	Photograph Igsi Description = short object Link = igsi voice over	Voice over ig Gender = female Level = adult Script = “ ig ” Igsi Gender = female Level = adult Script = “ igsi”	Tig1 Label = “ ” Link = shows “igsi” text ig1 Label = “●” Link = show Leeg photograph

		Standard photo Description = gray scale sound		ig2 Label = “●” Link = disabled
		Standard photo Description = gray scale sound		ig3 Label = “●” Link = disabled
Reference Number = 3.2.2.4 Pantig og	Content “og”	Photograph Standard photo Description = gray scale sound Standard photo Description = gray scale sound Loog Description = person choked/holding the throat Link = loog voice over	Voice over og Gender = female Level = adult Script = “og” Loog Gender = female Level = adult Script = “loog”	 og1 Label = “●” Link = disabled og2 Label = “●” Link = disabled Tog3 Label = “ ☐ ” Link = shows “loog” text og3 Label = “●” Link = show Loog photograph
Reference Number = 3.2.2.4 Pantig ug	Content “ug”	Photograph Ugnay Description = depicts connection between two things Link = ugnay voice over	Voice over ug Gender = female Level = adult Script = “ug” Ugnay Gender = female Level = adult Script = “ugnay”	 Tug1 Label = “ ☐ ” Link = shows “ugnay” text Ug1 Label = “●” Link = show Ugnay photograph

		Standard photo Description = gray scale sound		ug2 Label = “●” Link = disabled
		Standard photo Description = gray scale sound		ug3 Label = “●” Link = disabled
				<p>*Standard buttons below for 2-titik Pantig (Patinig-Katinig) Lesson</p> <p>ag Label = “ag” Link = Goes to “3.2.2.4, ag” Rollover Animation = change color</p> <p>eg Label = “eg” Link = Goes to “3.2.2.4, eg” Rollover Animation = change color</p> <p>ig Label = “ig” Link = Goes to “3.2.2.4, ig” Rollover Animation = change color</p> <p>og Label = “og” Link = Goes to “3.2.2.4, og” Rollover Animation = change color</p> <p>ug Label = “ug” Link = Goes to “3.2.2.4, ug” Rollover Animation = change color</p> <p>Home Label = “ </p>

				<p>Rollover Animation = glow</p> <p>Topic Menu Label = “ ” Link = 3.0 Rollover Animation = change color</p> <p>Dictionary Label = “ ” Link = Goes to “5.0” Rollover Animation = button glow</p> <p>Next Label = “ ” Link = 3.2.2.5 Rollover Animation = change color</p> <p>Previous Label = “ ” Link = 3.2.2.4 Rollover Animation = none</p> <p>*bullet buttons for photos: ○ white – current selected bullet ● dark brown – with content ● gray – no content</p>
<p>Reference Number = 3.2.2.5</p> <p>Pantig al</p>	<p>Content</p> <p>“al”</p>	<p>Photograph</p> <p>Alpabeto Description = a picture of the letters of the alphabet (flashcards) Link = alpabeto voice over</p>	<p>Voice over</p> <p>al Gender = female Level = adult Script = “al”</p> <p>Alpabeto Gender = female Level = adult Script = “alpabeto”</p>	<p>Tall Label = “ ” Link = shows “alpabeto”</p>

		Standard photo Description = gray scale sound Standard photo Description = gray scale sound		Label = “●” Link = shows Alfabeto photograph ah2 Label = “●” Link = disabled ah3 Label = “●” Link = disabled
Reference Number = 3.2.2.5 Pantig el	Content “el”	Photograph Standard photo Description = gray scale sound Standard photo Description = gray scale sound Standard photo Description = gray scale sound	Voice over el Gender = female Level = adult Script = “el”	el1 Label = “●” Link = disabled el2 Label = “●” Link = disabled el3 Label = “●” Link = disabled Tel1 Label = “□” Link = shows plain box (to cover the sound icon photo)
Reference Number = 3.2.2.5 Pantig il	Content “il”	Photograph Standard photo Description = gray scale sound	Voice over il Gender = female Level = adult Script = “il”	il1 Label = “●” Link = disabled

		Standard photo Description = gray scale sound		il2 Label = “●” Link = disabled
		Standard photo Description = gray scale sound		il3 Label = “●” Link = disabled
Reference Number = 3.2.2.6 Pantig ol	Content “ol”	Photograph Olyo Description = oil used for baptism and anointment of the sick Link = olyo voice over Standard photo Description = gray scale sound Standard photo Description = gray scale sound	Voice over ol Gender = female Level = adult Script = “ol” Olyo Gender = female Level = adult Script = “olyo”	Tol1 Label = “□” Link = shows “olyo” text ol1 Label = “●” Link = show Olyo photograph ol2 Label = “●” Link = disabled ol3 Label = “●” Link = disabled
Reference Number = 3.2.2.6 Pantig ul	Content “ul”	Photograph Ulbo Description = pig cage Link = ulbo voice over	Voice over ul Gender = female Level = adult Script = “ul” Ulbo Gender = female Level = adult Script = “ulbo”	Tul1 Label = “□” Link = shows “ulbo” text ul1 Label = “●” Link = show Ulbo photograph

		<p>Standard photo Description = gray scale sound</p> <p>Baul Description = photo of an old chest Link = baul voice over</p>		<p>ul2 Label = “●” Link = disabled</p> <p>Tu13 Label = “ ” Link = shows “Baul” text</p> <p>ul1 Label = “●” Link = show Baul photograph</p>
				<p>*Standard buttons below for 2-titik Pantig (Patinig-Katinig) Lesson</p> <p>al Label = “al” Link = Goes to “3.2.2.6, al” Rollover Animation = change color</p> <p>el Label = “el” Link = Goes to “3.2.2.6 el” Rollover Animation = change color</p> <p>il Label = “il” Link = Goes to “3.2.2.6, il” Rollover Animation = change color</p> <p>ol Label = “ol” Link = Goes to “3.2.2.6, ol” Rollover Animation = change color</p> <p>ul Label = “ul” Link = Goes to “3.2.2.6, ul” Rollover Animation = change color</p>

				<p>Home Label = Link = Goes to “1.0” Rollover Animation = glow</p> <p>Topic Menu Label = Link = 3.0 Rollover Animation = change color</p> <p>Dictionary Label = Link = Goes to “5.0” Rollover Animation = button glow</p> <p>Next Label = “ ” Link = 3.2.2.7 Rollover Animation = change color</p> <p>Previous Label = “ ” Link = 3.2.2.5 Rollover Animation = none</p> <p>*bullet buttons for photos: ○ white – current selected bullet ● dark brown – with content ● gray – no content</p>
Reference Number = 3.2.2.7 Pantig am	Content “am”	Photograph	Voice over am Gender = female Level = adult Script = “am”

		<p>Ampalaya Description = sliced amapalaya Link = ampalaya voice over</p> <p>Standard photo Description = gray scale sound</p> <p>Standard photo Description = gray scale sound</p>	<p>Ampalaya Gender = female Level = adult Script = “ampalaya”</p>	<p>Tam1 Label = “ ” Link = shows “ampalaya” text</p> <p>am1 Label = “●” Link = show Ampalaya photograph</p> <p>am2 Label = “●” Link = disabled</p> <p>am3 Label = “●” Link = disabled</p>
<p>Reference Number = 3.2.2.7</p> <p>Pantig em</p>	<p>Content “em”</p>	<p>Photograph</p> <p>Empleydo Description = a picture of a clerk working in the office Link = empleyado voice over</p> <p>Standard photo Description = gray scale sound</p> <p>Standard photo Description = gray scale sound</p>	<p>Voice over</p> <p>em Gender = female Level = adult Script = “em”</p> <p>Empleyado Gender = female Level = adult Script = “empleyado”</p>	<p>Tem1 Label = “ ” Link = shows “empleyado” photo</p> <p>em1 Label = “●” Link = shows Empleyado photograph</p> <p>em2 Label = “●” Link = disabled</p> <p>em3 Label = “●” Link = disabled</p>

Reference Number = 3.2.2.7 Pantig im	Content “im”	Photograph Impossible Description = depicts something impossible to do Link = impossible voice over Standard photo Description = gray scale sound Standard photo Description = gray scale sound	Voice over im Gender = female Level = adult Script = “im” Impossible Gender = female Level = adult Script = “impossible”	 Tim1 Label = “ ” Link = shows “impossible” text im1 Label = “●” Link = show Impossible photograph im2 Label = “●” Link = disabled im3 Label = “●” Link = disabled
Reference Number = 3.2.2.7 Pantig om	Content “om”	Photograph Standard photo Description = gray scale sound Standard photo Description = gray scale sound Luom Description = person behind prison bars Link = luom voice over	Voice over om Gender = female Level = adult Script = “om” Luom Gender = female Level = adult Script = “luom”	 om1 Label = “●” Link = disabled om2 Label = “●” Link = disabled Tom3 Label = “ ” Link = shows “luom” text Om3 Label = “●” Link = show Luom photograph

<p>Reference Number = 3.2.2.7</p> <p>Pantig um</p>	<p>Content</p> <p>“um”</p>	<p>Photograph</p> <p>Umpisa Description = start of a race Link = umpisa voice over</p> <p>Standard photo Description = gray scale sound</p> <p>Standard photo Description = gray scale sound</p>	<p>Voice over</p> <p>um Gender = female Level = adult Script = “um”</p> <p>Umpisa Gender = female Level = adult Script = “umpisa”</p>	<p>Tum1 Label = “ ” Link = shows “umpisa” text</p> <p>um1 Label = “●” Link = show Umpids photograph</p> <p>um2 Label = “●” Link = disabled</p> <p>um3 Label = “●” Link = disabled</p>
				<p>*Standard buttons below for 2-titik Pantig (Patinig-Katinig) Lesson</p> <p>am Label = “am” Link = Goes to “3.2.2.7, am” Rollover Animation = change color</p> <p>em Label = “em” Link = Goes to “3.2.2.7, em” Rollover Animation = change color</p> <p>im Label = “im” Link = Goes to “3.2.2.7, im” Rollover Animation = change color</p>

				<p>om Label = “om” Link = Goes to “3.2.2.7, om” Rollover Animation = change color</p> <p>um Label = “um” Link = Goes to “3.2.2.7, um” Rollover Animation = change color</p> <p>Home Label = “ The logo of De La Salle University, featuring a circular emblem with a star in the center and the words "DE LA SALLE UNIVERSITY" around the perimeter.</p>
--	--	--	--	---

				*bullet buttons for photos: ○ white – current selected bullet ● dark brown – with content ● gray – no content
Reference Number = 3.2.2.8 Pantig an	Content “an”	Photograph Antok Description = a sleepy person Link = antok voice over Standard photo Description = gray scale sound Laruan Description = various toys Link = laruan voice over	Voice over an Gender = female Level = adult Script = “an” Antok Gender = female Level = adult Script = “antok” Laruan Gender = female Level = adult Script = “laruan”	 Tan1 Label = “ ” Link = shows “antok” text an1 Label = “ ” Link = show Antok photograph an2 Label = “ ” Link = disabled Tan3 Label = “ ” Link = shows “laruan” text an3 Label = “ ” Link = show Laruan photograph
Reference Number = 3.2.2.8 Pantig en	Content “en”	Photograph Entablado Description = auditorium stage Link = entablado voice over	Voice over en Gender = female Level = adult Script = “en” Entablado Gender = female Level = adult Script = “entablado”	 Ten1 Label = “ ” Link = shows “entablado” text

		<p>Standard photo Description = gray scale sound</p> <p>Standard photo Description = gray scale sound</p>		<p>en1 Label = “●” Link = show Entablado photograph</p> <p>en2 Label = “●” Link = disabled</p> <p>en3 Label = “●” Link = disabled</p>
<p>Reference Number = 3.2.2.8</p> <p>Pantig in</p>	<p>Content</p> <p>“in”</p>	<p>Photograph</p> <p>Indak Description = people dancing Link = indak voice over</p> <p>Standard photo Description = gray scale sound</p> <p>Kain Description = person about to eat something Link = kain voice over</p>	<p>Voice over</p> <p>in Gender = female Level = adult Script = “in”</p> <p>Indak Gender = female Level = adult Script = “indak”</p> <p>Kain Gender = female Level = adult Script = “Kain”</p>	<p>Tin1 Label = “☐” Link = shows “indak” text</p> <p>in1 Label = “●” Link = show Indak photograph</p> <p>in2 Label = “●” Link = disabled</p> <p>Tin3 Label = “☐” Link = shows “kain” text</p> <p>in3 Label = “●” Link = show Kain photograph</p>
<p>Reference Number = 3.2.2.8</p> <p>Pantig on</p>	<p>Content</p> <p>“on”</p>	<p>Photograph</p>	<p>Voice over</p> <p>on Gender = female Level = adult Script = “on”</p>

		<p>Onse Description = 11 pesos worth of coins Link = onse voice over</p> <p>Standard photo Description = gray scale sound</p> <p>Baon Description = packed food in tupperwear Link = baon voice over</p>	<p>Onse Gender = female Level = adult Script = “onse”</p> <p>Baon Gender = female Level = adult Script = “an”</p>	<p>Ton1 Label = “ ” Link = shows “onse” text</p> <p>on1 Label = “●” Link = show Onse photograph</p> <p>on2 Label = “●” Link = disabled</p> <p>Ton3 Label = “ ” Link = shows “baon” text</p> <p>On3 Label = “●” Link = show Baon photograph</p>
<p>Reference Number = 3.2.2.8</p> <p>Pantig un</p>	<p>Content</p> <p>“un”</p>	<p>Photograph</p> <p>Untog Description = person’s head hit on an object Link = untog voice over</p> <p>Standard photo Description = gray scale sound</p> <p>Standard photo Description = gray scale sound</p>	<p>Voice over</p> <p>un Gender = female Level = adult Script = “un”</p> <p>Untog Gender = female Level = adult Script = “untog”</p>	<p>Tun1 Label = “ ” Link = shows “untog” text</p> <p>un1 Label = “●” Link = show Untog photograph</p> <p>un2 Label = “●” Link = disabled</p> <p>un3 Label = “●” Link = disabled</p>

				<p>*Standard buttons below for 2-titik Pantig (Patinig-Katinig) Lesson</p> <p>an Label = “an” Link = Goes to “3.2.2.8, an” Rollover Animation = change color</p> <p>en Label = “en” Link = Goes to “3.2.2.8, en” Rollover Animation = change color</p> <p>in Label = “in” Link = Goes to “3.2.2.8, in” Rollover Animation = change color</p> <p>on Label = “on” Link = Goes to “3.2.2.8, on” Rollover Animation = change color</p> <p>un Label = “un” Link = Goes to “3.2.2.8, un” Rollover Animation = change color</p> <p>Home Label = Link = Goes to “1.0” Rollover Animation = glow</p> <p>Topic Menu Label = Link = 3.0 Rollover Animation = change color</p>
--	--	--	--	--

				<p>Dictionary Label = “ ” Link = Goes to “5.0” Rollover Animation = button glow</p> <p>Next Label = “ ” Link = 3.2.2.9 Rollover Animation = change color</p> <p>Previous Label = “ ” Link = 3.2.2.7 Rollover Animation = none</p> <p>*bullet buttons for photos: white – current selected bullet dark brown – with content gray – no content</p>
<p>Reference Number = 3.2.2.9</p> <p>Pantig ang</p>	<p>Content</p> <p>“ang”</p>	<p>Photograph</p> <p>Angkan Description = family clan Link = angkan voice over</p> <p>Standard photo Description = gray scale sound</p> <p>Standard photo Description = gray scale sound</p>	<p>Voice over</p> <p>ang Gender = female Level = adult Script = “ang”</p> <p>Angkan Gender = female Level = adult Script = “angkan”</p>	<p>Tang1 Label = “ ” Link = shows “angkan” text</p> <p>ang1 Label = “ ” Link = show Angkan photograph</p> <p>ang2 Label = “ ” Link = disabled</p> <p>ang3 Label = “ ” Link = disabled</p>

Reference Number = 3.2.2.9 Pantig eng	Content “eng”	Photograph Engkanto Description = mythical/folklore Filipino creature Link = engkanto voice over Standard photo Description = gray scale sound Standard photo Description = gray scale sound	Voice over eng Gender = female Level = adult Script = “eng” Engkanto Gender = female Level = adult Script = “engkanto”	Teng1 Label = “ ” Link = shows “ engkanto ” text eng1 Label = “●” Link = show Engkanto photograph eng2 Label = “●” Link = disabled eng3 Label = “●” Link = disabled
Reference Number = 3.2.2.9 Pantig ing	Content “ing”	Photograph Inggit Description = depicts envy Link = inggit voice over Standard photo Description = gray scale sound	Voice over ing Gender = female Level = adult Script = “ing” Inggit Gender = female Level = adult Script = “inggit”	Ting1 Label = “ ” Link = shows “ inggit ” text ing1 Label = “●” Link = show Inggit photograph ing2 Label = “●” Link = disabled

		Laing Description = laing dish Link = laing voice over	Laing Gender = female Level = adult Script = “laing”	Ting3 Label = “ ” Link = shows “laing” text ing3 Label = “●” Link = show Laing photograph
Reference Number = 3.2.2.9 Pantig ong	Content “ong”	Photograph Standard photo Description = gray scale sound Standard photo Description = gray scale sound Bagoong Description = shrimp paste Link = bagoong voice over	Voice over ong Gender = female Level = adult Script = “ong” Bagoong Gender = female Level = adult Script = “bagoong”	ong1 Label = “●” Link = disabled ong2 Label = “●” Link = disabled Tong3 Label = “ ” Link = shows “bagoong” text ong1 Label = “●” Link = show Bagoong photograph
Reference Number = 3.2.2.9 Pantig ung	Content “ung”	Photograph Unggoy Description = a picture of a monkey Link = unggoy voice over	Voice over ung Gender = female Level = adult Script = “ung” Unggoy Gender = female Level = adult Script = “unggoy”	Tun1 Label = “ ” Link = shows “unggoy” text

		<p>Standard photo Description = gray scale sound</p> <p>Standard photo Description = gray scale sound</p>	<p>ung1 Label = “●” Link = shows Unggoy photograph</p> <p>ung2 Label = “●” Link = disabled</p> <p>ung3 Label = “●” Link = disabled</p>
			<p>*Standard buttons below for 2- titik Pantig (Patinig-Katinig) Lesson</p> <p>ang Label = “ang” Link = Goes to “3.2.2.9, ang” Rollover Animation = change color</p> <p>eng Label = “eng” Link = Goes to “3.2.2.9, eng” Rollover Animation = change color</p> <p>ing Label = “ing” Link = Goes to “3.2.2.9, ing” Rollover Animation = change color</p> <p>ong Label = “ong” Link = Goes to “3.2.2.9 ong” Rollover Animation = change color</p> <p>ung Label = “ung” Link = Goes to “3.2.2.9, ung” Rollover Animation = change color</p>

De La Salle University

Home

Label =

Link = Goes to “1.0”

Rollover Animation = glow

Topic Menu

Label =

Link = 3.0

Rollover Animation = change color

Dictionary

Label =

Link = Goes to “5.0”

Rollover Animation = button glow

Next

Label =

Link = 3.2.2.10

Rollover Animation = change color

Previous

Label =

Link = 3.2.2.8

Rollover Animation = none

***bullet buttons for photos:**

○ white – current selected bullet

● dark brown – with content

● gray – no content

Reference Number = 3.2.2.10 Pantig ap	Content “ap”	Photograph Standard photo Description = gray scale sound Standard photo Description = gray scale sound Alapaap Description = bright blue sky Link = alapaap voice over	Voice over ap Gender = female Level = adult Script = “ap” Alapaap Gender = female Level = adult Script = “alapaap”	 ap1 Label = “●” Link = disabled ap2 Label = “●” Link = disabled Tap3 Label = “ ” Link = shows “alapaap” text ap3 Label = “●” Link = show Alapaap photograph
Reference Number = 3.2.2.10 Pantig ep	Content “ep”	Photograph Standard photo Description = gray scale sound Standard photo Description = gray scale sound Standard photo Description = gray scale sound	Voice over ep Gender = female Level = adult Script = “ep”	 ep1 Label = “●” Link = disabled ep2 Label = “●” Link = disabled ep3 Label = “●” Link = disabled

				Tep1 Label = “ ” Link = shows plain box (to cover the sound icon photo)
Reference Number = 3.2.2.10 Pantig ip	Content “ip”	Photograph Ip-ip Description = front legs of animals Link = ip-ip voice over Standard photo Description = gray scale sound Standard photo Description = gray scale sound	Voice over ip Gender = female Level = adult Script = “ip” Ip-ip Gender = female Level = adult Script = “ip-ip”	Tip1 Label = “ ” Link = shows “ ip-ip ” text ip1 Label = “●” Link = show Ip-ip photograph ip2 Label = “●” Link = disabled ip3 Label = “●” Link = disabled
Reference Number = 3.2.2.10 Pantig op	Content “op”	Photograph Optika Description = eye doctor Link = optika voice over	Voice over op Gender = female Level = adult Script = “op” Optika Gender = female Level = adult Script = “optika”	Top1 Label = “ ” Link = shows “ optika ” text op1 Label = “●” Link = show Optika photograph

		Standard photo Description = gray scale sound		op2 Label = “●” Link = disabled
		Standard photo Description = gray scale sound		op3 Label = “●” Link = disabled
Reference Number = 3.2.2.10 Pantig up	Content “up”	Photograph Standard photo Description = gray scale sound Standard photo Description = gray scale sound Standard photo Description = gray scale sound	Voice over up Gender = female Level = adult Script = “up”	 up1 Label = “●” Link = disabled up2 Label = “●” Link = disabled up3 Label = “●” Link = disabled Tup1 Label = “□” Link = shows plain box (to cover the sound icon photo)
				*Standard buttons below for 2- titik Pantig (Patinig-Katinig) Lesson ap Label = “ap” Link = Goes to “3.2.2.10, ap” Rollover Animation = change color ep Label = “ep” Link = Goes to “3.2.2.10, ep”

				<p>Rollover Animation = change color</p> <p>ip Label = “ip” Link = Goes to “3.2.2.10, ip” Rollover Animation = change color</p> <p>op Label = “op” Link = Goes to “3.2.2.10, op” Rollover Animation = change color</p> <p>up Label = “up” Link = Goes to “3.2.2.10, up” Rollover Animation = change color</p> <p>Home Label = “ The logo of De La Salle University, featuring a circular emblem with a star in the center and the words "UNIVERSITY OF THE SACS" around the perimeter.</p>
--	--	--	--	---

				Previous Label = “◀” Link = 3.2.2.9 Rollover Animation = none *bullet buttons for photos: ○ white – current selected bullet ● dark brown – with content ● gray – no content
Reference Number = 3.2.2.11 Pantig ar	Content “ar”	Photograph Artista Description = local filipinoactor Link = artista voice over Standard photo Description = gray scale sound Standard photo Description = gray scale sound	Voice over Ar Gender = female Level = adult Script = “ar” Artista Gender = female Level = adult Script = “artista”	Tar1 Label = “□” Link = shows “artista” text ar1 Label = “●” Link = show Artista photograph ar2 Label = “●” Link = disabled ar3 Label = “●” Link = disabled
Reference Number = 3.2.2.11 Pantig er	Content “er”	Photograph Ermita Description = Ermita street in Manila Link = ermita photograph	Voice over er Gender = female Level = adult Script = “er” Ermita Gender = female Level = adult Script = “ermita”	Ter1 Label = “□” Link = shows “ermita” text

		<p>Standard photo Description = gray scale sound</p> <p>Standard photo Description = gray scale sound</p>		<p>er1 Label = “●” Link = show Ermita photograph</p> <p>er2 Label = “●” Link = disabled</p> <p>er3 Label = “●” Link = disabled</p>
<p>Reference Number = 3.2.2.11</p> <p>Pantig ir</p>	<p>Content</p> <p>“ir”</p>	<p>Photograph</p> <p>Standard photo Description = gray scale sound</p> <p>Standard photo Description = gray scale sound</p> <p>Standard photo Description = gray scale sound</p>	<p>Voice over</p> <p>ir Gender = female Level = adult Script = “ir”</p>	<p>ir1 Label = “●” Link = disabled</p> <p>ir2 Label = “●” Link = disabled</p> <p>ir3 Label = “●” Link = disabled</p> <p>Tir1 Libel = “ ” Link = shows plain box (to cover the sound icon photo)</p>
<p>Reference Number = 3.2.2.11</p> <p>Pantig or</p>	<p>Content</p> <p>“or”</p>	<p>Photograph</p>	<p>Voice over</p> <p>or Gender = female Level = adult Script = “or”</p>

		Orkid Description = gray scale sound Link = orkid voice over Standard photo Description = gray scale sound Standard photo Description = gray scale sound	Orkid Gender = female Level = adult Script = “orkid”	Tor1 Label = “ ” Link = shows “orkid” text or1 Label = “●” Link = show Orkid photograph or2 Label = “●” Link = disabled or3 Label = “●” Link = disabled
Reference Number = 3.2.2.11 Pantig ur	Content “ur”	Photograph Urban Description = urban place Link = urban voice over Standard photo Description = gray scale sound Standard photo Description = gray scale sound	Voice over ur Gender = female Level = adult Script = “ur” Urban Gender = female Level = adult Script = “urban”	Tur1 Label = “ ” Link = shows “urban” text ur1 Label = “●” Link = show Urban photograph ur2 Label = “●” Link = disabled ur3 Label = “●” Link = disabled

				<p>*Standard buttons below for 2-titik Pantig (Patinig-Katinig) Lesson</p> <p>ar Label = “ar” Link = Goes to “3.2.2.11, ar” Rollover Animation = change color</p> <p>er Label = “er” Link = Goes to “3.2.2.11, er” Rollover Animation = change color</p> <p>ir Label = “ir” Link = Goes to “3.2.2.11, ir” Rollover Animation = change color</p> <p>or Label = “or” Link = Goes to “3.2.2.11, or” Rollover Animation = change color</p> <p>ur Label = “ur” Link = Goes to “3.2.2.11, ur” Rollover Animation = change color</p> <p>Home Label = Link = Goes to “1.0” Rollover Animation = glow</p> <p>Topic Menu Label = Link = 3.0 Rollover Animation = change color</p>
--	--	--	--	---

				<p>Dictionary Label = “ ” Link = Goes to “5.0” Rollover Animation = button glow</p> <p>Next Label = “ ” Link = 3.2.2.12 Rollover Animation = change color</p> <p>Previous Label = “ ” Link = 3.2.2.10 Rollover Animation = none</p> <p>*bullet buttons for photos: white – current selected bullet dark brown – with content gray – no content</p>
<p>Reference Number = 3.2.2.12</p> <p>Pantig as</p>	<p>Content</p> <p>“as”</p>	<p>Photograph</p> <p>Aspalto Description = close-up shot of an asphalt Link = aspalto voice over</p> <p>Standard photo Description = gray scale sound</p> <p>Standard photo Description = gray scale sound</p>	<p>Voice over</p> <p>as Gender = female Level = adult Script = “as”</p> <p>Aspalto Gender = female Level = adult Script = “aspalto”</p>	<p>Tas1 Label = “ ” Link = shows “aspalto” text</p> <p>as1 Label = “ ” Link = shows Aspalto photograph</p> <p>as2 Label = “ ” Link = disabled</p> <p>as3 Label = “ ” Link = disabled</p>

De La Salle University

Reference Number = 3.2.2.12 Pantig es	Content “es”	Photograph Eskuwelahan Description = a picture of a school Link = eskuwelahan voice over Standard photo Description = gray scale sound Standard photo Description = gray scale sound	Voice over es Gender = female Level = adult Script = “es” Eskuwelahan Gender = female Level = adult Script = “eskuwelahan”	Tes1 Label = “ ” Link = shows “eskuwelahan” es1 Label = “●” Link = shows Eskuwelahan photograph es2 Label = “●” Link = disabled es3 Label = “●” Link = disabled
Reference Number = 3.2.2.12 Pantig is	Content “is”	Photograph Isda Description = a picture of a fish Link = isda voice over Standard photo Description = gray scale sound	Voice over is Gender = female Level = adult Script = “is” Isda Gender = female Level = adult Script = “isda”	Tis1 Label = “ ” Link = shows “isda” photo is1 Label = “●” Link = shows Isda photograph is2 Label = “●” Link = disabled

		Standard photo Description = gray scale sound		is3 Label = “●” Link = disabled
Reference Number = 3.2.2.12 Pantig os	Content “os”	Photograph Ospital Description = a picture of a hospital Link = ospital voice over Standard photo Description = gray scale sound Standard photo Description = gray scale sound	Voice over os Gender = female Level = adult Script = “os” Ospital Gender = female Level = adult Script = “ospital”	 Tas1 Label = “ ☐ ” Link = shows “ospital” photo os1 Label = “●” Link = shows ospital os2 Label = “●” Link = disabled os3 Label = “●” Link = disabled
Reference Number = 3.2.2.12 Pantig us	Content “us”	Photograph Usli Description = nails through a piece of wood Link = usli voice over	Voice over us Gender = female Level = adult Script = “us” Usli Gender = female Level = adult Script = “usli”	 Tus1 Label = “ ☐ ” Link = shows “usli” text us1 Label = “●” Link = show Usli photograph

De La Salle University

		Standard photo Description = gray scale sound		us2 Label = “●” Link = disabled us3 Label = “●” Link = disabled
				*Standard buttons below for 2- titik Pantig (Patinig-Katinig) Lesson as Label = “as” Link = Goes to “3.2.2.12, as” Rollover Animation = change color es Label = “es” Link = Goes to “3.2.2.12, es” Rollover Animation = change color is Label = “is” Link = Goes to “3.2.2.12, is” Rollover Animation = change color os Label = “os” Link = Goes to “3.2.2.12, os” Rollover Animation = change color us Label = “us” Link = Goes to “3.2.2.12, us” Rollover Animation = change color

				<p>Home Label = Link = Goes to “1.0” Rollover Animation = glow</p> <p>Topic Menu Label = Link = 3.0 Rollover Animation = change color</p> <p>Dictionary Label = Link = Goes to “5.0” Rollover Animation = button glow</p> <p>Next Label = “ ” Link = 3.2.2.13 Rollover Animation = change color</p> <p>Previous Label = “ ” Link = 3.2.2.11 Rollover Animation = none</p> <p>*bullet buttons for photos: ○ white – current selected bullet ● dark brown – with content ● gray – no content</p>
--	--	--	--	--

Reference Number = 3.2.2.13 Pantig at	Content “at”	Photograph Atleta Description = athlete Link = atleta voice over Standard photo Description = gray scale sound Laat Description = cracks Link = laat voice over	Voice over at Gender = female Level = adult Script = “at” Atleta Gender = female Level = adult Script = “atleta” Laat Gender = female Level = adult Script = “laat”	Tat1 Label = “ ” Link = shows “atleta” text at1 Label = “●” Link = show Atleta photograph at2 Label = “●” Link = disabled Tat3 Label = “ ” Link = shows “laat” text at3 Label = “●” Link = show Laat photograph
Reference Number = 3.2.2.13 Pantig et	Content “et”	Photograph Etsake Description = person reasoning out Link = etsake photograph Standard photo Description = gray scale sound	Voice over et Gender = female Level = adult Script = “et” Etsake Gender = female Level = adult Script = “etsake”	Tet1 Label = “ ” Link = shows “etsake” text et1 Label = “●” Link = show Etsake photograph et2 Label = “●” Link = disabled

		Standard photo Description = gray scale sound		et3 Label = “●” Link = disabled
Reference Number = 3.2.2.13 Pantig it	Content “it”	Photograph Itlog Description = a picture of an egg Link = itlog voice over Standard photo Description = gray scale sound Liit Description = relative size of a small object Link = liit voice over	Voice over it Gender = female Level = adult Script = “it” Itlog Gender = female Level = adult Script = “itlog” Liit Gender = female Level = adult Script = “liit”	Tit1 Label = “ ” Link = shows “itlog” text it1 Label = “●” Link = shows Itlog photograph it2 Label = “●” Link = disabled Tit3 Label = “ ” Link = shows “liit” text it3 Label = “●” Link = shows Liit photograph
Reference Number = 3.2.2.13 Pantig ot	Content “ot”	Photograph Otmil Description = oatmeal in a bowl Link = otmil voice over	Voice over ot Gender = female Level = adult Script = “ot” Otmil Gender = female Level = adult Script = “otmil”	Tot1 Label = “ ” Link = shows “otmil” text

De La Salle University

		<p>Standard photo Description = gray scale sound</p> <p>Laot Description = far part of an ocean Link = laot voice over</p>	<p>Laot Gender = female Level = adult Script = “laot”</p>	<p>ot1 Label = “●” Link = shows Ottil photograph</p> <p>ot2 Label = “●” Link = disabled</p> <p>Tot3 Label = “☐” Link = shows “laot” text</p> <p>ot3 Label = “●” Link = shows Laot photograph</p>
<p>Reference Number = 3.2.2.13</p> <p>Pantig ut</p>	<p>Content “ut”</p>	<p>Photograph</p> <p>Ut-ot Description = mother giving a breastfeed to her child Link = ut-ot voice over</p> <p>Standard photo Description = gray scale sound</p> <p>Standard photo Description = gray scale sound</p>	<p>Voice over</p> <p>ut Gender = female Level = adult Script = “ut”</p> <p>Ut-ot Gender = female Level = adult Script = “ut-ot”</p>	<p>Tut1 Label = “☐” Link = shows “ut-ot” text</p> <p>ut1 Label = “●” Link = shows Ut-ot photograph</p> <p>ut2 Label = “●” Link = disabled</p> <p>ut3 Label = “●” Link = disabled</p>

				<p>*Standard buttons below for 2-titik Pantig (Patinig-Katinig) Lesson</p> <p>at Label = “at” Link = Goes to “3.2.2.13, at” Rollover Animation = change color</p> <p>et Label = “et” Link = Goes to “3.2.2.13, et” Rollover Animation = change color</p> <p>it Label = “it” Link = Goes to “3.2.2.13, it” Rollover Animation = change color</p> <p>ot Label = “ot” Link = Goes to “3.2.2.13, ot” Rollover Animation = change color</p> <p>ut Label = “ut” Link = Goes to “3.2.2.13, ut” Rollover Animation = change color</p> <p>Home Label = Link = Goes to “1.0” Rollover Animation = glow</p> <p>Topic Menu Label = Link = 3.0 Rollover Animation = change color</p>
--	--	--	--	---

				<p>Dictionary Label = “ ” Link = Goes to “5.0” Rollover Animation = button glow</p> <p>Next Label = “ ” Link = 3.2.2.14 Rollover Animation = change color</p> <p>Previous Label = “ ” Link = 3.2.2.12 Rollover Animation = none</p> <p>*bullet buttons for photos: white – current selected bullet dark brown – with content gray – no content</p>
<p>Reference Number = 3.2.2.14</p> <p>Pantig aw</p>	<p>Content</p> <p>“aw”</p>	<p>Photograph</p> <p>Araw Description = photo of a sun Link = araw voice over</p> <p>Kalabaw Description = carabao on grass Link = kalabaw voice over</p>	<p>Voice over aw Gender = female Level = adult Script = “aw”</p> <p>Araw Gender = female Level = adult Script = “Araw”</p> <p>Kalabaw Gender = female Level = adult Script = “kalabaw”</p>	<p>Button</p> <p>Taw1 Label = “ ” Link = shows “araw” text</p> <p>aw1 Label = “ ” Link = shows Araw photograph</p> <p>Taw2 Label = “ ” Link = shows “kalabaw” text</p> <p>Aw2 Label = “ ” Link = shows Kalabaw photograph</p>

		Sayaw Description = group of people dancing Link = sayaw voice over	Sayaw Gender = female Level = adult Script = “sayaw”	Taw3 Label = “ ” Link = shows “sayaw” text Aw3 Label = “●” Link = shows Sayaw photograph
Reference Number = 3.2.2.14 Pantig ew	Content “ew”	Photograph Standard photo Description = gray scale sound Standard photo Description = gray scale sound Standard photo Description = gray scale sound	Voice over ew Gender = female Level = adult Script = “ew”	ew1 Label = “●” Link = disabled ew2 Label = “●” Link = disabled ew3 Label = “●” Link = disabled Tew1 Label = “ ” Link = shows plain box (to cover the sound icon photo)
Reference Number = 3.2.2.14 Pantig iw	Content “iw”	Photograph Laiw Description = a person showing sadness Link = laiw voice over	Voice over iw Gender = female Level = adult Script = “iw” Laiw Gender = female Level = adult Script = “laiw”	Tiw1 Label = “ ” Link = shows “laiw” text iw1 Label = “●” Link = shows Laiw photograph

		<p>Baliw Description = taong grasa Link = baliw voice over</p> <p>Sisiw Description = yellow chick Link = sisiw voice over</p>	<p>Baliw Gender = female Level = adult Script = “baliw”</p> <p>Sisiw Gender = female Level = adult Script = “sisiw”</p>	<p>Tiw2 Label = “ ” Link = shows “baliw” text</p> <p>Iw2 Label = “●” Link = shows Baliw photograph</p> <p>Tiw3 Label = “ ” Link = shows “sisiw” text</p> <p>Iw3 Label = “●” Link = shows Sisiw photograph</p>
<p>Reference Number = 3.2.2.14</p> <p>Pantig ow</p>	<p>Content</p> <p>“ow”</p>	<p>Photograph</p> <p>Standard photo Description = gray scale sound</p> <p>Standard photo Description = gray scale sound</p> <p>Standard photo Description = gray scale sound</p>	<p>Voice over</p> <p>ow Gender = female Level = adult Script = “ow”</p>	<p>ow1 Label = “●” Link = disabled</p> <p>ow2 Label = “●” Link = disabled</p> <p>ow3 Label = “●” Link = disabled</p> <p>Tow1 Label = “ ” Link = shows plain box (to cover the sound icon photo)</p>
<p>Reference Number = 3.2.2.14</p> <p>Pantig uw</p>	<p>Content</p> <p>“uw”</p>	<p>Photograph</p>	<p>Voice over</p> <p>uw Gender = female Level = adult Script = “uw”</p>

		<p>Standard photo Description = gray scale sound</p> <p>Standard photo Description = gray scale sound</p> <p>Standard photo Description = gray scale sound</p>		<p>uw1 Label = “●” Link = disabled</p> <p>uw2 Label = “●” Link = disabled</p> <p>uw3 Label = “●” Link = disabled</p> <p>Tuw1 Label = “□” Link = shows plain box (to cover the sound icon photo)</p>
				<p>*Standard buttons below for 2- titik Pantig (Patinig-Katinig) Lesson</p> <p>aw Label = “aw” Link = Goes to “3.2.2.14, aw” Rollover Animation = change color</p> <p>ew Label = “ew” Link = Goes to “3.2.2.14, ew” Rollover Animation = change color</p> <p>iw Label = “iw” Link = Goes to “3.2.2.14, iw” Rollover Animation = change color</p> <p>ow Label = “ow” Link = Goes to “3.2.2.14, ow” Rollover Animation = change color</p>

				<p>uw Label = “uw” Link = Goes to “3.2.2.14, uw” Rollover Animation = change color</p> <p>Home Label = Link = Goes to “1.0” Rollover Animation = glow</p> <p>Topic Menu Label = Link = 3.0 Rollover Animation = change color</p> <p>Dictionary Label = Link = Goes to “5.0” Rollover Animation = button glow</p> <p>Next Label = “➡” Link = 3.2.2.15 Rollover Animation = change color</p> <p>Previous Label = “⬅” Link = 3.2.2.13 Rollover Animation = none</p> <p>*bullet buttons for photos: ○ white – current selected bullet ● dark brown – with content ● gray – no content</p>
--	--	--	--	---

De La Salle University

Reference Number = 3.2.2.15 Pantig ay	Content “ay”	Photograph Liay Description = body twist Link = liay voice over Bantay Description = guard dog Link = bantay voice over Kilay Description = close-up shot of an eyebrow Link = kilay voice over	Voice over ay Gender = female Level = adult Script = “ay” Liay Gender = female Level = adult Script = “liay” Bantay Gender = female Level = adult Script = “bantay” Kilay Gender = female Level = adult Script = “ay”	Button Tay1 Label = “ ☐ ” Link = shows “liay” text ay1 Label = “●” Link = shows Liay photograph Tay2 Label = “ ☐ ” Link = shows “bantay” text ay2 Label = “●” Link = shows Bantay photograph Tay3 Label = “ ☐ ” Link = shows “kilay” text ay3 Label = “●” Link = shows Kilay photograph
Reference Number = 3.2.2.15 Pantig ey	Content “ey”	Photograph Standard photo Description = gray scale sound Keyk Description = birthday cake Link = keyk voice over	Voice over ey Gender = female Level = adult Script = “ey” Keyk Gender = female Level = adult Script = “keyk”	 ey1 Label = “●” Link = disabled Tey2 Label = “ ☐ ” Link = shows “keyk” text

		Standard photo Description = gray scale sound		ey2 Label = “●” Link = shows Keyk photograph ey3 Label = “●” Link = disabled
Reference Number = 3.2.2.15 Pantig iy	Content “iy”	Photograph Standard photo Description = gray scale sound Standard photo Description = gray scale sound Standard photo Description = gray scale sound	Voice over iy Gender = female Level = adult Script = “iy”	 iy1 Label = “●” Link = disabled iy2 Label = “●” Link = disabled iy3 Label = “●” Link = disabled Tiy1 Label = “□” Link = shows plain box (to cover the sound icon photo)
Reference Number = 3.2.2.15 Pantig oy	Content “oy”	 Standard photo Description = gray scale sound	Voice over oy Gender = female Level = adult Script = “oy”	 oy1 Label = “●” Link = disabled

		Standard photo Description = gray scale sound Unggoy Description = monkey in a cage Link = unggoy voice over	Unggoy Gender = female Level = adult Script = “unggoy”	oy2 Label = “●” Link = disabled Toy3 Label = “ ” Link = shows “unggoy” text oy3 Label = “●” Link = shows Unggoy photograph
Reference Number = 3.2.2.15 Pantig uy	Content “uy”	Photograph Standard photo Description = gray scale sound Standard photo Description = gray scale sound Kasuy Description = kasuy Link = kasuy voice over	Voice over uy Gender = female Level = adult Script = “uy” Kasuy Gender = female Level = adult Script = “kasuy”	uy1 Label = “●” Link = disabled uy2 Label = “●” Link = disabled Tuy3 Label = “ ” Link = shows “kasuy” text uy3 Label = “●” Link = shows Kasuy photograph
				*Standard buttons below for 2- titik Pantig (Patinig-Katinig) Lesson ay Label = “ay” Link = Goes to “3.2.2.15, ay” Rollover Animation = change color

				<p>ey Label = “ey” Link = Goes to “3.2.2.15, ey” Rollover Animation = change color</p> <p>iy Label = “iy” Link = Goes to “3.2.2.15, iy” Rollover Animation = change color</p> <p>oy Label = “oy” Link = Goes to “3.2.2.15, oy” Rollover Animation = change color</p> <p>uy Label = “uy” Link = Goes to “3.2.2.15, uy” Rollover Animation = change color</p> <p>Home Label = Link = Goes to “1.0” Rollover Animation = glow</p> <p>Topic Menu Label = Link = 3.0 Rollover Animation = change color</p> <p>Dictionary Label = Link = Goes to “5.0” Rollover Animation = button glow</p> <p>Next Label = Link = disabled</p>
--	--	--	--	---

De La Salle University

				Rollover Animation = change color Previous Label = “◀” Link = 3.2.2.14 Rollover Animation = none *bullet buttons for photos: ○ white – current selected bullet ● dark brown – with content ● gray – no content
Reference Number = 3.3.1.1	Content “bun” “bundok” “buntis”	Photograph Bundok Description = photo of a mountain Link = Bundok voice over Bundok Description = photo of a mountain Link = Bundok voice over	Voice Over bun Gender = Female Level = adult Script = “bun” Bundok Gender = Female Level = adult Script = “bundok” Buntis Gender = Female Level = adult Script = “buntis”	Button Tbun1 Label = “□” Link = shows “bundok” text bun1 Label = “●” Link = shows Bundok photograph Tbun2 Label = “□” Link = shows “buntis” text buntis Label = “●” Link = shows Buntis photograph
Reference Number = 3.3.1.2	Content “lat”	Photograph	Voice Over lat Gender = Female Level = adult Script = “lat”	Button

	<p>“aklat”</p> <p>“sulat”</p> <p>“balat”</p>	<p>Aklat Description = photo of a book Link = Aklat voice over</p> <p>Sulat Description = photo of a person writing Link = Sulat voice over</p> <p>Balat Description = close-up of skin Link = Balat voice over</p>	<p>Aklat Gender = Female Level = adult Script = “aklat”</p> <p>Sulat Gender = Female Level = adult Script = “sulat”</p> <p>Balat Gender = Female Level = adult Script = “balat”</p>	<p>Tlat1 Label = “ ” Link = shows “aklat” text</p> <p>aklat Label = “●” Link = shows Aklat photograph</p> <p>Tlat2 Label = “ ” Link = shows “sulat” text</p> <p>sulat Label = “●” Link = shows Sulat photograph</p> <p>Tlat3 Label = “ ” Link = shows “balat” text</p> <p>balat Label = “●” Link = shows Balat photograph</p>
Reference Number = 3.3.1.3	Content	Photograph	Voice Over	Button
	<p>“lay”</p> <p>“gulay”</p> <p>“kilay”</p>	<p>Gulay Description = photo of various vegetables Link = Gulay voice over</p> <p>Kilay Description = close-up photo of an eyebrow Link = Kilay voice over</p>	<p>lay Gender = Female Level = adult Script = “lay”</p> <p>Gulay Gender = Female Level = adult Script = “gulay”</p> <p>Kilay Gender = Female Level = adult Script = “kilay”</p>	<p>Tlay1 Label = “ ” Link = shows “gulay” text</p> <p>gulay Label = “●” Link = shows Gulay photograph</p> <p>Tlay2 Label = “ ” Link = shows “kilay” text</p>

	“suklay”	Suklay Description = close-up shot of comb Link = Suklay voice over	Suklay Gender = Female Level = adult Script = “suklay”	kilay Label = “●” Link = shows Kilay photograph Tlay3 Label = “□” Link = shows “suklay” text suklay Label = “●” Link = shows Suklay photograph and text
Reference Number = 3.3.1.4	Content “lis” “pulis” “walis”	Photograph Pulis Description = photo of a local policeman Link = Pulis voice over Walis Description = photo of a broom Link = Walis voice over	Voice Over lis Gender = Female Level = adult Script = “lis” Pulis Gender = Female Level = adult Script = “pulis” Walis Gender = Female Level = adult Script = “walis”	Button Tlis1 Label = “□” Link = shows “pulis” text pulis Label = “●” Link = shows Pulis photograph Tlis2 Label = “□” Link = shows “walis” text pulis Label = “●” Link = shows Walis photograph
Reference Number = 3.3.1.5	Content “log”	Photograph	Voice Over log Gender = Female Level = adult Script = “log”	Button

	<p>“itlog”</p> <p>“tulog”</p> <p>“hulog”</p>	<p>Itlog Description = close-up shot of an egg Link = Itlog voice over</p> <p>Tulog Description = photo of a person sleeping Link = Tulog voice over</p> <p>Hulog Description = photo of a person falling Link = Hulog voice over</p>	<p>Itlog Gender = Female Level = adult Script = “itlog”</p> <p>Tulog Gender = Female Level = adult Script = “tulog”</p> <p>Hulog Gender = Female Level = adult Script = “hulog”</p>	<p>Tlog1 Label = “ ” Link = shows “itlog” text</p> <p>hulog Label = “ ” Link = shows Itlog photograph</p> <p>Tlog2 Label = “ ” Link = shows “tulog” text</p> <p>tulog Label = “ ” Link = shows Tulog photograph</p> <p>Tlog3 Label = “ ” Link = shows “hulog” text</p> <p>tulog Label = “ ” Link = shows Hulog photograph</p>
				<p>*Standard buttons below for 3-titik Pantig (Katinig-Patinig-Katinig) Lesson</p> <p>bun Label = “bun” Link = Goes to “3.3.1.1, bun” Rollover Animation = change color</p> <p>lat Label = “lat” Link = Goes to “3.3.1.2, lat” Rollover Animation = change color</p> <p>lay Label = “lay” Link = Goes to “3.3.1.2, lay”</p>

				<p>Rollover Animation = change color</p> <p>lis</p> <p>Label = “oy”</p> <p>Link = Goes to “3.3.1.2, lis”</p> <p>Rollover Animation = change color</p> <p>log</p> <p>Label = “uy”</p> <p>Link = Goes to “3.3.1.2, log”</p> <p>Rollover Animation = change color</p> <p>Home</p> <p>Label = “ ”</p> <p>Link = Goes to “1.0”</p> <p>Rollover Animation = glow</p> <p>Topic Menu</p> <p>Label = “ ”</p> <p>Link = 3.0</p> <p>Rollover Animation = change color</p> <p>Dictionary</p> <p>Label = “ ”</p> <p>Link = Goes to “5.0”</p> <p>Rollover Animation = button glow</p> <p>Next</p> <p>Label = “ ”</p> <p>Link = Goes to “3.3.1.6”</p> <p>Rollover Animation = change color</p> <p>Previous</p> <p>Label = “ ”</p> <p>Link = disabled</p>
--	--	--	--	--

De La Salle University

				*bullet buttons for photos: ○ white – current selected bullet ● dark brown – with content ● gray – no content
Reference Number = 3.3.1.6	Content “hon” “dahon” “kahon”	Photograph Dahon Description = close-up shot of a leaf Link = Dahon voice over Kahon Description = photo of a box Link = Kahon voice over	Voice Over hon Gender = Female Level = adult Script = “hon” Dahon Gender = Female Level = adult Script = “dahon” Kahon Gender = Female Level = adult Script = “kahon”	Button Thon1 Label = “ ” Link = shows “dahon” text dahon Label = “ ” Link = shows Dahon photograph Thon2 Label = “ ” Link = shows “kahon” text kahon Label = “ ” Link = shows Kahon photograph
Reference Number = 3.3.1.7	Content “may” “kamay”	Photograph Kamay Description = close-up shot of a hand Link = Kamay voice over	Voice Over may Gender = Female Level = adult Script = “may” Kamay Gender = Female Level = adult Script = “kamay”	Button Tmay1 Label = “ ” Link = shows “kamay” text kamay Label = “ ” Link = shows Kamay photograph

De La Salle University

	“pamaypay”	Pamaypay Description = photo of a fan Link = Pamaypay voice over	Pamaypay Gender = Female Level = adult Script = “pamaypay”	Tmay2 Label = “ ” Link = shows “pamaypay” text pamaypay Label = “ ” Link = shows Pamaypay photograph
Reference Number = 3.3.1.8	Content “mit” “damit” “gamit”	Photograph Damit Description = close-up shot of a blouse Link = Damit voice over Gamit Description = various items Link = Gamit voice over	Voice Over mit Gender = Female Level = adult Script = “mit” Damit Gender = Female Level = adult Script = “damit” Gamit Gender = Female Level = adult Script = “gamit”	Button Tmit1 Label = “ ” Link = shows “damit” text damit Label = “ ” Link = shows Damit photograph Tmit2 Label = “ ” Link = shows “gamit” text gamit Label = “ ” Link = shows Gamit photograph
Reference Number = 3.3.1.9	Content “mot” “gamot”	Photograph Gamot Description = photo of any medicine Link = Gamot voice over	Voice Over mot Gender = Female Level = adult Script = “mot” Gamot Gender = Female Level = adult Script = “gamot”	Button Tmot1 Label = “ ” Link = shows “gamot” text

	“kumot”	Kumot Description = photo of a blanket Link = Kumot voice over	Kumot Gender = Female Level = adult Script = “kumot”	gamot Label = “●” Link = shows Gamot photograph Tmot1 Label = “□” Link = shows “kumot” text kumot Label = “●” Link = shows Kumot photograph
Reference Number = 3.3.1.10	Content “nim” “anim” “tanim”	Photograph Anim Description = 6 fingers being shown Link = Anim voice over Tanim Description = photo of a plant with garden tools on the side Link = Tanim voice over	Voice Over nim Gender = Female Level = adult Script = “nim” Anim Gender = Female Level = adult Script = “anim” Tanim Gender = Female Level = adult Script = “tanim”	Button Tnim1 Label = “□” Link = shows “anim” text anim Label = “●” Link = shows Anim photograph Tnim2 Label = “□” Link = shows “tanim” text tanim Label = “●” Link = shows Tanim
				*Standard buttons below for 3-titik Pantig (Katinig-Patinig-Katinig) Lesson hon Label = “hon” Link = Goes to “3.3.1.6, hon” Rollover Animation = change color

				<p>may Label = “may” Link = Goes to “3.3.1.7, may” Rollover Animation = change color</p> <p>mit Label = “mit” Link = Goes to “3.3.1.8, mit” Rollover Animation = change color</p> <p>mot Label = “mot” Link = Goes to “3.3.1.9, mot” Rollover Animation = change color</p> <p>nim Label = “nim” Link = Goes to “3.3.1.10 nim” Rollover Animation = change color</p> <p>Home Label = “ ” Link = Goes to “1.0” Rollover Animation = glow</p> <p>Topic Menu Label = “ ” Link = 3.0 Rollover Animation = change color</p> <p>Dictionary Label = “ ” Link = Goes to “5.0” Rollover Animation = button glow</p>
--	--	--	--	--

				<p>Next Label = “➡” Link = Goes to “3.3.1.11” Rollover Animation = change color</p> <p>Previous Label = “⬅” Link = Goes to “3.3.1.1” Rollover Animation = change color</p> <p>*bullet buttons for photos: ○ white – current selected bullet ● dark brown – with content ● gray – no content</p>
Reference Number = 3.3.1.11	Content	Photograph	Voice Over	Button
	“ril”		ril Gender = Female Level = adult Script = “ril”	
	“baril”	Baril Description = any photo of a gun Link = Baril voice over	Baril Gender = Female Level = adult Script = “baril”	Tril1 Label = “□” Link = shows “baril” text
	“sigarilyo”	Sigarilyo Description = photo of a cigarette Link = Sigarilyo voice over	Sigarilyo Gender = Female Level = adult Script = “sigarilyo”	baril Label = “●” Link = shows Baril photograph
				Tril2 Label = “□” Link = shows “sigarilyo” text
				sigarilyo Label = “●” Link = shows Sigarilyo photograph

Reference Number = 3.3.1.12	Content “sin” “asin” “sindi”	Photograph Asin Description = photo of table salt Link = Asin voice over Sindi Description = photo of lit lighter Link = Sindi voice over	Voice Over sin Gender = Female Level = adult Script = “sin” Asin Gender = Female Level = adult Script = “asin” Sindi Gender = Female Level = adult Script = “sindi”	Button Tsin1 Label = “ ” Link = shows “asin” text asin Label = “●” Link = shows Asin photograph Tsin2 Label = “ ” Link = shows “sindi” text sindi Label = “●” Link = shows Sindi photograph
Reference Number = 3.3.1.13	Content “tak” “takbo” “utak”	Photograph Takbo Description = photo of a person running Link = Takbo voice over Utak Description = photo of a brain model Link = Utak voice over	Voice Over tak Gender = Female Level = adult Script = “tak” Takbo Gender = Female Level = adult Script = “takbo” Utak Gender = Female Level = adult Script = “utak”	Button Ttak1 Label = “ ” Link = shows “takbo” text takbo Label = “●” Link = shows Takbo photograph Ttak2 Label = “ ” Link = shows “utak” text

				utak Label = “●” Link = shows Utak photograph
Reference Number = 3.3.1.14	Content “tas” “gatas” “prutas”	Photograph Gatas Description = photo of a milk in a glass Link = Gatas voice over Prutas Description = photo of various fruits Link = Prutas voice over	Voice Over tas Gender = Female Level = adult Script = “tas” Gatas Gender = Female Level = adult Script = “gatas” Prutas Gender = Female Level = adult Script = “prutas”	Button Ttas1 Label = “ ” Link = shows “gatas” text gatas Label = “●” Link = shows Gatas photograph Ttas2 Label = “ ” Link = shows “prutas” text prutas Label = “●” Link = shows Prutas photograph
Reference Number = 3.3.1.15	Content “tin” “tindero”	Photograph Tindero Description = photo of a male vendor Link = Tindera voice over	Voice Over tin Gender = Female Level = adult Script = “tin” Tindera Gender = Female Level = adult Script = “tindero”	Button Ttin1 Label = “ ” Link = shows “tindero” text tindero Label = “●” Link = shows Tindero photograph

De La Salle University

	“tindahan”	Tindahan Description = photo of a sari-sari store Link = Tindahan voice over	Tindahan Gender = Female Level = adult Script = “tindahan”	Ttin2 Label = “ ” Link = shows “tindahan” text tindahan Label = “●” Link = shows Tindahan photograph
	*Note: The same flow goes for the rest of the Katinig-Patinig-Katinig / Kluster Pantig (See Appendix C – Tatlong Pantig, for the complete set of Pantig)			<p>*Standard buttons below for 3-titik Pantig (Katinig-Patinig-Katinig) Lesson</p> <p>ril Label = “ril” Link = Goes to “3.3.1.11, ril” Rollover Animation = change color</p> <p>sin Label = “sin” Link = Goes to “3.3.1.12, sin” Rollover Animation = change color</p> <p>tak Label = “tak” Link = Goes to “3.3.1.13, tak” Rollover Animation = change color</p> <p>tas Label = “tas” Link = Goes to “3.3.1.14, tas” Rollover Animation = change color</p> <p>tin Label = “tin” Link = Goes to “3.3.1.15 tin” Rollover Animation = change color</p>

				<p>Home Label = Link = Goes to “1.0” Rollover Animation = glow</p> <p>Topic Menu Label = Link = 3.0 Rollover Animation = change color</p> <p>Dictionary Label = Link = Goes to “5.0” Rollover Animation = button glow</p> <p>Next Label = “➡” Link = disabled</p> <p>Previous Label = “⬅” Link = Goes to “3.3.1.6” Rollover Animation = change color</p> <p>*bullet buttons for photos: ○ white – current selected bullet ● dark brown – with content ● gray – no content</p>
--	--	--	--	---

<p>Reference Number = 4.0</p> <p>Salita</p>	<p>Title = “Salita”</p> <p>*See Appendix C-7 (Hulapi-Unlapi / Unlapi-Hulapi) for complete set of words</p> <p>*See Appendix C-7 (Simpleng Manipulasyon) for complete set of words</p> <p>*See Appendix C-8 to C-10 (Mga Salita) for complete set of words</p>			<p>Button</p> <p>HU Label= “Hulapi-Unlapi, Unlapi-Hulapi” Rollover Animation = change color Link = 4.1 (displays 10 sets for Hulapi-Unlapi/Unlapi-Hulapi)</p> <p>SM Label= “Simpleng Manipulasyon” Rollover Animation = change color Link = 4.1(displays 10 sets for simpleng manipulasyon)</p> <p>MS Label = “Mga Salita” Rollover Animation = change color Link = 4.2</p> <p>Home Label = “ ” Link = Goes to “1.0” Rollover Animation = glow</p> <p>Topic Menu Label = “ ” Link = 4.0 Rollover Animation = change color</p> <p>Dictionary Label = “ ” Link = Goes to “5.0” Rollover Animation = button glow</p>
---	---	--	--	--

				*bullet buttons for photos: ○ white – current selected bullet ● dark brown – with content ● gray – no content
Reference Number = 4.1 Hulapi-Unlapi / Unlapi-Hulapi (HU-UH)	Content Word1 Content = “lata” Word2 Content = “tama” Word3 Content = “mahaba”	Visuals	Audio lata Gender = female Level = adult Script = “lata” tama Gender = female Level = adult Script = “tama” mahaba Gender = female Level = adult Script = “mahaba”	Button lata Label = “ta” Link = Goes to 4.1 HU-UH – set 1, word 2 Rollover Animation = highlight Lata sound Label = “(P)” Link = plays “lata” sound tama1 Label = “ta” Link = Goes to 4.1 HU-UH – set 1, word 1 Rollover Animation = highlight tama2 Label = “ma” Link = Goes to 4.1 HU-UH – set 1, word 3 Rollover Animation = highlight Tama sound Label = “(P)” Link = plays “tama” sound mahaba1 Label = “ma” Link = Goes to 4.1 HU-UH – set 1, word 2 Rollover Animation = highlight mahaba2 Label = “ba” Link = Goes to 4.1 HU-UH – set 1, word 4 Rollover Animation = highlight

	<p>Word4 Content = “baka”</p>		<p>baka Gender = female Level = adult Script = “baka”</p>	<p>Mahaba sound Label = “(♫)” Link = plays “mahaba” sound</p> <p>baka1 Label = “ba” Link = Goes to 4.1 HU-UH – set 1, word 3 Rollover Animation = highlight</p> <p>baka2 Label = “ka” Link = Goes to 4.1 HU-UH – set 1, word 5 Rollover Animation = highlight</p> <p>Baka sound Label = “(♫)” Link = plays “baka” sound</p>
	<p>Word5 Content = “kama”</p>		<p>kama Gender = female Level = adult Script = “kama”</p>	<p>kama1 Label = “ka” Link = Goes to 4.1 HU-UH – set 1, word 4 Rollover Animation = highlight</p> <p>kama2 Label = “ma” Link = Goes to 4.1 HU-UH – set 1, word 6 Rollover Animation = highlight</p> <p>Kama sound Label = “(♫)” Link = plays “kama” sound</p>
	<p>Word6 Content = “mata”</p>		<p>mata Gender = female Level = adult Script = “mata”</p>	<p>mata1 Label = “ma” Link = Goes to 4.1 HU-UH – set 1, word 5 Rollover Animation = highlight</p>

	<p>Word7 Content = “tawa”</p>		<p>tawa Gender = female Level = adult Script = “tawa”</p>	<p>Mata2 Label = “ta” Link = Goes to 4.1 HU-UH – set 1, word 7 Rollover Animation = highlight</p> <p>Mata sound Label = “(♣)” Link = plays “mata” sound</p> <p>Tawa1 Label = “ta” Link = Goes to 4.1 HU-UH – set 1, word 6 Rollover Animation = highlight</p> <p>Tawa2 Label = “wa” Link = Goes to 4.1 HU-UH – set 1, word 8 Rollover Animation = highlight</p> <p>Tawa sound Label = “(♣)” Link = plays “tawa” sound</p> <p>Wala1 Label = “wa” Link = Goes to 4.1 HU-UH – set 1, word 7 Rollover Animation = highlight</p> <p>Wala1 Label = “wa” Link = Goes to 4.1 HU-UH – set 1, word 9 Rollover Animation = highlight</p> <p>Wala sound Label = “(♣)” Link = plays “wala” sound</p>
	<p>Word8 Content = “wala”</p>		<p>wala Gender = female Level = adult Script = “wala”</p>

	<p>Word9 Content = “laba”</p> <p>Word10 Content = “babae”</p>		<p>laba Gender = female Level = adult Script = “laba”</p> <p>babae Gender = female Level = adult Script = “babae”</p>	<p>Laba1 Label = “la” Link = Goes to 4.1 HU-UH – set 1, word 8 Rollover Animation = highlight</p> <p>Laba2 Label = “ba” Link = Goes to 4.1 HU-UH – set 1, word 10 Rollover Animation = highlight</p> <p>Laba sound Label = “(🔊)” Link = plays “laba” sound</p> <p>Babae1 Label = “ba” Link = Goes to 4.1 HU-UH – set 1, word 9 Rollover Animation = highlight</p> <p>Babae sound Label = “(🔊)” Link = plays “babae” sound</p>
	<p>*NOTE: The same flow goes for the rest of the 9 sets for Hulapi-Unlapi / Unlapi-Hulapi</p> <p>*See Appendix C-7 for the complete set</p>			<p>*Standard buttons for 4.1 Reading Skills</p> <p>Home Label = “(🏠)” Link = Goes to “1.0” Rollover Animation = glow</p> <p>Topic Menu Label = “(☰)” Link = 4.0 Rollover Animation = change color</p> <p>Dictionary Label = “(📖)”</p>

				Link = Goes to “5.0” Rollover Animation = button glow
Reference Number = 4.1 Simpleng Manipulasyon (SM)	Word1 Content = “bato”		Bato Gender = female Level = adult Script = “bato”	bato Label = “t” Link = Goes to 4.1 SM – set 1, word 2 Rollover Animation = highlight Bato sound Label = “☛)” Link = plays “bato” sound
	Word2 Content = “baso”		Baso Gender = female Level = adult Script = “baso”	baso Label = “ba” Link = Goes to 4.1 SM – set 1, word 3 Rollover Animation = highlight Baso sound Label = “☛)” Link = plays “baso” sound
	Word3 Content = “braso”		Braso Gender = female Level = adult Script = “braso”	braso Label = “br” Link = Goes to 4.1 SM – set 1, word 4 Rollover Animation = highlight Braso sound Label = “☛)” Link = plays “braso” sound
	Word4 Content = “aso”		Aso Gender = female Level = adult Script = “braso”	aso Label = “b” Link = Goes to 4.1 SM – set 1, word 5 Rollover Animation = highlight Aso sound Label = “☛)” Link = plays “aso” sound

	<p>Word5 Content = “abo”</p> <p>Word6 Content = “abokado”</p>		<p>Abo Gender = female Level = adult Script = “abo”</p> <p>Abokado Gender = female Level = adult Script = “abokado”</p>	<p>abo Label = “_” (right side of ‘o’) Link = Goes to 4.1 SM – set 1, word 6 Rollover Animation = highlight</p> <p>Abo sound Label = “(🔊)” Link = plays “abo” sound</p> <p>abokado Label = “kado” Link = Goes to 4.1 SM – set 1, word 5 Rollover Animation = highlight</p> <p>Abokado sound Label = “(🔊)” Link = plays “abokado” sound</p>
	<p>*NOTE: The same flow goes for the rest of the 9 sets for Simpleng Manipulasyon</p>			<p>*Standard buttons for 4.1 Reading Skills</p> <p>Home Label = “(🏠)” Link = Goes to “1.0” Rollover Animation = glow</p> <p>Topic Menu Label = “(☰)” Link = 4.0 Rollover Animation = change color</p> <p>Next Label = “(➡)” Link = next word Rollover Animation = change color</p>

				<p>Previous Label = “◀” Link = previous Rollover Animation = change color</p> <p>*arrows are disabled if it’s the first and last word of the set already</p>
<p>Reference Number = 4.2 Phoneme Spelling</p> <p>(Mga Salita)</p>	<p>Content</p> <p>Word1 = “aklat”</p> <p>Word2 = “aktor”</p>		<p>Aklat Gender = female Level = adult Script = “aklat”</p> <p>Aktor Gender = female Level = adult Script = “aktor”</p>	<p>Combo Box Label = “2 Pantig” Values = aklat, aktor, ama, anak, anim,</p> <p>aklat1 Label = “ak” Rollover Animation = highlight</p> <p>aklat2 Label = “lat” Rollover Animation = highlight</p> <p>aklat sound Label = “(🔊)” Link = plays “aklat” sound</p> <p>aktor1 Label = “ak” Rollover Animation = highlight</p> <p>aktor2 Label = “tor” Rollover Animation = highlight</p> <p>aklat sound Label = “(🔊)” Link = plays “aktor” sound</p>

	<p>Word3 = “ama”</p> <p>Word4 = “anak”</p> <p>Word5 = “anim”</p>		<p>Ama Gender = female Level = adult Script = “ama”</p> <p>Anak Gender = female Level = adult Script = “anak”</p> <p>Anim Gender = female Level = adult Script = “anim”</p>	<p>ama1 Label = “a” Rollover Animation = highlight</p> <p>ama2 Label = “ma” Rollover Animation = highlight</p> <p>ama sound Label = “(P)” Link = plays “ama” sound</p> <p>anak1 Label = “a” Rollover Animation = highlight</p> <p>anak2 Label = “nak” Rollover Animation = highlight</p> <p>anak sound Label = “(P)” Link = plays “anak” sound</p> <p>anim1 Label = “a” Rollover Animation = highlight</p> <p>aklat2 Label = “nim” Rollover Animation = highlight</p> <p>aklat sound Label = “(P)” Link = plays “nim” sound</p>
	<p>*NOTE: The same flow goes for the rest of the words for “Mga Salita”</p> <p>*highlights each syllable of the word</p>			<p>*Standard buttons for 4.2 Phoneme Spelling</p> <p>Home Label = “(H)” Link = Goes to “1.0” Rollover Animation = glow</p>

				<p>Topic Menu Label = “ ” Link = 4.0 Rollover Animation = change color</p> <p>Next Label = “ ” Link = next word Rollover Animation = change color</p> <p>Previous Label = “ ” Link = previous Rollover Animation = change color</p> <p>*arrows are disabled if it's the first and last word of the set already</p>
<p>Reference Number = 5.0 Dictionary</p>	<p>Content</p> <p>Word = “abo” Definition = “ang solidong tira ng apoy”</p> <p>Word = “abokado” Definition = “isang uri ng prutas at puno”</p> <p>Word = “baba” Definition = “Pagkilos mula sa itaas pailalim; kabalikan ng akyat.”</p> <p>Word = “babae” Definition = “pangkasariang ginagamit sa tao na</p>		<p>Voice-over</p> <p>Abo Gender = female Level = adult Script = “abo”</p> <p>Abokado Gender = female Level = adult Script = “abokado”</p> <p>Baba Gender = female Level = adult Script = “baba”</p> <p>Babae Gender = female Level = adult Script = “babae”</p>

	<p>kabaligtaran ng lalaki“</p> <p>Word = “baboy” Definition = “ Hayop na apat ang paa, malaki ang ulo, mahaba at bilugan ang katawan, may matitigas na balahibo.”</p> <p>Word = “kaarawan” Definition = “Kapanganakan; araw ng pagsilang; araw o petsa ng isang nakatakadang pangyayari.”</p> <p>Word = “kabibe” Definition = “Lamandagat na kinakain ang maliit at mapula-pulang laman.”</p> <p>Word = “kahero” Definition = “Tao sa bangko, tanggapan o tindahan na tumatanggap ng pera at siya ring nakaaalam o nangangasiwa sa pagbabayad o pagpapalabas ng kuwarta; may hawak ng kaha.”</p> <p>Word = “daga” Definition = “ Hayop na ang katawan ay humahaba nang</p>		<p>Baboy Gender = female Level = adult Script = “baboy”</p> <p>Kaarawan Gender = female Level = adult Script = “kaarawan”</p> <p>Kabibe Gender = female Level = adult Script = “kabibe”</p> <p>Kahero Gender = female Level = adult Script = “kahero”</p> <p>Daga Gender = female Level = adult Script = “daga”</p>	
--	---	--	---	--

	<p>hanggang sampung dali, maikli ang nguso, mapagngatngat ng damit, pagkain, atb. at nagtitira sa mga lungga.”</p> <p>Word = “dahon” Definition = “bahagi ng halaman”</p> <p>Word = “dalaga” Definition = “tawag sa isang babae na wala pang asawa ngunit nasa hustong gulang na”</p> <p>Word = “edad” Definition = “Gulang; taon.”</p> <p>Word = “edukasyon” Definition = “Pagtuturo; pagpapanuto; ang pagbibigay o pagtatamo ng karunungan, kaalaman, kasanayan, atb.; maayos at masistemang pagtuturo o pagsasanay.”</p> <p>Word = “eleksiyon” Definition = “Pagpili ng tao o mga taong ilalagay sa tungkulin sa pamamagitan ng pagboto”</p>		<p>Dahon Gender = female Level = adult Script = “dahon”</p> <p>Dalaga Gender = female Level = adult Script = “dalaga”</p> <p>Edad Gender = female Level = adult Script = “edad”</p> <p>Edukasyon Gender = female Level = adult Script = “edukasyon”</p> <p>Eleksiyon Gender = female Level = adult Script = “eleksiyon”</p>	
--	--	--	---	--

	<p>Word = “gabi” Definition = “Kabuuan ng isang magdamag; oras o panahon buhat sa paglubog ng araw hanggang sa pagsikat nitong muli kinabuksan.”</p> <p>Word = “galit” Definition = “Matinding damdamin ng pagsasalungatan, kawalang-kasiyahan, pagkayamot o paghihinakit. Damdaming nagdudulot sa isang tao ng hangaring makipag-away o lumaban; sama ng loob.”</p> <p>Word = “gamit” Definition = “Anumang bagay o kasangkapan”</p> <p>Word = “hagdan” Definition = “Bai-baitang na akyatan sa pagpanhik sa bahay.”</p> <p>Word = “halaman” Definition = “Sa kalahatan, anumang nabubuhay sa lupa at tubig na may katawan, ugat, sanga at mga dahon.”</p>		<p>Gabi Gender = female Level = adult Script = “gabi”</p> <p>Galit Gender = female Level = adult Script = “galit”</p> <p>Gamit Gender = female Level = adult Script = “gamit”</p> <p>Hagdan Gender = female Level = adult Script = “hagdan”</p> <p>Halaman Gender = female Level = adult Script = “halaman”</p>	
--	---	--	---	--

	<p>Word = “handaan” Definition = “Pagtitipon o piging na may masasarap na pagkaing inilalaan sa mga panauhin.”</p> <p>Word = “ibabaw” Definition = “Dakong itaas o taluktok; ituktok.”</p> <p>Word = “ibon” Definition = “Hayop na balot ng balahibo ang katawan, may dalawang paa at dalawang pakpak na ginagamit sa paglilipad, sari-sari ang hugis at tuka at iba’t iba ang kulay.”</p> <p>Word = “idlip” Definition = “Sandaling tulog lamang.”</p> <p>Word = “laba” Definition = “Paglilinis ng damit at iba pang kauri nito sa tubig at sabon.”</p> <p>Word = “labasan” Definition = “Pook o lugar na pinagdaraan kapag papalabas.”</p> <p>Word = “labi” Definition = “Dakong ibaba ng bibig, ang</p>		<p>Handaan Gender = female Level = adult Script = “handaan”</p> <p>Ibabaw Gender = female Level = adult Script = “ibabaw”</p> <p>Ibon Gender = female Level = adult Script = “ibon”</p> <p>Idlip Gender = female Level = adult Script = “idlip”</p> <p>Laba Gender = female Level = adult Script = “laba”</p> <p>Labasan Gender = female Level = adult Script = “labasan”</p> <p>Labi Gender = female Level = adult</p>	
--	---	--	---	--

	<p>dakong itaas ay tinatawag na nguso. Kung ginagamitan ng pangmaraming mga, ang salita ay tumutukoy sa nguso at labi.”</p> <p>Word = “mababa” Definition = “Hindi mataas o kulang sa taas; pandak.”</p> <p>Word = “mabait” Definition = “Hindi malupit; mabuti ang ugali.”</p> <p>Word = “mabilis” Definition = “Matulin”</p> <p>Word = “nanay” Definition = “babaeng magulang ng anumang uri ng anak”</p> <p>Word = “nars” Definition = “isang dalubhasang tagapag-alaga ng maysakit”</p> <p>Word = “negosyante” Definition = “Hanapbuhay”</p> <p>Word = “ngat-ngat” Definition = “Pagsira sa anumang bagay sa pamamagitan ng matalas na ngipin”</p>		<p>Script = “labi”</p> <p>Mababa Gender = female Level = adult Script = “mababa”</p> <p>Mabait Gender = female Level = adult Script = “mabait”</p> <p>Mabilis Gender = female Level = adult Script = “mabilis”</p> <p>Nanay Gender = female Level = adult Script = “nanay”</p> <p>Nars Gender = female Level = adult Script = “nars”</p> <p>Negosyante Gender = female Level = adult Script = “negosyante”</p> <p>Ngat-ngat Gender = female Level = adult Script = “ngat-ngat”</p>	
--	---	--	---	--

<p>Word = “ngipin” Definition = “ang mga istrukturang nakikita sa loob ng panga o bibig na ginagamit sa pagkagat, pagngasab at pagnguya ng pagkain”</p> <p>Word = “ngiti” Definition = “isang anyo, bikas, hilatsa, o hitsura ng mukha ng isang tao na karaniwang ginagawa kapag masaya siya.”</p> <p>Word = “okra” Definition = “isang uri ng halamang gulay”</p> <p>Word = “opisina” Definition = “Silid o gusaling katatagpuan ng isang puno, kawani, atb. ng isang pamahalaan o pangasiwaan”</p> <p>Word = “oras” Definition = “And sandali ng kaganapan ng anuman”</p> <p>Word = “paa” Definition = “pang-ibabang bahagi ng katawan na pangunahing ginagamit sa paglalakad”</p>	<p>Ngipin Gender = female Level = adult Script = “ngipin”</p> <p>Ngiti Gender = female Level = adult Script = “ngiti”</p> <p>Okra Gender = female Level = adult Script = “okra”</p> <p>Opisina Gender = female Level = adult Script = “opisina”</p> <p>Oras Gender = female Level = adult Script = “oras”</p> <p>Paa Gender = female Level = adult Script = “paa”</p>
--	---

De La Salle University

	<p>Word = “paaralan” Definition = “isang pook kung saan nag-aaral ang isang mag-aaral”</p> <p>Word = “pagkain” Definition = “anumang sustansya na karaniwang kinakain o iniinom ng mga buhay na organismo”</p> <p>Word = “raketa” Definition = “Pamalo o panghampas ng bola sa larong tenis, badminton, pingpong, atb.”</p> <p>Word = “radyo” Definition = “Aparatong ginagamit sa pagpapadala at pagtanggap ng sabi o balita sa pamamagitan ng hangin”</p> <p>Word = “regalo” Definition = “Bagay na ipinagkakaloob ng sinuman sa kapwa sa anumang kadahilanan”</p> <p>Word = “sabon” Definition = “isang bagay na ginagamit na panlinis sa katawan”</p>		<p>Paaralan Gender = female Level = adult Script = “paaralan”</p> <p>Pagkain Gender = female Level = adult Script = “pagkain”</p> <p>Raketa Gender = female Level = adult Script = “raketa”</p> <p>Radyo Gender = female Level = adult Script = “radyo”</p> <p>Regalo Gender = female Level = adult Script = “regalo”</p> <p>Sabon Gender = female Level = adult Script = “sabon”</p>	
--	---	--	---	--

De La Salle University

	<p>Word = “saging” Definition = “isang mukhang-punong halaman na malapit ang kauganayan sa saba”</p> <p>Word = “sahig” Definition = “bahagi na bahay o gusali na inaapakan o kinatatayuan ng tao”</p> <p>Word = “tabako” Definition = “isang agricultural na produkto na hinahango mula sa sariwang dahon ng mga halaman na napapabilang sa saring Nicotiana”</p> <p>Word = “tabo” Definition = “Anumang pansalok na yari sa bao ng niyog o sa anumang uri na ginagamit sa pagkuha ng tubig o anumang likido sa lalagyan”</p> <p>Word = “tainga” Definition = “organong pandama sa katawan na ginagamit sa pagdinig ng mga tunog”</p>		<p>Saging Gender = female Level = adult Script = “saging”</p> <p>Sahig Gender = female Level = adult Script = “sahig”</p> <p>Tabako Gender = female Level = adult Script = “tabako”</p> <p>Tabo Gender = female Level = adult Script = “tabo”</p> <p>Tainga Gender = female Level = adult Script = “tainga”</p>	
--	--	--	---	--

<p>Word = “ube” Definition = “isang uri ng halamang-ugat na inaani mula sa ilalim na kulay lila at matamis”</p> <p>Word = “ubo” Definition = “Pabugsu-bugsong paglabas ng hangin mula sa lalamunan, na may kasabay na tunog o ingay.”</p> <p>Word = “ulan” Definition = “isang klase ng presipitasyon, na isang produkto ng kondensasyon ng tubig sa atmosperika na natitipon sa lupa”</p> <p>Word = “wala” Definition = “Nauukol sa mga bagay na hindi makita o hindi matagpuan sa dapat karoonan”</p> <p>Word = “walis” Definition = “isang kagamitan na ginagamit sa panlinis ng dumi sa sahig”</p> <p>Word = “walo” Definition = “isang likas na bilang na pagkatapos ng 7 at bago ng 9”</p>	<p>Ube Gender = female Level = adult Script = “ube”</p> <p>Ubo Gender = female Level = adult Script = “ubo”</p> <p>Ulan Gender = female Level = adult Script = “ulan”</p> <p>Wala Gender = female Level = adult Script = “wala”</p> <p>Walis Gender = female Level = adult Script = “walis”</p> <p>Walo Gender = female Level = adult Script = “walo”</p>
--	---

	<p>Word = “yakap” Definition = “Pagkulong sa anuman ng dalawang bisig”</p> <p>Word = “yari” Definition = “Gawa.”</p> <p>Word = “yelo” Definition = “anyong solido ng isang sustansiya o tubig”</p>		<p>Yakap Gender = female Level = adult Script = “yakap”</p> <p>Yari Gender = female Level = adult Script = “yari”</p> <p>Yelo Gender = female Level = adult Script = “yelo”</p>	
	<p>Note: This goes for the rest of the words for the dictionary (See Appendix C-11-C25, for the complete definition of all the words)</p>			<p>*Standard buttons for 5.0 Dictionary</p> <p>Sound Label = “🔊” Link = plays the sound of the current word Rollover Animation = change color</p> <p>Home Label = “🏠” Link = Goes to “1.0” Rollover Animation = glow</p> <p>Previous Label = “⬅️” Link = goes back to the previous scene before accessing the dictionary Rollover Animation = glow</p>

3.2.9. Problems Encountered

The teachware incorporated pictures in the modules to support the words being taught and read out, and at the same time, to avoid confusion since the letters will just appear as foreign symbols to the students, considering that they are illiterate.

Hand-drawn pictures were not used as visual representations since the teachware will be used in teaching adult learners; original photos were used throughout the teachware. Therein lies the problem since the proponents had to take most of the photos, about 270 photos to ensure patented rights. Difficulty came when adjectives and verbs had to be visually represented through said photos. The proponents resorted to asking other photographers for some photos to reduce burden.

There was also a problem in the consistency of the design since not all words were represented in pictures, such as hindi, tama, mali, & maganda. Words like these were included in the word list since they are considered to be the very basic words used in daily communication.

The teachware was to be presented to the learners using a projector if the mobile teacher was teaching in groups, otherwise a laptop would suffice. The design resolution of the teachware was fixed because it depended on what the projector can accommodate. The initial design of the teachware was not carried out so the whole proposal was reconstructed.

3.2.10. Design Cost

Voice over was required in the teachware to provide a consistent pronunciation of the letters and words. The proponents hired a female talent to accomplish the voiceovers. Cost for the hiring of the talent was Php10, 000.00.

Pictures were used to support the words that were used in teaching the learners, and since they are already adults, hand-drawn pictures did not suffice. The proponents took real pictures of the word that were used in the teachware. Transportation cost for taking the photos in various places was included in one of the proponents' expenses.

The proponents used various software in the development of the teachware. The total cost for these software is Php29, 389.47. The breakdown of the cost of the software is the following:

Software	Total Cost
Adobe Lightroom 3	Php3,810.73
Adobe Photoshop CS5	Php8,520.62
Adobe Flash CS5	Php7,664.28
Adobe Soundbooth CS5	Php4,158.00
Microsoft Office 2010	Php5,235.84
TOTAL SOFTWARE COST	Php29,389.47

Table 3.2.11-1: List of Software

*Adobe products were based on their Education Price (Student and Teacher Edition).

Lastly, the program design was made by the proponents and will thereby be free of charge.

Breakdown of Design Cost:

Description	Total Cost
Designer	Free
Digital SLR	Php37,000.00
Camera Lens (18-135mm)	Php18,000.00
Software	Php29,389.47
Transportation for photo shoot/s	P500.00
Voice Talent	Php10,000.00
TOTAL	Php94,889.47

Table 3.2.11-2: Total Breakdown of Design Cost

3.3. Development

3.3.1 Team Organization and Member Roles

The team is composed of three female members who were tasked for the following roles and responsibilities:

- *Team leader*

The team leader is responsible for the management of the team. It is her responsibility to ensure division of labor for maximum productivity. It is also her duty to track the progress of the team and make sure everything is done accurately. During the development phase, each member is tasked for the following roles:

- *Documentation*

The people assigned for documentation are the ones responsible for the completion of the thesis papers and requirements. These include the proposal, letters and manuals. All members have significantly contributed for this task.

- *Interface Designer*

The designer creates an aesthetically pleasing interface that is practical to use for the suggested users' purpose. Usability and usefulness is also considered.

- *ActionScript Developer*

The developer uses object-oriented logic and algorithms to put together the theories and various multimedia elements (text, graphics and sounds) in order to create an efficient software.

- *Sound Master*

The sound master records, cuts and edits the sound files so that they have consistent amplification. She also ensures the proper intonation of the respective words and sounds.

- *Photographer*

The photographer takes and/or retrieves the images necessary for the sample pool of words used in the system. It is also her duty to assess each photo's appropriateness for the users' learners.

The members collaborate and compromise for the best plausible solutions. Members may assume roles depending on their expertise and convenience. It is highly encouraged for members to help each other regardless of their specific duty as any minimal effort is appreciated.

3.3.2. System Specifications

3.3.2.1. Modules

The teachware is comprised of three modules namely: Alpabeto, Pantig and Salita modules.

3.3.2.1.1. Alpabeto Module

One of the goals of the teachware is to provide a systematic way of teaching basic reading to the learners. The simplest topic that should be ideally taught first is the Tagalog alphabets. The Alpabeto module encompasses all 20 alphabets. It involves mapping out letters to its corresponding sound to help the learners recognize the letters and their names. Each letter has at maximum 3 sample words with corresponding voice overs to practice letter recognition. At the end of this module, the learners are expected to identify or distinguish the alphabets.

3.3.2.1.2. Pantig Module

The Pantig module focuses on the letter-sound association. After teaching the alphabets to the learners, the teacher can proceed to combine or blend phonemes (sounds) of the letters to form syllables. Through a series of practice words, the learners are able to distinguish the individual sounds that comprise a word.

3.3.2.1.3. Salita Module

The Salita Module tackles word recognition by combining the techniques on sound recognition, awareness of syllables, and phoneme spelling. In this module, the learners are taught to break down the words into separate sounds to differentiate the syllables. After differentiating the syllables, the learners are then taught phoneme spelling in which it involves manipulating the word by adding, deleting, or substituting phonemes to create a new word.

3.3.2.2. Features

3.3.2.2.1. Dictionary

Some of the Filipino words have the same spelling yet have a completely different meaning. Due to this, the proponents included a dictionary which is only exclusive for the teachers. This feature allows the teacher to search the meaning of any word and then go back to the module.

3.3.2.2.2. Voice Over Function

The inconsistency of the pronunciation of the phonemes and words is one of the problems encountered by the mobile teachers when teaching. This is due to the wide variation of dialects the Filipino language has. To remedy such problem, the proponents incorporated a voice over function, which is also one of the features of the teachware. Voice overs are integrated all throughout the modules in order to support learning. This function has established to be very helpful to the teachers for they could play the audio repetitively; unlike before that they have to say it over and over again which could be tiring for them. Likewise, playing the audio repetitively proved to be a big support to the learners to familiarize the phonemes (see Appendix F).

3.3.2.2.3. Highlighted Syllables

Mga Salita, is a submodule of Salita, contains all the 393 practice words categorized according to difficulty. These words will be used in the latter part of teaching in order to really test whether the learners can already read. A feature of the teachware is the highlighted syllables which are integrated in this module. These highlighted syllables helps the learners to read by breaking down the word first before reading it as a whole. It serves as a guide so that the learners will know where to start reading the word (see Appendix F).

3.3.3. Tools Required

The following tools were required for the development of the teachware:

- *Adobe Flash CS5*

This is the flash-creating tool used for the development of the teachware and to compile the multimedia elements namely text, graphics and sounds.

- *Actionscript 3.0*

This is the language used to incorporate interactivity and non-linear usage of the teachware.

- *Adobe Photoshop CS5*

This is the photo-editing software used to edit images and photos used for the interface and content of the teachware.

- *Adobe Soundbooth CS5*

This is the main sound-editing software used to cut and edit the sounds used in the teachware.

- *Adobe Lightroom 3*

This photo-editing software was used to enhance the photos taken for the content of the teachware.

- *Audacity*

This sound-editing software was used to minimally cut and edit the sounds used in the teachware.

- *Digital SLRs*

This type of camera was used to obtain digital photographs used in the teachware.

- *Microsoft Word*

This word-processing software was used for the documentation of the thesis.

- *Sound Forge*

This sound-editing software was used to record the audio from a sound-proof studio.

- *Microphone*

This tool was used to obtain narration of the voice talent used in the teachware.

3.3.4. Technical Media Specifications

Audio	
Channels (Mono/Stereo)	Mono
File Type	.mp3
Bitrate	128 kbps
Images	
Format	JPEG
Size	455x455
Resolution	100
Overall Layout	
Frames per second (FPS)	30 fps
Size	1024x768
Text	
Font Style	Champagne & Limousines, Century Gothic, Arial

Table 3.3.4-1: Technical Media Specifications

3.3.5. Prototypes

3.3.5.1. Prototype 1

Figure 3.3.5.1-1. Home Page

Figure 3.3.5.1-2. Alpabeto - Patinig

Figure 3.3.5.1-3. Pantig - B

For the initial development of the teachware, the developers used temporary photos to serve as templates when shown to the content experts. The circular buttons used for the transition of images on the Alpabeto and Pantig modules were originally placed on the toolbar. The chosen interface color scheme was that of a yellow-orange shade for legibility as a projection.

3.3.5.2. Prototype 2

Figure 3.3.5.2-1. Home Page

Figure 3.3.5.2-2. Alpabeto – Katinig

Figure 3.3.5.2-3. Salita – Word Manipulation

Figure 3.3.5.2-4. Diksyunaryo Partial Screen

In this point at the development phase, a third of the photos have already been taken. The Alpabeto and Pantig modules are near completion and the development of the Salita module and Diksyunaryo had begun. The circular buttons for the image transition have already been taken off the main toolbar and placed on the photo area. Shades have also been implemented to indicate which button has been selected or whether it is selectable. Navigation keys on the toolbar have also been modified. Arrow keys were appended and the placement of the home, menu and dictionary buttons has been switched. A status bar for the word manipulation under Salita has been placed on the toolbar to indicate the end of the word group.

3.3.5.3. Prototype 3 – Pre-final Prototype

Figure 3.3.5.3-1. Salita Menu with Final Word List

Figure 3.3.5.3-2. Komplikadong Salita Selection

This semi-final prototype has already been given to the mobile teachers for test runs. It includes the final grouping for the words and a menu for the word lists on the Salita module. It also already contains a good 90% of all photos needed

for the entire teachware; The rest of which are still temporary and only used as pegs due to the difficulty of representing the words visually.

3.3.5.4. Prototype 4 – Final Prototype

Figure 3.3.5.4-1. Alfabeto with a Toggle Button

Figure 3.3.5.4-2. Pantig with a Toggle Button

Figure 3.3.5.4-3. Diksyunaryo

This final output contains the completed software including the revisions taken from the content experts based on the dry run of the previous versions. These revisions include the re-assessed photographs, a back button from the Diksyunaryo, a toggle button for the images of the sample words and calling the sound function on click of the Alpabeto and Pantig choices. Alpabeto module's "toggle" button has a slightly different function from the Pantig module. The former simply turns off the visibility of the images whereas the latter includes the word spelling and an emphasis on the syllable being referred to by the said example. Embedding the fonts had also been taken into account as to keep the format and typefaces concise and consistent.

3.3.6. Problems Encountered

Since the teachware required using original photos, the proponents encountered problems with taking the photos themselves due to time constraints. The lack of availability of the subject for the photo was also an issue, and because of this, the proponents resorted to taking photos in the provinces. The perspective of some photos also had to be revised as requested by the content expert. There were other objects seen in the shot and according to the content expert, the photos were supposed to focus only on the subject itself so that the learners won't be distracted by the other objects.

The consistency with the volume of the voice overs was a recurring problem since the recordings happened on different days. In addition, the area for which the words are displayed was a fixed size, so the proponents had problems on how to fit some of the words on that fixed area size.

3.3.7. Development Cost

The proponents visited QCPD Station 10 and Barangay Loyola Heights 5 times for consultations and checking of the prototypes. A round trip fare of Php200.00 is paid per visit, for a total amounting to Php1000.00. Labor cost which includes food supplies summed up to a total of Php1000.00. Below is the breakdown of the total development cost:

Description	Cost
Software	Php24,153.63
Voice Talent	Php3,000.00
Transportation	Php1,000.00
Food	Php1,000.00
TOTAL COST:	Php29,153,63.00

Table 3.3.7-1: Total Development Cost

3.4. Implementation and Testing

3.4.1. Installation Requirements

3.4.1.1. Hardware Requirements

The hardware components required for the implementation and testing of the teachware were a personal computer, a mouse, audio speakers, and a projector. The personal computer aided the mobile teachers in communicating the lessons to the learners. However, it was preferred to use a laptop rather than a personal computer since the mobile teachers transferred from one venue to another. The personal computer or laptop must have the following minimum specifications:

- Processor: Pentium 4 or higher
- RAM: 512 MB
- 512 MB dedicated video card
- Hard Disk Space: At least 1GB free

The mouse was used for navigating the teachware. Since the teachware contained a voice over function, it was best to have audio speakers for sound projection. It was connected to the personal computer or the laptop so that all learners heard the audio recordings clearly. The projector however was optional; it was only used for display when there was a larger audience or a larger room.

3.4.1.2. Software Requirements

The personal computer or laptop must be installed with an Adobe Flash Player to run the teachware. The flash player can be downloaded for free from the website <http://get.adobe.com/flashplayer/>. The personal computer or laptop must operate on a Windows 98 or higher operating system to support the flash player.

3.4.1.3. People Requirements

The users of the system are ideally mobile teachers from ALS who have a bachelor's degree in basic education. Users are expected to be computer literate in order to run and navigate the teachware.

3.4.2. User Acceptance Testing

3.4.2.1. Sample Demographics

The teachware was tested out in two locations, the Quezon City Police Department Station 10 and the Loyola Heights Barangay Hall. For the first location which was the QCPD Station 10, the proponent's content expert

was the mobile teacher in charge of the venue. There were 11 inmates (respondents) aged 18 years old and above who participated in the testing. These learners were all either out-of-school adults or high school dropouts.

The second location which is the Loyola Heights Barangay was being handled by a fellow mobile teacher of the content expert who was introduced to the proponents prior to testing. She handled 3 learners, aged between 40-55 years old, all of which had no proper education.

3.4.2.2. Time Requirements

The basic reading program of ALS is usually within a span of 3 months, with 2 sessions per week for 2-3 hours. With this, the proponents decided to follow such timeline to coincide with the schedule of the learners and the teachers. Both QCPD Station 10 and Loyola Heights Barangay had 2 sessions per week for 2-3 hours. The sessions started on April 17 for Brgy. Loyola and July 9 for QCPD Station 10.

3.4.2.3. Data Collection Methods

The proponents prepared two kinds of user acceptance questionnaires, one was for the mobile teachers and the other one was for the learners. The questionnaires were comprised of questions regarding the teachware's content, interface, delivery, and navigation. They had to rate each question on a scale of 1-4, 1 being the lowest and 4 being the highest. Aside from the

ratings, the questionnaires also had a comments and suggestions section wherein the users can express their reactions to the teachware.

Apart from the questionnaires, the proponents also interviewed both the mobile teachers and learners to get a better insight on what they thought about the new material. The proponents were free to ask questions to the users as they went along the interview. However, video and audio recording were prohibited to preserve the anonymity of the learners. Photos were only taken from the camera of the jail coordinators and mobile teachers and were handed over to the learners after testing (see Appendices D, E, and F).

3.4.2.4. Procedure

1. Coordinated with ALS-BLP Mobile teachers

After the development of the teachware, the proponents contacted Ms. Irene Barzaga, the mobile teacher at QCPD Station 10, and Ms. Angelyn Malabanan, the mobile teacher at Barangay Loyola Heights to hand over the teachware for the testing.

2. Prepared and installed software on test units

Upon surrendering the teachware, the proponents assisted the mobile teachers with the installation of the teachware on their respective laptops. At the same time, the proponents briefed the users on how to use the teachware.

3. Monitored mobile teachers on their sessions

The proponents visited the two testing sites on several occasions. The following activities were done during the visits:

a. April 17, 2012 – Handing over of teachware to Barangay Loyola Heights

The proponents handed over the teachware to the Barangay Loyola Heights' mobile teacher in order to start its testing to the learners. However, it was not a scheduled session so we had to go back the following day, April 18, 2012.

b. April 18, 2012 – Day 1 Testing at Barangay Loyola Heights

The teachware was first tested out at Barangay Loyola Heights. The learners were 3 female learners aged over 40 years old. The session lasted for about an hour since it was all new to the learners and the teacher did not want to overwhelm them with the new material.

c. July 9, 2012 – Day 1 Testing at QCPD Jail Station 10

A new batch of 14 Basic Learners (BL) was asked to participate and try out the new material provided by the proponents, which is the basic reading teachware. As the first day of session progressed, it was discovered that 6 of them can already recognize the alphabets while 8 of them cannot and have no prior knowledge at all. It was decided that the group will be divided into two in order to

accommodate the learners' needs. The session for the 8 learners was scheduled on July 11, 2012 whereas the session for the 6 advanced learners was on July 13, 2012.

d. July 11, 2012 – Day 2 Testing at QCPD Jail Station 10

The day was dedicated to teaching the 8 no read, no write learners. These learners could not read nor recognize the letters of the alphabet, so the session started out with teaching the Tagalog alphabet, primarily the vowels. However, of the 8 expected learners, only 6 of them showed up.

e. July 13, 2012 – Day 3 Testing at QCPD Jail Station 10

The second group of learners were already familiar with the letters of the alphabet, and they can read 2-syllable words. Yet when it comes to words with 3 or more syllables, they either cannot read it or have a hard time reading it. Thus, they skipped the Alpabeto module and proceeded to the Pantig and Salita module. Of the 6 expected slightly advanced BL learners, only 5 of them showed up. However, 4 no read, no write BL learners willingly returned to join the session.

4. Collection of UAT from mobile teachers and students

UAT questionnaires were distributed on the last day of testing to both the teachers and the learners. Since the learners cannot write yet, the

proponents asked the learners the questions and wrote it down on the UAT questionnaire (see Appendices E and F).

3.4.2.5. Certification by Content Expert / Organization

For the certification by content expert / organization, kindly refer to Appendix G.

3.4.3. Problems Encountered

One problem the proponents had during the testing was the availability of the learners. In Loyola Heights Barangay, there were only 3 learners that the mobile teacher handled and there were times when these learners did not show up for the sessions. Another problem was the availability of venue in the QCPD Station 10 testing site. The testing in the said site had to be stopped for a while because the classroom was being renovated. When the venue at the QCPD Station 10 was finally available, there were still problems with it because it was an open space, thus the inmates were easily distracted by their fellow inmates.

The jail offers recreational activities for the inmates to build their skills and personality, and on one of the sessions, the recreational activity coincided with the class session. The event was adjacent to the classroom, the facilitators and participants were too noisy that the BL teacher and learners resorted to transferring rooms causing a delay in the session.

There were also technical problems with the teachware's audio because it would suddenly stop in the middle of the session. Limited system specifications

hindered optimum performance efficacy and at one point, the system suddenly stopped running.

A picture could be interpreted in different ways, thus some of the photos could be understood by the learners differently. For example, a learner may see the picture as *libro* but it is actually depicted as *aklat*.

3.4.4. Implementation and Testing Cost

Transportation was one of the expenses for the impletation and testing since the teachware was implemented at the QCPD Station 10 and Barangay Loyola Heights. An average of Php215.00 was paid for a one way trip to Barangay Loyola Heights while an average of Php36.00 was paid for a one way trip to QCPD Station 10. The breakdown for the transportation cost is shown below:

Description	Cost	Number of Times Visited	Total Cost
QCPD Station 10	Php430.00	3 times	Php 1290.00
Barangay Loyola Heights	Php72.00	3 times	Php 216.00

Table 3.4.4-1: Breakdown for Transportation Cost

The proponents burned the teachware in a CD in order to distribute it to various mobile teachers. Questionnaires for both the mobile teachers and students were printed and disseminated after the testing as part of the user acceptance tests. The following are the breakdown of expenses for the cd burning and printing of questionnaires:

Description	Cost	Quantity	Total Cost
CD & Burning Fee	Php50.00	2	Php100.00
Printing of User Acceptance Test Questionnaires (Teachers)	Php1.00/page	2	Php2.00
Printing of User Acceptance Test Questionnaires (Students)	Php1.00/page	30	Php30.00

Table 3.4.4-2: Breakdown of Expenses for CD Burning and Questionnaire Printing

Breakdown of Implementation and Testing Cost:

Description	Total Cost
Transportation	Php1506.00
CD Burning	Php100.00
Questionnaire Printing	Php32.00
TOTAL	Php1638.00

Table 3.4.4-3: Breakdown of Implementation and Testing Cost

3.5. Evaluation

3.5.1 Evaluation Criteria

User evaluation was conducted at Brgy. Loyola and Quezon City Police District Station 10 (QCPD10). It was done to validate the effectivity of the teachware in solving the teaching problems of the mobile teachers for the Basic Literacy Program (BLP) of the Alternative Learning System (ALS).

The proponents formulated 2 evaluation forms, one for teachers and another for the learners. The Teacher Evaluation Form (TEF) was designed differently from the Student Evaluation Form (SEF) as the students were illiterate. The TEF was more specific whereas the SEF was simpler and constructed in the vernacular. The TEF consisted of 2 parts: the first part had a numerical rating system based on criteria while the second part contained questions for clarifications and additional recommendations. The SEF had only 1 part which had somewhat similar criteria but was worded differently in order to match the students' comprehension.

The criteria used for the evaluation forms are as follows:

1. Content – This criterion was separated into overall content and individual module content. The overall content evaluates the organization, association of modules, presentation and actual content of the teachware. Module content criterion evaluated each module's appropriateness and relevance on their respective topics. Accuracy, arrangement, and adequacy of material have also been evaluated for each module.
2. Interface – This evaluates the spatial and visual aspect of the teachware. Colors, icons and buttons are rated for their aesthetics and suitability.
3. Media Used – This evaluates the consistency, quality, relevance, and legibility of the text, audio and images used for the teachware.

4. Navigation – This evaluates the accessibility and ease of movement of the teachware. This includes the assessment of each element such as the menu, buttons, hyperlinks and modules.

3.5.2. Results

Results for the TEF were gathered through a 4-point Likert scale wherein a 4 would account for *Strongly Agree* and a 1 for a *Strongly Disagree*. Questions were based on criteria aforementioned. There were 2 respondents for the TEF: one mobile teacher from Brgy. Loyola and another from QCPD Station 10. Below is a double column graph indicating the average scores for each criterion.

Figure 3.5.2-1. Teacher Evaluation Results

A total of 14 students were able to answer the SEF. The students from Brgy. Loyola were 3 females aged 43 above whereas, 11 students from QCPD Station 10 were all male and aged 32 below.

Student Evaluation Results have been based off the responses of the learners (Refer to Appendix F). The proponents determined the approval rating of each criterion through the assessment of answers. Below is a stack bar graph showing the number of positive, neutral and negative responses and their overall percentages.

Figure 3.5.2-2. Student Evaluation Results

3.5.3. Analysis

The TEF showed very positive results with 100% of the ratings not lower than 3.0 (4.0 being the highest). Both mobile teachers had an average of 3.833 for the Overall Content criterion, which would indicate the teachware's effectivity as the mobile teachers' BLP teaching material. The respondents have *Strongly Agreed* that

the organization of topics by module proves to be useful in teaching illiterate learners. The results also indicate that teachers found the transition and hyperlinking helpful in reviewing related topics.

Individually, the modules had slightly varying results based on average regarding their content. The Pantig module had the lowest rating from both mobile teachers. The common concern for both teachers is the sufficiency of the number of examples needed to teach syllabication. The Alphabet module, having the second lowest rating out of the 3 modules also had the same problem from the Brgy. Loyola mobile teacher, Ms. Malabanan. However, it had received a perfect 4.0 from the QCPD Station 10 mobile teacher, Ms. Barzaga. The Salita module had received only one 3.0 rating from both teachers, that being the sufficiency of visual materials to support the material in teaching word recognition and manipulation.

The mobile teachers found the teachware very helpful in mapping the phonemes to their respective alphabet and/or syllable. Emphasis has been given to examples for the Pantig module. In addition, the mobile teachers also have ease in manipulating word displays and sounds. This became apparent in the Salita module where they could easily point out the different syllables that comprise the word.

The interface of the teachware also received high ratings as it garnered an average of 3.75 and 4.0 from Brgy. Loyola and QCPD Station 10, respectively. This criterion received a 3.0 rating because Ms. Barzaga had concerns regarding the clarity of the buttons and where they led to.

The mobile teachers had also given the media used high ratings with averages ranging from 3.71 to 3.86. Both of which had concerns mainly on the consistency of pronunciation of the audio. Nonetheless, both still *Agreed* that the recorded speech sounds are helpful for maintaining consistency even over repetition.

Navigation received a larger variance in terms of ratings as it got a 3.17 from Ms. Malabanan and a 3.83 from Ms. Barzaga. Ms. Malabanan *Strongly Agreed* to the accessibility of the buttons and *Agreed* to the accessibility of the menu, subtopics, modules and hyperlinks. On the other hand, Ms. Barzaga did the complete opposite by *Strongly Agreeing* to the accessibility of everything aside from the buttons.

Student evaluation also indicated excellent turnout for the teachware on the learning perspective. The proponents had gathered a total of 14 respondents wherein 93% had positive feedback on the effectivity, audio and images. The interface was the criterion with the lowest rating from the learners with 86% positive feedback and 14% negative feedback. Overall, the material also received 86% positive feedback.

The material received a neutral response from a learner (29, Male, QCPD10) who was studying for the first time and had no previous experiences whatsoever. Another learner (24, Male, QCPD10) found the material “difficult as well” but is achievable. They have no comments on whether the material is good or not. All of

the learners found the teachware generally helpful in teaching them how to read. The material itself received no negative feedback from the learners.

The interface received negative feedback due to the inexperience of the learners. They have said that they are not at ease with reading the letters and words because it was their first time. Although still unreadable to the eyes of the learners, 86% of the learners have nonetheless found them clear and helpful.

One learner (20, Male, QCPD10) found the photos a hindrance to reading and said that it would be easier to read without them. However, the rest of the respondents found the photos helpful because they can associate them to the words, syllables and letters. They have said that it is easier to remember the words when they see the pictures.

A rather experienced learner (19, Male, QCPD10) found the audio unhelpful because he thought of them as some sort of cheat that some of the learners could use to just mimic instead of actually “read”. The rest of the learners found them useful because of their clarity and their use in constant repetition for memory enhancement.

An inmate (18, Male, QCPD10) who previously knew how to read yet had forgotten due to drugs finds it easier just to practice actual reading rather than using the teachware. However, the remaining respondents found the teachware easy to work with and helpful for their retention. One of the learners (19, Male, QCPD10) expressed that it is good since it goes through the letters and syllables first before

moving on to more complicated words. Another learner (20, Male, QCPD10) found it helpful because he could see the breakdown of the syllables per word. The Brgy. Loyola learners generally found the photos enticing, lively and easily relatable.

3.5.4. System Revisions Required

Revisions were requested by the teachers as their usage of the teachware progressed. These revisions were later on compiled and were given to the proponents after testing to be implemented. Included in the revisions list was the correction of the syllable highlights. The syllabication of some words was wrongfully done affecting the highlight per syllable.

Another revision was the color of the toggle background. The circular buttons that is used to navigate between practice words or pictures could not be seen because the toggle background of the box was white. The proponents changed it to the shade of lemon chiffon.

Lastly, it was observed that the learners used the photos presented as a “cheat” when the teacher asks them what the word is. What happened was that even though the learners cannot read, they knew what the word was based on the picture, so it wasn’t known if they really read the word or just based it on the picture. To solve this problem, the proponents resorted in displaying the word first before the picture, as suggested by the teachers and learners (see Appendices E and F).

3.5.5. Problems Encountered

The suggestions made by the teachers as they were evaluating the teachware were out of the scope, such as the foreign letters and capital letters, thus those suggestions cannot be implemented.

The proponents decided to interview the learners since they do not know how to write and their feedbacks were collected as part of the student UAT. The learners were extremely shy hence the proponents could not get any comprehensive and in-depth answers from them.

3.5.6. Total System Cost

Analysis Cost	
Printing Expenses	Php2,495.00
Ring Bind Cost	Php720.00
Transportation	Php3,000.00
Labor Cost	Php6,000.00
Design Cost	
Designer	Free
Digital SLR	Php37,000.00
Camera Lens (18-135mm)	Php18,000.00
Software	Php29,389.47
Transportation for Photoshoot/s	Php500.00
Voice Talent	Php10,000.00

Development Cost	
Transportation for consultations	Php1,000.00
Food	Php1,000.00
Implementation & Testing Cost	
Transportation	Php1,506.00
CD Burning	Php100.00
Questionnaire Printing	Php32.00
Evaluation Cost	
Printing Expenses (Php500.00/document)	Php1, 500.00
Ring Bind Cost (Php100.00/document)	Php300.00
CD Burning (Php50.00/CD)	Php150.00
TOTAL SYSTEM COST	Php112,692.47

Table 3.5.6-1: Total System Cost

Chapter 4 System Outputs

4.1. Instructional Process

4.1.1. Pre-Instruction Activity

Once the teachware is running, the mobile teacher is greeted by a main menu which displays all three main modules – Alpabeto module, Pantig module, and Salita module. The Alpabeto module contains all 20 letters of the Tagalog alphabet while the Pantig module focuses on letter-sound association and syllabication. The Salita module, which is the most difficult of all, gives emphasis to word manipulation and word recognition. The mobile teacher may choose one of the modules to start the session. It is advisable however to start with the Alpabeto module and end with the Salita module for a systemized way of teaching.

Figure 4.1.1-1 Module Selection

4.1.2. Lesson Presentation

4.1.2.1. Alpabeto Module

The Alpabeto module displays all of the 20 letters in the Tagalog alphabet. The alphabet is divided into two categories: Patinig and Katinig. Patinig submodule contains all the vowels while the Katinig submodule contains all consonant letters. A highlighted letter means that it is being selected; click it to proceed to the next lesson.

Figure 4.1.2.1-1 Alpabeto Module

The letter is displayed at the left side of the screen and clicking it plays the letter sound audio. To its right are at maximum 3 practice words that begin with the said letter. Clicking the right box will play the audio. The “eye” button found at the upper right of the box serves as a toggle button. Click it to display the picture representation of the word. The 3 circular buttons found at the lower part of the box serves as a navigation to shift between the 3 practice words. The 5 letters found below the screen serve as

navigation through the letters and will play the letter name audio on click. Click the home button at the bottom left of the screen to return to the main menu and click the menu button to return to the subtopics menu. To access the dictionary feature, simply click the dictionary button located at the bottom right of the program. The same procedure applies for the rest of the Alpabeto module.

Figure 4.1.2.1-2 Alpabeto Module - Patinig

4.1.2.2 Pantig Module

Pantig module involves teaching syllabication to the learners. It is divided into four categories: 1-titik pantig (one vowel syllable), katinig-patinig pantig (consonant-vowel syllable), patinig-katinig pantig (vowel-consonant syllable), and katinig-patinig-katinig pantig (consonant-vowel-consonant syllable). Click on one of the categories to proceed. An arrow will indicate which category is currently chosen.

Figure 4.1.2.2-1 Pantig Module

The syllable is displayed at the left side of the screen and clicking it plays the voice over function. To its right are at maximum 3 practice words that begin with the said syllable. Clicking the right box will play the audio. The “eye” button found at the upper right of the box serves as a toggle button. The word is initially displayed for the learners to read, and a graphic representation of the said word will be displayed once the toggle button is clicked.

The 3 circular buttons found at the lower part of the box serve as navigation to shift between the 3 practice words. The 5 syllables found below the screen serve as navigation and will play the voice over function on click. The next and previous buttons found at the lower left of the screen are navigations to shift between the 15 syllables. Click the home button at the bottom left of the screen to return to the main menu and click the menu button to return to the subtopics menu. To access the dictionary feature,

simply click the dictionary button located at the bottom right of the program.

The same procedure applies for the rest of the Pantig module.

Figure 4.1.2.2-2 Pantig Module - Katinig-Patinig

4.1.2.3. Salita Module

The Salita module tackles lessons in word manipulation in which learners will be trained with their word recognition skills. They are expected to be able to read after being familiar with the letters and their corresponding sound or phoneme. The module has three categories: Hulapi-Unlapi/Unlapi-Hulapi, Simpleng Manipulasyon, and Mga Salita. Select any of the three categories to proceed to the lessons; an arrow will indicate that the category is chosen.

The Hulapi-Unlapi/Unlapi-Hulapi submodule focuses on word manipulation according to affixes. There are 10 sets with 10 sample words per set. This submodule demonstrates that a new word can be formed from another word's prefix or suffix. The manipulation is done simply by clicking

the highlighted affix to view the new word. The status bar found at the bottom of the screen indicates the progress of the manipulation. Click the home button at the bottom left of the screen to return to the main menu and click the menu button to return to the subtopics menu. To access the dictionary feature, simply click the dictionary button located at the bottom right of the program.

Figure 4.1.2.3-1 Salita Module

Figure 4.1.2.3-2 Salita Module – Hulapi-Unlapi/Unlapi-Hulapi

The Simpleng Manipulasyon sub module involves the phonemic awareness instruction which includes adding, deleting, or substituting phonemes in any part of the word to create new words. The procedure is pretty much the same as that of Hulapi-Unlapi/Unlapi-Hulapi's manipulation; click the highlighted syllable or letter to proceed to the new word. Click the home button at the bottom left of the screen to return to the main menu and click the menu button to return to the subtopics menu. To access the dictionary feature, simply click the dictionary button located at the bottom right of the program.

Figure 4.1.2.3-3 Salita Module

Figure 4.1.2.3-4 Salita Module – Simpleng Manipulasyon

The last sub topic for the Salita module is the Mga Salita that encompasses all 393 words which are categorized according to difficulty. This serves as a practice as well as an assessment on whether the learners can already read. Syllables are highlighted when hovered and the word's audio will play once the sound icon or the grey part is clicked. There are two ways to navigate among the words, and the first one is the next and previous buttons found at the lower left of the screen. To shift faster from word to word, a combo box found directly below the word box can be used. Click the home button at the bottom left of the screen to return to the main menu and click the menu button to return to the subtopics menu. To access the dictionary feature, simply click the dictionary button located at the bottom right of the program.

Figure 4.1.2.3-5 Salita Module

Figure 4.1.2.3-6 Salita Module – Mga Salita

4.1.3. Learning Activities / Exercise

The teachware only provided at maximum 3 practice words per alphabet letter or syllable. After the discussion of each subtopic, the mobile teachers would typically ask each learner to give a word that starts with the current letter or syllable that is

being tackled. This is done to further the vocabulary of the learners as well as to hone their phoneme and word recognition skills.

4.2. Assessment Process

At the end of every Basic Literacy Program, the learners are evaluated to verify if they are able to read. They are assessed through the Personal Information Sheet (PIS), which was also given at the beginning to assess the literacy level of the learner. They are required to fill up the PIS again and after that, they will be given a short story or poem in which they have to read out loud. If the learner succeeded in the aforementioned tasks, s/he will graduate from the Basic Literacy Program and proceed to the Functional Literacy Program. The assessment part, however, is not included in the teachware.

Chapter 5 Findings, Conclusion, and Recommendations

5.1. Findings / Realizations

The proponents have realized that literacy is a blessing. Privileges are often overlooked until people have experienced how living would be like without them. In this sense, the group has empathized with the illiterate adults and the mobile teachers handling them.

ALS mobile teachers have little or no salaries and yet the group has witnessed their dedication for their work. Ms. Barzaga was the ALS mobile teacher for the QCPD Station 10 for 8 years. The venue for their sessions in jail is open-spaced, noisy, distracting and has limited equipment. She has to shout in order to be heard. Despite all of this, she still continues teaching, doesn't give up and entertains no thoughts of quitting.

The moment the proponents handed over the finished teachware, the mobile teachers and some of the police officers visibly expressed their appreciation. It was very heartwarming. The teachware was deemed to be of big help for them and that it would lessen their difficulty in teaching people how to read. The material was such a big hit to the QC Jail community that even the police officers wanted to use them as help for teaching their own children.

The learners have also expressed their gratitude towards ALS and their literacy program. They sincerely treasure the opportunity to be educated because they realize the need to have those skills. A lot of inmates have plans of looking for jobs when they are released from imprisonment. Hence, they have gained the desire to learn reading while they are spending their time in prison.

The proponents have unnecessarily extended their university years due to neglect for deadlines and timelines. In addition, they acquired another 2 units of failure for their academic transcripts. All of this was due to a 20-minute late submission of required documents during Thesis Project Development 1 (THS-IS1). The group eventually learned to manage their priorities and time effectively. They have put a halt to cramming and swore to pass requirements at most 2 days before the deadline.

5.2. Conclusion

The teachware was evidently a success as based on the results and analysis. Both the students and teachers found the teachware helpful and effective.

The material was of big help to the teachers because it follows a systematic method for teaching. Prior to the usage of the teachware, teachers taught adults through immediate introduction to words. This was not a very effective teaching method because students merely memorized the words as a whole instead of distinguishing letters and syllables hence they could not read words that have not been introduced to them during sessions. The teachware addressed this problem through the use of modules and transition of difficulty.

The audio also proved to be useful because of their clarity, pronunciation and consistency. The teachers were pleased because their previous experiences with teaching phonemes involved uncertainty in their pronunciation. Ms. Barzaga referred to it as “regional defect” wherein teachers might incorrectly pronounce phonemes because of

provincial accents. This problem has been addressed by teachware since it already contains the audio and teachers need not fret of their shortcomings in eloquence.

The teachware also helped the teachers compare phonemes with ease. Comparing sounds such as /e/ to /i/ is just a click away. It became much more plausible and convenient for them in distinguishing the phonemes. The teachware also lessens the time for writing or dictating repetitively because it already contains material necessary to aid the teachers in teaching.

It also became easier and faster for teachers to manipulate words because there already exists a given set of words. As such, they need not spend time thinking of appropriate word combinations because they have already been provided for. With the material, the teachers already have a head start and could avoid delays during the sessions.

Examples provided by the teachware also aid in stimulating the students' cognition. When students are asked by the teacher to give their own examples, they can conjure up words associated with the 3 practice words on the system. There may be times that students incorrectly apply the concept of the exercise but have nonetheless grasped the main idea. For example: when asked by the teacher to provide words that start with /ba/, one may assume that bangkay could pass off as an answer. However this may not be the case because the first syllable for this particular word is /bang/.

Highlighting of comprising syllables per word also helped a lot. It assists the teachers in identifying the syllabication and could individually point out each syllable. This helped the learners read complicated words by aiding them in identifying the simpler

components. Based on observation, the teachware helped the students where to start reading and not get intimidated by the word as a whole. This made it easier for the teacher to express the importance of transitioning the topics (from alphabet to words).

The teachware is also age-appropriate because the examples and their visual representations are ones which are familiar and suitable to the adult learners. This is unlike before wherein the teachers could only use flash cards or whatnot designed for children. The teachers need not bother themselves the effort of looking for materials appropriate for their learners.

In conclusion, the teachware was highly effective because it addressed all the teaching problems aforementioned.

5.3. Recommendation

The teachware only comprises of about 400 words that will be used in teaching basic literacy to the learners. The proponents recommend the addition of more words for practice. If the word list count remains at 400, the learners could possibly memorize the content since the practice words are always the same. But if there are additional words, there would be a variation thus the learners will be able to practice reading in a more in-depth method.

The development of a courseware version of the teachware is highly recommended by the proponents. The courseware will serve as a self-study tool in which the learners could utilize sans the supervision of the teacher. This provides an option for the learners if they wish to practice on their own.

The teachware has received positive reactions from the mobile teachers during its implementation and testing. According to the mobile teachers, the teachware was such a big help since it lessened the difficulty of their methods in teaching people how to read. Because of this, the proponents highly recommend the distribution of the teachware to other ALS implementers who are handling the Basic Literacy Program. ALS implementers include the instructional managers, facilitators, and mobile teachers.

Lastly, the proponents also recommend the teachware to be used in formal schooling, provided that the primary language used in teaching is Tagalog. The teachware is applicable to Kinder, Grades 1 & 2 students since formal schooling utilizes phonics in teaching the children how to read.

APPENDIX A

Certification of organization tie-up

De La Salle University-Manila

CERTIFICATION

This is to certify that Katrina Barrios, Lian Castillo, and Clarissa Tenorio, students of De La Salle University, will be working and cooperating with the Bureau of Alternative Learning System (BALS) of the Department of Education (DepEd) as they develop their Thesis Project from 3rd Term, AY 2010-2011 to 3rd Term, AY 2011-2012.

Signed by:

Mr. Joselito B. Castro
Education Program Specialist
Bureau of Alternative Learning System

Ma. Katrina Carmela T. Barrios
De La Salle University

Lian Sabella V. Castillo
De La Salle University

Ma. Clarissa Andrea C. Tenorio
De La Salle University

De La Salle University-Manila

CERTIFICATION

This is to certify that Katrina Barrios, Lian Castillo, and Clarissa Tenorio, students of De La Salle University, will be working and cooperating with the Bureau of Alternative Learning System (BALS) of the Department of Education (DepEd) as they develop their thesis project from 3rd Term, AY 2010-2011 to 3rd Term, AY 2011-2012.

Signed by:

Mr. Roderick Corpuz
Education Program Specialist
Bureau of Alternative Learning System

Ma. Katrina Carmela T. Barrios
De La Salle University

Lian Sabella V. Castillo
De La Salle University

Ma. Clarissa Andrea C. Tenorio
De La Salle University

APPENDIX B
Personal Information Sheet

PERSONAL INFORMATION SHEET**A. Panuto: Sagutan ang mga sumusunod na tanong.**

- 1) Anong pangalan mo? _____
- 2) Kailan ang iyong kaarawan? _____
- 3) Ilang taon ka na? _____
- 4) Saan ka nakatira? _____
- 5) Ano ang iyong kasarian? Lagyan ng tsek (✓) ang tamang kahon.

☐ Lalaki	☐ Babae
---------------------------------	--------------------------------
- 6) Ano ang iyong relihiyon? _____
- 7) Ano ang iyong estado sa buhay? Lagyan ng tsek (✓) ang tamang kahon.

☐ Walang asawa	☐ Biyudo/Biyuda
☐ May asawa	☐ Hiwalay sa asawa
- 8) Ano ang iyong hanapbuhay? _____
- 9) Ano ang pinakamataas na antas na iyong natapos sa pag-aaral? _____

B. Panuto: Sumulat ng isang pangungusap tungkol sa iyong sarili.

- 10) _____

APPENDIX C

Teachware Content

Letters of the Alphabet (Letter Recognition)

a b k d e g h i l m n n g o p q r s t u w y

Alpabeto

a	aso, aklat, apoy
e	elepante, eroplano, estudyante
i	ilog, ibon, itlog
o	orasan, ospital, okra
u	ulap, uling, usok
b	balde, bintana, buto
k	kalye, kasal, kusina
d	dasal, drayber, daga
g	gatas, gulay, gupit
h	hagdan, halaman, hulog
l	luha, lolo, liwanag
m	mesa, mukha, manok
n	noo, nanay, nood
ng	ngipin, ngiti, ngawa
p	pagkain, pera, prutas
r	resibo, regalo, relo
s	saging, sayaw, sipilyo
t	tao, tawid, traysikel
w	walis, watawat, welga
y	yakap, yero, yelo

Word List for Letter-Sound Relationship

Isang Pangtig (Patinig)

a	abo, apoy, araw
e	eleksiyon, elepante, eroplano
i	ilog, ilong, iyak
o	okra, opisina, orasan
u	ulap, uling, upo

Dalawang Pantig (Katinig-Patinig / Patinig-Katinig)

	a	e	i	o	u
b	bahay	belo	bilog	bola	buhok
	babae	bombero	kabibe	abokado	sibuyas
	mataba	bibe	gabi	takbo	----
	----	----	ib-ib	----	----
	----	----	----	----	----
	liab	----	ilaib	loob	----
k	kahoy	----	kilay	---	kubo
	pagkain	raketa	----	---	eskuwelahan
	baka	palengke	lalaki	bangko	----
	aklat	eksam	----	oktubre	ukbot
	----	----	maikli	----	ukdo
	----	----	----	look	----
d	dahon	----	dila	----	dugo
	tindahan	pandesal	kandila	----	madulas
	isda	balde	sindi	sarado	----
	----	----	idlip	----	udlot
	----	----	----	----	----
	----	----	----	nood	----
g	gabi	----	gitara	goma	guro
	sigarilyo	----	agila	negosyante	----
	umaga	tiangge	----	dugo	----
	agham	egnog	igsi	----	ugnay
	----	----	----	----	----
	----	leeg	----	loog	----

h	halaman mahaba baraha ---- ---- ----	hepe kahera garahe ---- ---- ----	higa mahirap mananahi ---- ---- ----	holen ---- trabaho ---- ---- ----	hulog ---- ---- ---- ---- ----
l	labi salamín bala alpabeto ---- ----	---- elepante ---- ---- ---- ----	ligo daliri gusali ---- ---- ----	lobo --- ulo olyo ---- ----	luha ---- ---- ulbo ---- baul
m	masaya kamatis kama ampalaya ---- ----	mesa ---- ---- employdo ---- ----	---- ---- dumi imposible ---- ----	modelo ---- damo ---- ---- luom	--- almusal ---- umpisa ---- ----
n	nanay mananahi gitna antok ---- laruan	negosyante hardinero ---- entablado ---- ----	niyog manika mani indak ---- kain	noo ---- telepono onse ---- baon	nunal sinulid ---- untog ---- ----
ng	ngawa ---- tainga angkan ---- ----	---- ---- ---- engkanto ---- ----	ngipin mangingisda ---- inggit ---- laing	---- ---- alimango ---- ---- bagoong	nguso ---- ---- unggoy ---- ----
p	paa sapatos apa ---- ---- alapaap	pera propesor kape ---- ---- ----	piso ospital ---- ip-ip ---- ----	posas telepono gripo optika ---- ----	pulis maputi sampu ---- ---- ----

r	raketa paaralan lampara	regalo ---- ----	riles ---- pari	rosas eroplano laro	ruler --- ---
	artista ---- ----	ermita ---- ----	---- ---- ----	orkid ---- ----	urban ---- ----
s	sapatos mansanas isa	semento ---- klase	sibuyas traysikel susi	sobre ---- baso	sulat asukal ----
	asfalto ---- ----	eskuwelahan ---- ----	isda ---- ----	ospital ---- ----	usli ---- ----
t	tatay watawat bata	telepono karpintero bote	tinidor botika kalapati	toyo ---- bato	tulay estudyante ----
	atleta ---- laat	etsake ----- -----	itlog ----- liit	otmil ----- laot	ut-ot ---- ----
w	walo liwanag dalawa	huwebes nuwebe ----	wisik ---- ----	----	----
	araw kalabaw sayaw	---- ---- ----	baliw sisiw laiw		
y	yakap ---- silya	yelo ---- kalye	yibok --- ---	yoyo ---- bagyo	yuko ---- ----
	liay bantay kilay	---- keyk ----	---- ---- ----	---- ---- unggoy	---- ----- kasuy

* For the list of words for the letter-sound relationship, those in "----" means that a word neither exists nor is included in the defined set of words.

Tatlong Pantig (Katinig-Patinig-Katinig)

bun	bundok, buntis	hal	mahal
lat	aklat, balat, sulat	ham	liham
lay	kilay, gulay, suklay	han	handá, simbahan, tindahan
lis	pulis, walis	har	hardinero
log	Itlog, tulog, hulog	has	rehas
hon	dahon, kahon	hig	sahig
may	kamay, pamaypay	hin	hindi, hintay
mit	damit, gamit	hod	tuhod
mot	gamot, kumot	hok	buhok
nim	anim, tanim	kad	lakad, matangkad
ril	baril, sigarilyo	kal	kalye, asukal
sin	asin, sindi	kam	kambling
tak	takbo, utak	kan	kanta, kandila
tas	gatas, prutas	kap	yakap
tin	tindero, tindahan	kar	karpintero
bal	balde	kas	malakas
bang	bangko	ken	kendi
bid	lubid	kid	bukid
big	tubig	kit	sakit
bin	bintana	kod	likod
bing	kambling	kot	kotse
bol	bolpen	kut	kutsara, kutsilyo
bom	bombero	lag	lagda
bon	ibon, sabon	lak	bulaklak
bong	bubong	lam	lampara
bra	braso, sobra	lan	ulan, paaralan, pangalan
bre	sobre	lap	ulap
dad	edad	lek	eleksiyon
dan	hagdan	len	holen
den	dentista	leng	palengke
der	karinderya	ler	ruler
dok	doktor, bundok, sandok	les	riles
gan	ganti, maganda, kaibigan	lib	libro
gas	matigas	lid	silid
ging	saging	lim	ilalim
git	gitna	ling	uling, magaling
gol	sanggol	lit	galit
gos	negosyante	log	ilog, bilog, tulog
gri	gripo	long	ilong, gulong, talong
gun	gunting	lung	malungkot
hag	hagdan	man	mansanas, halaman

mat	salamat	sang	sanggol
men	semento	sap	usap
mig	malamig	sas	posas rosas
min	salamín	sik	wisik
mok	lamok	sil	silya
muk	mukha	sim	simbahan
nag	liwanag	sing	singsing, lasing
nak	anak	sok	usok
nan	unan, kanan	tai	tainga
nas	mansanas	tal	ospital
nig	banig	tang	tanghali, matangkad, utang
nin	kanín	tat	tatlo
ngan	kulungan	tid	kapatid
ngis	mangingisda	tik	plastik
nis	linis, malinis	ting	gunting
nit	init, mainit	tis	artista, buntis, kamatis
nog	tunog	tod	puntod
nok	manok	tog	untog
nom	inom	tol	santol
pag	pagkain, masipag	tor	aktor, doktor
pal	aspalto	tos	sapatos
pan	panyo, pandesal	tra	trabaho
pas	pasko	wan	Kaarawan, katwan, buwan
pat	apat	wang	bawang
pel	apelyido, papel	wat	watawat
pen	bolpen	wel	welga
pet	petsay	wid	tawid
pil	sipilyo	wis	pawis
pin	karpintero	yak	iyak
ping	pinggan	yam	siyam
pis	pisngi, ipis, lapis	yan	negosyante, sasakyan
pit	ipit, gupit, malapit	yas	sibuyas
pla	eroplano	yong	payong
ple	empleyada, empleyado	yop	hayop
pro	propesor		
pru	prutas	dyan	estudyante
pun	puntod	pals	plastik
ral	aral	siyon	eleksiyon
rap	harap, mahirap, masarap	syon	edukasyon
ras	oras	tres	aktres
rin	karinderya		
sak	sasakyan		
sal	kasal, almusal, pandesal		
sam	sampu		
san	sandok, santol, orasan		

Salita
Hulapi-Unlapi / Unlapi-Hulapi

SET	WORDS
1	lata – tama – mahaba – baka – kama – mata – tawa – wala – laba – babae
2	regalo – lobo – botika – kama – mali – ligo – goma – mata – tawa – walo
3	taba – baba – бага – gabi – bituka – kaibigan – ganti – tiwala – lawa – watawat
4	mesa – sarili – lima – maganda – dalaga – garahe – hepe – pera – raketa – tatay
5	eksam – sampu – puno – nobela – lata – tabo – bola – lalaki – kilusan – sandok
6	kanta – tama – mapa – parusa – sarili – ligo – goma – mababa – babae – edad
7	kendi – dila – laba – basa – sarili – libo – bote – tela – labasan – santol
8	kandila – lapis – pisngi – ngiti – tiwala – labi – bibe – belo – lobo – boto
9	tindahan – handa – daga – gasera – raketa – talaba – bata – tao – orasan – sandok
10	utang – tanghali – libo – botika – kama – mangingisda – dalawa – wala – lasing

Simpleng Manipulasyon

SET	WORDS
1	bato – baso – braso – aso – abo – abokado
2	parusa – pusa – puso – puno – noo
3	mata – mataba – mababa – mahaba – mahal
4	ipis – ipit – init – ina – isa – isda
5	sabaw – sayaw – saya – silya – silid
6	taba – tabo – takbo – tao – tatlo
7	dalaga – dala – daga – dugo – dulo
8	niyog – bilog – ilog – itlog – tulog
9	ubo – ulo – walo – wala – bala
10	regalo – relo – yelo – yero – tindero

Mga Salita

2 Pantig						
a, e, i, o, u	b, k, d		g, h, l		m, n, p, r	s, t, w, y
aklat	baba	dala	gabi	lubid	mahal	sabon
aktor	baga	damit	galit	luha	mali	saging
ama	baka	damo	gamit	luma	mani	sahig
anak	bala	dila	gamot		manok	sakit
anim	balat	doktor	ganti		mapa	sampu
apa	balde	dugo	gatas		mata	sandok
apat	banig	dulo	gitna		mesa	santol
aral	baril	dumi	goma		noo	saya
asin	basa		gulong		nood	silid
aso	baso		gunting		paa	silya
edad	bata		gupit		panyo	sindi
ibon	bato		guro		papel	siyam
ilog	belo		hagdan		pari	sulat
ilong	bibe		handa		pasko	susi
ina	bilog		hapon		pawis	taba
init	bola		harap		payong	tabo
inom	bolpen		hayop		pera	takbo
ipis	bote		higa		piso	talong
ipit	boto		hindi		pito	tama
isa	bubong		holen		posas	tanim
isda	buhok		huli		pulis	tao
itlog	bukid		hulog		puno	taon
iyak	bundok		laba		puntod	tatlo
oras	buntis		labi		pusa	tawa
ubo	buto		lagda		puso	tawid
ulan	kahon		lakad		rehas	tela
ulap	kain		lamok		relo	toyo
uling	kalye		lapis		riles	tubig
ulo	kama		laro		rosas	tuhod
unan	kambing		lasing		ruler	tulog
untog	kanan		laso			tunog
upo	kanin		lata			wala
usap	kanta		lawa			walis
usok	kape		libo			walo
utak	kasal		ligo			wisik
utang	kubo		liham			yakap
uwi	kuko		likod			yelo
	kumot		lima			yero
	daga		linis			yoyo
	dahon		lobo			yuko
			loob			

3 Pantig			
a, e, i, o, u	b, k, d,g,h,l	m	n, p, r, s, t, w
abokado agila alimango almusal alpabeto anino artista asfalto asukal elepante eroplano ilalim opisina orasan ospital umaga	babae baraha bintana bituka botika bulaklak kaarawan kabibe kahera kaibigan kalabaw kalapati kaliwa kamatis kandila kapatid karinderya karpintero katawan katulong kilusan kusina dalaga dalawa daliri dentista garahe gasera gitara gusali halaman handaan hapunan harana hardinero labasan lalaki lampara liwanag	mababa mabait mabilis madali magaling maganda mahaba mahirap maikli mainit malakas malaki malamig malapit malayo maliit malinis malungkot mananahi manika mansanas masarap masaya masipag mataas mataba matangkad matigas modelo	nobela paaralan pagkain pandesal papaya parusa raketa regalo resibo salamat salamín sapatos sarado sarili semento sibuyas sigarilyo simbahan sipilyo tabako talaba telepono tindahan tindera tindero tinidor tiwala watawat

Diptonggo	Komplikadong Salita	
araw	aktres	sobre
apoy	apelyido	tainga
baboy	bangko	tanghali
bahay	bawang	tanghalian
drayber	braso	trabaho
gulay	buwan	tren
hintay	kendi	
ibabaw	kotse	
ilaw	kulungan	
kahoy	kutsara	
kalabaw	kutsilyo	
kamay	dyip	
kilay	edukasyon	
nanay	eleksiyon	
pamaypay	employada	
sabaw	empleyado	
sayaw	eskuwelahan	
sisiw	estudyante	
suklay	gripo	
tatay	libro	
tinapay	mangingisda	
traysikel	mukha	
tulay	nars	
unggoy	negosyante	
	ngawa	
	ngipin	
	ngiti	
	nguso	
	nguya	
	okra	
	palengke	
	pangalan	
	petsay	
	pinggan	
	pisngi	
	plastik	
	presyo	
	propesor	
	prutas	
	sanggol	
	sasakyan	
	singsing	
	sobra	

Dictionary

abo	ang solidong tira ng apoy
abokado	isang uri ng prutas at puno
aktor	lalaking gumaganap sa dulaan, teatro, tanghalan o pelikula
aklat	mga pinagsamasamang mga nailimbag na salita at larawan sa papel
aktres	babaing gumaganap sa dulaan, teatro, tanghalan o pelikula
agila	Alinman sa malalaking ibong mandaragit na kung manginain ay sa araw at kilala sa kanilang lakas, laki, katalasan ng paningin at lakas sa paglipad.
agham	Tanging sangay ng karunungan, lalo na ang kaalaman kung paanong ang isang pangyayari nagbibigay-daan sa pinagmumulan ng iba sa lipunan
alapaap	Namumuon ng mga butil ng tubig sa papawirin
alimango	hayop-tubig na kung lumakad ay patagilid; may talukab na malapad at malukong; may dalawang sungot sa gitna, isang pares na sipit sa dakong unahan, tatlong pares na galamay na matutulis ang dulo, at sa hulihan ay isang pares napanlangoy na ang dulo ay maninipis at malalapad.
almusal	Agahan; pagkain sa umaga.
alpabeto	kalipunan ng mga titik na mayroong pagkasunod-sunod
ama	lalaking magulang ng anumang uri ng anak
ampalaya	Taunang baging na gumagapang sa pamamagitan ng mga pangkunyapit; Ang bungang nakakain ay mapait, hugis-bumbong, tulis sa magkabilang dulo, may mga kanal na pahaba, at kulubot ang balat
anak	isang supling na may kaugnayan sa mga magulang.
anim	isang likas na bilang na pagkatapos ng 5 at bago ng 7
anino	maitim o madilim na bagay na nalilikha ng anumang humaharag sa liwanag ng araw, kandila, ilaw, atb.
antok	Pakiramdam ng isang taong ibig matulog
angkan	Lipon ng mga taong magkakamag-anak na galling sa iisang kanunuan
apa	masa ng arinang may halong asukal at kung minsan ay may itlog pa, tinusta at hinugis nang pabalising song upang paglagyan ng sorbets o kaya ay hinugis na parang bumbong upang kainin
apat	isang likas na bilang na pagkatapos ng 3 at bago ng 5
apelyido	Pangalang pang-angkan ng isang tao
apoy	Isa sa mga pangunahing element ng kalikasan ng nagtataglay ng init; alab ng nagniningas na anuman.
aral	Paghutok sa isip upang matutuhan o malaman ang isang bagay.
araw	ang pinakasentro ng bituin ng sistemang solar
artista	Ang lumalabas sa puting-tabling, dulaan, o radyo; sinumang kung gumayak o umanoy ay parang lalabas sa tanghalan.
asin	isang mineral na maalat na karaniwang ginagamit na panlasa sa pagkain
aso	Hayop na kargahan na nahahalintulad sa kabayo, mahaba ang tainga at karaniwang abuhin, mabagal, matiyaga at walang panganib na madulas, madapa o mabuwal.
aspalto	malagkit, itim, at malapot na likido o medyo-solido na karaniwang ginagamit ito sa panambak sa kalye
asukal	isang maputing mala-krystal na solido na karaniwang ginagamit na panlasa sa pagkain

atleta	Manlalaro
baba	Pagkilos mula sa itaas pailalim; kabalikan ng akyat.
babae	pangkasariang ginagamit sa tao na kabaligtaran ng lalaki
baboy	Hayop na apat ang paa, malaki ang ulo, mahaba at bilugan ang katawan, may matitigas na balahibo.
baga	Sangkap na panloob ng tao o hayop na ginagamit sa paghinga.
bagoong	Sawsawan o panimplang Pilipino na yari sa inasnan at inimbak na maliliit na isda, itlog ng isda, o alamang.
bagyo	Malakas na hanging may kasamang ulang nagbubuwal sa mga bahay at punungkahoy at sumisira ng lansangan, atb.
bahay	isang kayarian o istrukturang gawa ng tao at isang tirahan na napapalibutan ng mga dingding at bubong
baka	Malaki at maamong hayop na pat ang paa katulong ng tao sa paggawa sa lupa at sa paghila ng mabibigat na bagay. Ang babae nito ay ginagatasan.
bala	Punlong ginagamit sa mga sandata o armas na panudla.
balat	Pinakataklob o balot ng anumang bagay na may laman, maging may buhay o wala.
balde	Panalok ng tubig ng karaniwan ay basyong lata ng gas na inalis ang takip at nilagyan ng mahahawakang kahoy na pahalang na ipinako sa dakong pinakabibig.
baliw	Taong nasisira ang ulo; Nasisiraan ng isip
bangko	isang lugar kung saan maaaring ideposito at utangin ang salapi
banig	Kasangkapang yari sa nilalang binulay na buli, dahon ng pandan, atb. na ginagamit na sapin sa paghiga.
bantay	Sinumang tumatanod sa anuman upang iilag sa anumang kapinsalaan ang tinatanuran.
baon	Anumang bagay na dinadala ng isang may paroroonan upang magamit tulad ng kuwarta, pagkain, atb.
baraha	isang piraso ng natatanging hinandang mabigat na <u>papel</u> na nilagyan ng <u>bilang</u> , may naiibang mga paksa at ginagamit bilang isa sa mga magkakasamang baraha upang <u>makapaglaro</u> ng mga <u>larong baraha</u>
baril	uri ng sandata na may kakayahang tumira ng bala
basa	Salita, wika.
baso	isang uri ng kasangkapang pang-inom
bata	isang taong nasa kaniyang kabataan
bato	isang matigas na bagay
baul	Kasangkapang tila kahong yari sa kahoy na taguan ng damit
bawang	isang uri ng halamang gulay na ginagamit sa pagluto
belo	Talukbong, pindong, pandong, kulubong na karaniwan ay gamit o isinusuot sa pagsisimba ng mga babae.
bibe	isang uri ng ibon
bilog	Anumang bagay na pabilog
bintana	bahagi ng isang bahay o gusali
bituka	Likaw-likaw na tubo sa loob ng katawan ng tao o hayop na pinagdaraan at pinagtutunawan din ng pagkain mula sa sikmura hanggang sa puwit.

bola	Ang mabilog na bagay, maging hungkag o may laman ang loob na ginagamit sa laro.
bolpen	isang makabagong uri ng panulat
bombero	Ang tagapatay ng sunog
bote	Sisidlang yari sa bubog, may leeg at bibig na may tapon at nilalagyan ng tubig o bagay na lusaw; botelya; garapa.
botika	Tindahang ng gamut maging yari na o tinitimpla; parmasya.
boto	Pagpapahayag ng pagpili o niloloob sa alinmang dapat pagpasiyahan, maging ito ay sa pamamagitan ng pagsulat, pagtataas ng kamay, pagsagot, atbp.
braso	Bisig ng tao.
bubong	pang-itaas na bahaging pantakip sa isang bahay o gusali
buhok	mga mahahabang hibla ng balahibo na matatagpuan sa ibabaw ng ulo ng <u>tao</u> at maging sa balat
bukid	Malawak na lupang taniman ng palay
bulaklak	anumang bunga ng <u>halaman</u> na may <u>talulot</u>
bundok	<u>anyong lupa</u> na lumalagpas sa taas ng paligid ng mababang bahagi ng lupa sa isang limitadong lawak
buntis	May taglay na sanggol sa tiyan
buto	bahagi ng katawan ng tao o hayop
buwan	isang bagay na nasa kalawakan
kaarawan	Kapanganakan; araw ng pagsilang; araw o petsa ng isang nakatakdang pangyayari.
kabibe	Lamandagat na kinakain ang maliit at mapula-pulang laman.
kahera	Tao sa bangko, tanggapan o tindahan na tumatanggap ng pera at siya ring nakaaalam o nangangasiwa sa pagbabayad o pagpapalabas ng kuwarta
kahero	Tao sa bangko, tanggapan o tindahan na tumatanggap ng pera at siya ring nakaaalam o nangangasiwa sa pagbabayad o pagpapalabas ng kuwarta; may hawak ng kaha.
kahon	Kulong at parisukat o parihabang taguan o lalagyan ng anuman na gawa sa kahoy, karton o metal, maaaring hiwalay o kabit ang takip.
kahoy	Pinagputul-putol at ipinrosesong bahagi ng katawan at sanga ng punungkahoy na ginagamit sa paggawa ng iba't ibang bagay o kaya ipinanggagatong.
kaibigan	Taong katapatang-loob, kasundo sa ugali at kapalautangan ng lingap at pagtinging may di-karaniwang malasakit at pagtitiwala.
kain	Pagsasabibig ng anuman na makabubusog o makasisiya sa katawan.
kalabaw	Malaking hayop na sa Pilipinas ay tanging gamit sa pag-araro o panghila.
kalapati	Maamong ibon na karaniwang puti o abuhing-pula ang balahibo, pula ang tuka at mga paa at mataas lumipad.
kaliwa	Sa tao, ang dakong karaniwang kinaroroonan ng puso; katugon o kaibayo ng kanan.
kalye	Daan: kalsada; lansangan
kama	Higaang yari sa bakal, kahoy o kawayan, na karaniwang may pat na paa.
kamatis	Prutas na mapula o dilaw at makatas kung hinog; nakakain nang hilaw at karaniwang ginagawang sawsawan, panangkap o pampaasim sa pagluluto

kamay	Bahagi ng katawan ng tao na nakahugpong sa magkabilang balikat, sa kanan at kaliwa. Binubuo ito ng bisig, kamao at mga daliri; gamit sa paghawak ng kung anumang.
kambing	Hayop na kauri, kasinlaki at kaugali ng tupa sa kilos, sa panginginain at sa paggagala sa kaparangan. Naiiba ito sa tupa sapagkat may sungay ang babae at lalake nito at di-mahaba ang balahibo.
kanan	Tumutukoy sa parte ng katawan ng tao na karaniwang kinaroroonan ng bisig at pang lalong gamitin at gamay sa paggawa; kasalungat ng kaliwa.
kandila	Pang-ilaw o pananglaw na gawa sa sebo o pagkit na nilagyan ng mitsa sa gitna
kanin	Bigas na niluto at handa nang kainin.
kanta	Awit.
kapatid	Ang tao sa pagkakaugnay niya sa ibang anak ng kanyang mga magulang.
kape	Malaaromang inumin mula sa buto ng halamang may ganito ring pangalan
karinderya	Maliit na restoran o kainan na nagdudulot ng mga lutong pagkain
karpintero	Manggagawa ng mga kasangkapang yari sa kahoy; katu-katulong sa paghuhubog at pag-uugnay ng kabuuan ng bahay o anumang gusali
kasal	Pag-iisang dibdib ng babae at lalaki sa harap ng pari o hukom o ng iba pang maykapangyarihang magpatibay o maialinsunod sa batas ang kanilang pagsasama
kasuy	Maliit na punungkahoy na ang bungang hugis-ppuso at dilaw ay kinakain at ang buto na nakalabas sa katawan ng bungay ay malinamnam na kagaya ng mani kung iniihaw
katawan	Kabuuan ng isang tao o hayop
katulong	Kawaksi; karamay
kendi	Pagkaing yari sa asukal, gatas at iba pang pampalasa tulad ng tsokolate, prutas at mani.
keyk	Pinaghalong arina, itlog, gatas at iba pang sangkap na iniluto sa hurno o oben
kilay	Buhok na ang pagkakatatubong ay pabalantok sa ibabaw ng talukap ng mata ng sinuman.
kilusan	Sama-samang pagkilos o pagtutulungan ng mga tao upang maisakatuparan ang isang layunin.
klase	Pagpapangkat-pangkat ng mga mag-aaral sa ilalim ng iisang guro
kotse	Awto, awtomobil
kubo	Bahay na munti na ang bubong ay yari sa nipa o kugon at may dingding na kawayan. Ginagamit na silungan at pahingahan sa bukid.
kuko	Pinakamatigas na bahagi sa gawing ibabaw ng dulo ng darili ng kamay at paa ng tao at ibang hayop
kulungan	Piitan, selda
kumot	Kayo o telang malapad na may tahi sa gilid, karaniwang makapal na ginagamit na panakip sa higaan, pambalot sa katawan ng natutulog na tao upang makapananggol sa lamig.
kusina	Lutuan o ang silid-lutuan sa loob ng bahay.

kutsara	Pangunahing kagamitan sa pagkain, kahugis ng munting sandok at yari sa iba't ibang uri ng metal, plastic, kahoy, atb. Karaniwang ginagamit na kasama ng tinidor
kutsilyo	Maliit at manipis na kampit, may isang pulgada ang lapad at karaniwang gamit sa paghihiwa ng anumang medaling hiwain
daga	Hayop na ang katawan ay humahaba nang hanggang sampung dali, maikli ang nguso, mapagngatngat ng damit, pagkain, atb. at nagtitira sa mga lungga.
dahon	bahagi ng halaman
dala	Paglilipat ng anuman sa iba't ibang pook sa pamamagitan ng kamay, sasakyan atb.
dalaga	tawag sa isang babae na wala pang asawa ngunit nasa hustong gulang na isang likas na bilang na pagkatapos ng 1 at bago ang 3
daliri	bahagi ng katawan at isang organo ng manipulasyon at pandama na matatagpuan sa kamay at paa
damit	mga bagay na pantakip sa katawan ng tao
damo	Halamang di gaanong tumataas at hindi nagkakaroon ng sangang kahuyan.
dentista	doktor ng mga ngipin o manggagamot ng mga ngipin
dila	bahagi ng katawan na nasa loob ng bibig
doktor	lisensyadong propesyonal ukol sa medisina
drayber	tagapagmaneho ng kotse, motor, o traysikel
dugo	Likidong nananalaytay sa mga ugat ng tao at hayop na nagdadala at namamahagi ng pampalusog at oksiheno sa lahat ng dako ng katawan at lumilikom ng mga duming dapat ilabas o itapon.
dulo	Pinakamalayo at pinakahuling dako o bahagi ng anuman.
dumi	Anumang bagay na nakapagpapangit, nakapagpapabaho o nakasisira sa kinalalagyan (gaya ng alikabok, putik, dungis, libag, banil, atb.)
dyip	Sasakyang de-makina na noong una ay ginagamit lamang na panghukbo ngunit ngayon ay pampasahero na rin.
eksam	Pagsusuri; pagsubok; pagsusulit
edad	Gulang; taon.
edukasyon	Pagtuturo; pagpapanuto; ang pagbibigay o pagtatamo ng karunungan, kaalaman, kasanayan, atb.; maayos at masistemang pagtuturo o pagsasanay.
egnog	Gatas at itlog na may alak
eleksiyon	Pagpili ng tao o mga taong ilalagay sa tungkulin sa pamamagitan ng pagboto.
elepante	Pinakamalaking hayop na may malalaki, malalapad at lawit ng tainga. Ito ay may mahahabang bulaylay at dalawang balikukong pangil na garing.
empleyada/o	Taong nagtatrabaho nang may upa para sa ibang tao o sa isang bahay-kalakal
entablado	Tanghalang bukas at walang tabing na pinagdarausan ng palatuntunan, dula, talumpati at iba pang kauri ng mga ito
engkanto	Kapangyarihan angkin ng sinuman na makagawa o makalika ng mga kahima-himalang gawain, bagay o pangyayari
ermita	Tirahan ng ermitanyo; Alinmang tirahang hiwalay o malayo sa karamihan;

eroplano	bahay na nakabukod sa karamihan Sasakyang-panghimpapawid ng mabigat kaysa hangin; tumataas at napamamalagi sa himpapawid sa pamamagitan ng pagdaraan ng hangin sa mga pakpak, pinaandar ng elise, motor, atb.
eskuwelahan	Gusaling ginagamit ng mga nagsisipag-aral; pook na turuan o sanayan.
estudiyante	Isang mag-aaral (gaya ng nasa kolehiyo, unibersidad at iba pang paaralan).
etsake	Dahilan, sangkalan
gabi	Kabuuan ng isang magdamag; oras o panahon buhat sa paglubog ng araw hanggang sa pagsikat nitong muli kinabuksan.
galit	Matinding damdamin ng pagsasalungatan, kawalang-kasiyahan, pagkayamot o paghihinakit. Damdaming nagdudulot sa isang tao ng hangaring makipag-away o lumaban; sama ng loob.
gamit	Anumang bagay o kasangkapan
gamot	Anumang bagay na nakalulunas sa karamdaman
ganti	Anumang bagay na ibinibigay sa kapwa bilang kapalit ng paglilingkod na tinatanggap o ng anumang utang-na-loob.
garahe	Himpilan o silungan ng mga sasakyang-de-motor (gaya ng awto, trak, dyip, atb.
gasera	Ilawang ginagamitan ng gas.
gatas	Maputing likidong lumalabas sa suso ng babaing mamalya bilang pagkain ng kanilang supling.
gitara	Instrumento sa musika na may anim na kuwerdas na kinakalabit upang tumunog
gitna	Pagitan ng dalawang bagay na pareho ang layo sa magkabilang dulo
goma	Punungkahoy na may taluhaba, makintab at malakatad na dahon. Ang malagkit na dagta nito ang ginagawang goma o lastiko.
gripo	Kasangkapang ginagamit sa maayos na pagpapalabas o pagpigil sa daloy ng tubig at iba pang likido mula sa tubo.
gulay	Anumang mahalang-damong ang bunga, buot, ugat, tangkay, dahon o bulaklak ay kinakain
gulong	Bilog na balangkas o ang buong disko na umiikot sa ehe
gunting	Kasangkapang ginagamit na paggupit o panabas na binubuo ng dalawang metal na magkaekis at magkaharap ang talim, may hawakan na kapag pinagdiit ay nakapuputol o nakahahati.
gupit	Pagputol sa buhok, tela, kayo, papel atb. sa pamamagitan ng gunting
guro	Taong nagtuturo o taong ang hanapbuhay o propesyon ay ang pagtuturo.
gusali	Kayariang itinayong pangmatagalan, may bubong at nakukulong ng mga pader at nagsisilbing tuluyan, imbakan, pagawaan at iba pang makabuluhang layunin.
hagdan	Bai-baitang na akyatan sa pagpanhik sa bahay.
halaman	Sa kalahatan, anumang nabubuhay sa lupa at tubig na may katawan, ugat, sanga at mga dahon.
handa	Iba't ibang pagkaing inilalaan sa mga panauhin.
handaan	Pagtitipon o piging na may masasarap na pagkaing inilalaan sa mga panauhin.
hapon	Oras mula sa tanghali hanggang sa paglubog ng araw.

harana	Pagtapat ng binatang nais manligaw sa tahanan ng dalaga at pagpaparinig ng mga awit at tugtugin sa mga oras na tahimik na ang gabi.
harap	Dakong nasa bungad o unahan ng anuman.
hardinero	Sinumang tagapag-aruga ng isang hardin maging ito ay isang hanapbuhay or isang libangan lamang.
hayop	Anumang nilikhang may buhay, maliban sa mga halaman.
hepe	Puno, tsip.
higa	Anyo o kalagayan ng tao o hayop na namamahinga nang lapat ang buong katawan.
hindi	Nauukol sa pagtangga o hindi pagsang-ayon
hintay	Pagpaparaan ng panahon sa isang lugar hanggang sa dumating ang ibig makita o mangyari.
holen	Maliit at bilog na marbol o bubog.
huli	Hindi nakarating nang husto sa oras.
hulog	Ang pagbagsak ng anuman buhat sa mataas na lugar.
huwebes	Araw na sumusunod sa Miyerkules at sinusundan ng Biyernes; Ikalimang araw mula sa Linggo
ib-ib	Paghithit ng hangin (gaya ng ginagawa sa sigarilyo o tabako)
ibabaw	Dakong itaas o taluktok; ituktok.
ibon	Hayop na balot ng balahibo ang katawan, may dalawang paa at dalawang pakpak na ginagamit sa paglilipad, sari-sari ang hugis at tuka at iba't iba ang kulay.
idlip	Sandaling tulog lamang
igsi	Iksi
ilaib	Isalab; Idarang sa init; iinit ang dahon upang lumambot
ilalim	Dakong ibaba ng anuman; ang kinapapatungan ng anuman.
ilaw	Anumang nagbibigay ng liwanag
ilog	Likas na daang-tubig na malaki kaysa sa sapa, tabang man o alat at umaagos patungong kababaan at tumutuloy sa dagat.
ilong	Bahagi ng mukha na ginagamit na pang-amoy.
imposible	Hindi maisakatuparan o mangyayari
ina	Magulang na babae.
indak	Pasayaw na galaw ng mga paa
init	Nakadadarang o tumatalab na tama ng apoy o araw.
inom	Paglagok ng tubog o anumang lusaw na bagay.
inggit	Pagkainis sa kapwa dahil sa kahigitan nito
ip-ip	Ang bawat isa sa dalawang hitang pang-unahan ng hayop
ipis	Kulisap na may pakpak, manipis ang katawang lapad at may dalawang mahahabang sungot. Tumitira sa madilim at maruming butas at nanginginain ng dumi.
ipit	Ang pagkakalagay ng dalawang bagay upang siksikin o pisain ang anuman.
isa	Walang kasama; hindi marami.
isda	Hayop na nakatira sa tubig, may mga palikpik at karaniwang ballot ng kaliskis ang buong katawan; may buntot ata karaniwan ay pahaba ang katawan at humihinga sa kanyang hasang.

itlog	Biluhabang bagay na iniluluwal ng manok, ibon at ibang uri ng hayop na nangingitlog.
iyak	Pagtulo ng luhang may kasabay na hikbi sanhi ng matinding sakit o damdamin.
laat	Maliit na bitak na siyang simula ng pagkabasag
laba	Paglilinis ng damit at iba pang kauri nito sa tubig at sabon.
labasan	Pook o lugar na pinagdaraan kapag papalabas.
labi	Dakong ibaba ng bibig, ang dakong itaas ay tinatawag na nguso. Kung ginagamitan ng pangmaraming mga, ang salita ay tumutukoy sa nguso at labi.
laing	Tangkay at dahon ng halamang gabi
laiw	Kapanglawan; Kalungkutan
lakad	Libot.
lagda	Pagsulat ng sariling pangalan at apelyido, pagpirma.
lalaki	Kasarian ng tao o hayop na naiiba sa babae.
lampara	Ilawang ginagamit ng langis, alcohol, o gas.
lamok	Kulisap na ang laki ay di-humihigit sa sangkapat na dali, makitid ang tiyan, malaki ang dib-dib at may pandurong panipsip sa dugo ng tao o hayop.
laot	Malayong dako o kalagitnaan ng dagat
lapis	Panulat na yari sa tasa na nakapaloob sa kahoy, metal, atb.
laro	Libangan
laruan	Anumang bagay na pinaglalaruan
lasing	Sinumang nawawalan ng isip sa buong panahon ng kalagayan iyon o umiikot ang paningin dahil sa bias ng labis na alak.
laso	Piraso ng kayo o kauri nito na may iba't ibang lapad at ginagamit na palamuti, panali, atb.
lata	Sisidlan na karaniwan ay yari sa metal.
lawa	Malawak na bahaging tubig na nakukulong ng lupa.
leeg	Bahagi ng katawang mula sa may baba hanggang sa may balagat na siyang naghuhugpong ng ulo sa katawan
liab	Ningas o ang bigla at matinding pagsiklab ng apoy.
liay	Patalikod ng paggiwang ng katawan, karaniwan ay buhat sa baywang pataas
libo	Pamilang, sampung sandaan.
libro	Katipunan ng mga papel na may nakalimbag na mga akda o aralin.
likod	Bahaging katapat ng o pinakamalayo sa harapan.
ligo	Paglilinis ng buong katawan sa pamamagitan ng pagbubuhos ng tubig o paglubog sa tubig.
liham	Papel na kinasusulatan o kinalilimbangan ng anumang ibig sabihin o ibabalita at ipinadadalawa kinauukulan.
liit	Kababaan o kakauntian ng isang bagay, bilang, katangian, o kalagayan
lima	Pamilang, apat dagdagan ng isa.
linis	Pag-aalis ng dumi, sagabal o hadlang sa anuman o saanman.
liwanag	Paglinaw ng isang bagay na malabo sa isip at paningin.

lobo	Bagay na karaniwan ay bilog na parang bola, ang laman ay hangin o kimikang gas na nagpapagaan at nagpapalutang dito sa hangin.
loob	Puwang na nasasaklaw nang lubusan o hindi ng isang bangkulong.
loog	Bagay na nakahirin o nakabara sa lalamunan
look	Dagat na di-kalawakan at di-lubusang naliligid ng lupa dahil sa pagkakaroon ng isang bungangang pinapasukan or nilalabasan ng tubig buhat sa kanugnog na karagatan
lubid	Malaki, mataba at matibay na paneling yari sa mga himaymay ng abakang pinagpili-pilipit nang sama-sama or tinirintas
luha	Malinaw at maalat-alat na tubig na lumalabas o umaagos buhat sa mata, karaniwan ay bunga ng damdamin.
luma	Nauukol sa katagalan na ng pagiging, ng pagkakagawa, ng pangyayari, atb. ng anuman; dati nang ginagamit; hindi bago.
luom	Nauukol sa kalagayang kulong o kulob
mababa	Hindi mataas o kulang sa taas; pandak.
mabait	Hindi malupit; mabuti ang ugali.
mabilis	Matulin
madali	Magaang gawin o hindi mahirap.
madulas	Madupilas
magaling	Mabuti o malakas; walang sakit.
maganda	May taglay na alindog, kaakit-akit, may katangiang nakalulugod sa paningin, marilag o kaaya-aya sa paningin.
mahaba	May taglay na haba; hindi maikli.
mahal	Mataas ang halaga.
mahirap	Dukha, aba; Maralita
maikli	Maliit ang haba
mainit	Maapoy, mangingas, maliyab.
malakas	Matibay o matigas at may kakayagan sa paggawa ng anuman.
malaki	May taglay na laking binubuo ng taas, haba, lapad at kapal.
malamig	May lamig, nasa kalagayang nag-aangkin ng lamig; hindi mainit.
malapit	Maliit lamang ang pagitan; may kaunting pagitan o hindi malayo.
malayo	May malaking agwat o may malaking pagitan.
mali	Anumang di-natutumpak sa tuntuning sinusunod; hindi totoo; sala o hindi tama; hindi wasto o tumpak; lihis o lisya.
maliit	Munti; bulilit.
malinis	Nauukol sa kalagayang walang dumi osa kalagayan ng isang bagay na nagawa nang buong ayos.
malungkot	Mapanglaw, nalulumbay, may lungkot, may pighati.
mananahi	Kosturera, tawag sa sinumang ang gawain sa araw-araw ay manahi.
mani	Halamang naglalaman sa ilalim ng lupa at itinatanim dahil sa mahalagang buto na siyang iniluluto.
manika	Ang tau-tauhang laruan; laruang hinubog at ini-anyo sa tao.
manok	Hayop na kauri ng ibon, ngunit malaki rito at hindi lumilipad nang mataas at madaling paamuin.

mansanas	Prutas na mabilog at hugis-puso; ang balat ay karaniwang pula, dilaw o lunti. Ang laman ay malutong bagamat kung minsan ay malabo, makatas at may ilang maliliit na buto.
mangingisda	Sinumang ang ikinabubuhay ay ang panghuhuli ng isda.
mapa	Larawang nagpapakilala ng hugis at nilalaman sa loob at lumiligid; kinaguguhitan o kinalalarawan ng ayos ng isang pook, bayan, lalawigan, bansa o ng mga lupalop ng sandaigdigan.
mapait	May lasang katulad ng sa ampalaya
maputi	Kulay busilak, kakulay ng pangkaraniwang yelo
masarap	Malinamnam; kasiya-siyang lasa ng anumang pagkain.
masaya	Masigla; maligaya
masipag	Masikap sa Gawain, walang takot sa paggawa.
mata	Bahagi sa mukha ng tao o ng hayop, na may kapangyarihang makakita.
mataba	Nasa kalagayang malusog, malaki o puno; malaman.
mataas	May taas; nauukol sa kahigtan sa sukat sa taas.
matangkad	Nauukol sa kataasan ng tao.
matigas	May angking tigas; hindi malambot.
mesa	ang patag na kagamitan sa bahay na may apat na paa
modelo	Huwaran, halimbawa.
mukha	isang pangharap na bahagi ng ulo
nanay	babaeng magulang ng anumang uri ng anak
nars	isang dalubhasang tagapag-alaga ng maysakit
negosyante	Hanapbuhay
niyog	isang uri ng palmang namumunga ng niyog at makapuno
nobela	Mahabang kathang pampanitikan na naglalahad ng isang kawil ng mga pangyayaring pinaghabi-habi sa isang mahusay na pagkabalangkas na ang pinakapangunahing sangkap ay ang pagkakalaban ng hangarin ng bayani sa isang dako at ng hangarin naman ng kanyang mga katunggali sa kabila.
noo	mabutong parte ng ulo sa ibabaw ng mga mata
nood	Kusang pagtingin sa anuman
ngat-ngat	Pagsira sa anumang bagay sa pamamagitan ng matalas na ngipin
ngawa	Ang malakas at patuloy na pag-iyak ng bata
ngipin	ang mga istrukturang nakikita sa loob ng panga o bibig na ginagamit sa pagkagat, pagngasab at pagnguya ng <u>pagkain</u>
ngiti	isang anyo, bikas, hilatsa, o hitsura ng mukha ng isang tao na karaniwang ginagawa kapag <u>masaya</u> siya.
nguso	nakikitang organo sa <u>bibig</u> ng mga <u>tao</u> at maraming mga <u>hayop</u>
nguya	Pagdurog sa anumang kinakaing nasa bibig sa pamamagitan ng pagkagat-kagat ng ngipin
nunal	Likas na marking bilog sa balat ng tao, karaniwan ay itim o pula at kung minsan ay tila kuntil na bilog na may balahibo
nuwebe	Siyam
okra	Halamang taunan kung itanim, may bungang hugis balisunsong, lunti at may malambot at malagkit na lamang iginugulay.
oktubre	Ika-sampung buwan ng bawat taon at lagging nagtataglay ng 31 araw
olyo	Langis na ipinapahid ng pari sa binibinyagan, sa maysakit na

	kinukumpisal sa kanyang paglulubha, atb.
onse	Labing-isa
opisina	Silid o gusaling katatagpuan ng isang puno, kawani, atb. ng isang pamahalaan o pangasiwaan
optika	Karunungan sa liwanag at paningin
oras	And sandal ng kaganapan ng anuman
orasan	kasingkahulugan ng relo; aparatong sumusukat, nagtatala, at nagsasabi ng oras
orkid	Dapo, orkidya
ospital	Gusaling pinagpapagamutan at tinitirhan ng mga maysakit
otmil	Pagkaing nakukuha sa trigo; Ang nilulugaw nito
otso	Walo
paa	pang-ibabang bahagi ng katawan na pangunahing ginagamit sa paglalakad
paaralan	isang pook kung saan nag-aaral ang isang mag-aaral
pagkain	anumang sustansya na karaniwang kinakain o iniinom ng mga buhay na organismo
palengke	isang pook-pamilihan na pinupuntahan ng mga tao
pamaypay	Anumang bagay na pabalik-balik na pinakikilos upang pangalawin ang hangin at upang lumamig
pandesal	Pagkaing yari sa harina, gatas, o tubig, atbp., minasa at sinangkapan ng asukal, mantika, asin, at pampaalsa, bago inihuhurno.
panyo	Kanyo o telang parisukat na karaniwang ginagamit na pamunas ng mukha at panakip ng ulo
pangalan	nagbibigay turing sa isang pangngalan na karaniwang ginagamit upang itangi ang isa mula sa iba
papaya	isang uri ng prutas o puno na ang bunga ay malalaki, taluhabang may mababaw na liha sa balat at kung hunog ay manila-nilaw na salmon, matamis at malaman at maraming butong karaniwan ay itim at kung minsan ay wala.
papel	isang kagamitang pansulat
pari	isang alagad ng Simbahan o isang taong nagsasakripsyo at nagdarasal sa Diyos para sa mga tao
parusa	Hatol na iginagawad sa isang nagkasala
pasko	isang araw ng pangiling sa kalendaryong Kristiyano, na kadalasan ay ipinagdiriwang tuwing ika-25 ng Disyembre
pawis	Ang butil-butil na tubig na lumalabas sa balat ng tao o hayop lalo na kung labis na napapagod, naiinitan o natatakot
payong	Ang bitbiting pananggalang sa araw o ulan, na binubuo ng mga tadyang na asero, atb., na nababalutan ng tela o plastic na pabilog at natitiklop o naisasara
pera	pangkalakalang bagay; nagpapanatili ng halaga ng bagay o serbisyong nauugnay o nailaan para dito
petsay	uri ng gulay na madirilim na luntiang dahon at mga malalapad na mapuputing tangkay
pinggan	Kasangkapang karaniwan ay malanday, bilog, yari sa porselena o plastic at pinaglalagyan ng pagkain

pisngi	Alinman sa dalawang malamang gilid ng mukha.
piso	isang yunit ng pananalapi
pito	isang likas na bilang na pagkatapos ng 6 at bago ang 8
plastik	Alinman sa mga sintetikong kagamitang maaaring hubugin kapag malambot at saka pinatitigas.
posas	Bakal na hugis-singsing na ikinakabit sa galanggalangan. Ito ay isang pares na pinagkakabit ng kadena at karaniwang nilalagay sa kamay ng bilanggo o salarin upang hindi makatakas.
presyo	Halaga
propesor	Gurong may pinakamataas na ranggo sa isang pamantasan o kolehiyo
prutas	produkto ng halaman o puno na pwedeng kainin
pulis	mga taong may hanapbuhay o trabahong nangangalaga ng katahimikan at kaayusan, pagpapatupad ng batas, magimbestiga ng mga krimen, at pagbibigay proteksyon sa publiko
puno	isang pampalagian makahoy na halaman
puntod	isang libingan ng mga patay
pusa	Hayop na karaniwang inaalagaan sa tahanan na namumuksa ng mga daga
puso	organong muskular na may tungkuling mag-bomba ng dugo palagos sa mga daluyang ugat papunta sa iba't ibang bahagi ng katawan
raketa	Pamalo o panghampas ng bola sa larong tenis, badminton, pingpong, atb.
regalo	Bagay na ipinagkakaloob ng sinuman sa kapwa sa anumang kadahilanan
rehas	Mga haling na makakabit na maayos na inilalagay sa isang malaking puwang upang huwag karakang maraanan
relo	aparatang sumusukat, nagtatala, at nagsasabi ng oras
resibo	Kasulatan ng pagkatanggap ng pera, kalakal, paninda, atb. karaniwan tinitiyak
riles	Mahahabang bakal na hinugisan, inayos at dugtung-dugtong na inilatag nang dalawahan at paayos sa kahabaan ng mga lansangan upang siyang gulungan tuwiran ng mga bakal na gulong ng tren, trambiya, atb.
rosas	isang namumulaklak na palumpong sa saring Rosa
ruler	Panuto sa pagguhit nang matuwid, na kilala rin sa tawag na reglador.
sabaw	Tubig na inilalagay sa nilulutong pagkain; ang lusaw na bahagi ng sabon
sabon	isang bagay na ginagamit na panlinis sa katawan
saging	Panlinis ng mga damit sa paglalaba, na kapag ikinuskos at kinusot ay lumilikga ng maraming bula.
sahig	isang mukhang-punong halaman na malapit ang kauganayan sa saba
sakit	bahagi na bahay o gusali na inaapakan o kinatatayuan ng tao
salamat	negatibong pansariling karanasan ng hapdi
salamin	Katagang karaniwang sinasabi ng isang nagpapahayag o ibig kumilala ng utang na loob
sampu	isang matigas na babasaging bagay
sandok	isang likas na bilang na pagkatapos ng 9 at bago ang 11
santol	Malanday na panalok ng kanin, ulam, atbp., sa palayok at iba pang sisidlan at yari sa bao o metal na nilagyan ng tangkay.
	Punongkahoy o ang bunga nito, na karaniwang kinakain kung hinog at ginagamit na pang-asim sa sinigang.

sanga	Bahagi ng punungkahoy o anumang halamang tumutubo sa pinakakatawan at tinutubuan naman ng mga dahon.
sanggol	salitang ginagamit na pantawag para sa napakabata pang supling o anak
sapatos	isang kasuotan o sapin sa paa
sarado	Nakapinid, nakasusi, may takip
sarili	Kakayahan ng may-katawan o ang may-katawan
sasakyan	Anumang ginagamit sa paglululan at paghahatid ng pasahero, kalakal, atb. sa ibang dako o lugar
saya	Katuwaan; Galak; Ligaya
sayaw	Pag-indak-indak ng katawan sa saliw ng tugtugin; alinman sa iba't ibang anyo ng pag-indak ng katawan sa himig ng tugtog.
semento	isang materyal na konkreto na tumitigas at maaaring bumigkis sa ibang materyal na magkasama
sibuyas	isang uri ng halamang gulay na ginagamit sa pagluluto
sigarilyo	isang produktong ginagamit sa pamamagitan ng pagpapausok nito at gawa mula sa pinong hiwang dahon ng tabako
silid	bahagi ng isang bahay o gusali
silya	gamit sa bahay o opisina na nagsisilbing patungan o luklukan ng puwit
simbahan	isang gusaling pampananampalataya, nagsisilbing sambahan, at pinagdarausan ng misa
sindi	Ningas, liyab
sinulid	Himaymay na ginagamit sa pananahi ng mga damit na kasuutan
singsing	Kasuutang pandaliri, na karaniwang may pabatong mahahalagang hiyas.
sipilyo	Panhiso ng ngipin
sisiw	anak ng isang babaeng ibon
siyam	isang likas na bilang na pagkatapos ng 9 at bago ang 10
sobra	Anumang humigit sa talagang kailangan; kalabisan.
sobre	Sisidlan ng sulat na ipinahahatid sa koreo
suklay	Pino at mahahabang mga ngiping pang-ayos ng buhok
sulat	Anumang guhit na likha ng lapis, pontempen
susi	Pambukas at pansara ng kandado
taba	Maputi o dilaw na kalamnan ng mga hayop na pinagkukunan ng mantika.
tabako	isang agricultural na produkto na hinahango mula sa sariwang dahon ng mga halaman na napapabilang sa saring Nicotiana
tabo	Anumang pansalok na yari sa bao ng niyog o sa anumang uri na ginagamit sa pagkuha ng tubig o anumang likido sa lalagyan
takbo	Pagpunta o pagtungo sa isang lugar nang mabilis kaysa lakad
tainga	organong pandama sa katawan na ginagamit sa pagdinig ng mga tunog
talaba	Lukan, walang tiyak na hugis at matatagpuan sa ilalim ng dagat na nakadikit sa mga bato. Karaniwan ay nabibiling may balat o hinimay samga palengke at nakakain.
talong	Halamang-palumpong na ang bunga ay haba at nakakahugis halos ng batuta, makinis at kulay biyoleta o murado.
tama	tumpak, totoo, o tunay
tanim	Bagay na naibaon sa lupa at nabuhay o tumubo

tanghali	Kalagitnaan ng isang araw; panahon ng isang araw na nasa pagitan ng umaga at ng hapon
tao	Ang nilikha ng Diyos, binigyan ng buhay, kaluluwa at isip
taon	Panahong binubuo ng labindalawang buwan
tatay	kasingkahulugan ng ama; lalaking magulang ng isang anak
tatlo	isang likas na bilang na pagkatapos ng 2 at bago ang 4
tawa	Galaw ng mukhang nagpapakita ng kasiyahan, kaligayahan, atb.
tawid	Pagbagtas sa daan o sa ilog upang lumipat sa kabilang ibayo
tela	Kayong yari sa pamamagitan ng paghahabi.
telepono	isang aparatong pantelekomunikasyon na nagtatawid at tumatanggap ng tunog galing sa dalawang magkalayong lugar
tiangge	Pamilihan
tinapay	isang pagkain na ginagawa sa pamamagitan ng paghurno ng isang masa ng harina at tubig
tindahan	isang pook kung saan pumupunta ang mga tao para bumili ng mga binibentang bagay
tindero/a	Nangangasiwa sa isang tindahan; ang tagapagbili; Ang nagtitinda
tinidor	Kasangkapang may dalawa o mahigit na mahabang tulos na ginagamit sa pagdadala ng pagkain sa bibig
titser	Sinumang ang Gawain ay magturo, lalo na ang may propesyon nito
tiwala	Paniniwala sa kabutihan, katarungan, katapatan, atbp., ng isang tao.
toyo	Panimplang yari sa katas ng <i>soy bean</i> at karaniwang ipinaninimla sa mga ulam.
trabaho	gawain, gampanin, o tungkulin na isinasagawa ng isang tao upang makatanggap ng kapalit na salapi, gana, o suweldo
traysikel	isang uri na sasakyan na tatlo lang ang gulong
tren	isang sunud-sunod o serye ng mga <u>sasakyan</u> o " <u>kotse</u> " ng dumaraan sa ibabaw ng isang <u>riles</u>
tubig	isang walang <u>lasa</u> , walang <u>amoy</u> , at walang <u>kulay</u> na <u>sustansya</u> sa kanyang dalisay na anyo, at mahalaga para sa lahat ng mga kilalang anyo ng <u>buhay</u>
tuhod	Kasukasuan ng paa ng tao na naghuhugpong sa butunghita at saping-lulod o mga lulod; ang bahaging nasa paligid ng kasukasuan itp ay ginagamit sa pagluhod
tulay	isang estruktura na inatayo sa pagitan ng bangin, lambak, kalsada, riles ng tren, ilog, mga anyong tubig, at iba pa upang matawiran
tulog	isang kalagayan ng pagpapahinga
tunog	Ingay na nalilikha; alalad.
ubo	Pabugsu-bugsong paglabas ng hangin mula sa lalamunan, na may kasabay na tunog o ingay.
ukbot	Anyo ng pag-upong baluktot ang katawan; pag-upong baluktot o di-tuwid
ukdo	Lukso, lundag na kasama ang galaw ng mga kalamnan
udlot	Biglang pagkahinto ng lakad o anumang bagay na ginagawa
ugnay	Pagdurugtong ng dalawang o higit na bagay; pagka-may kinalaman ng isa sa isa
ulan	isang klase ng presipitasyon, na isang produkto ng kondensasyon ng tubig sa atmosperika na natitipon sa lupa

ulap	ito ay matatagpuan sa atmospera ng daigdig
ulbo	Kulungan ng baboy
uling	isang kulay itim na masunuging nalatak na bato
ulo	bahagi ng katawan na binubuo ng utak, mga mata, ilog, mga tainga, at bibig
umaga	Maagang oras sa pagsisimula ng araw; panahong nagsisimula sa hatinggabi hanggang tanghali ng kinabukasan.
umpisa	Pagsisimula ng isang bagay na gagawin; ang naging sanhi o dahilan
unan	Ang ginagamit na pang-atang sa ulo kung humihiga o natutulog, na yari sa bulak, balahibo o iba pang malambot na bagay na nasa kaluban at nadaramtan ng punda
untog	Pagkabundol ng ulo.
unggoy	isang hayop sa klaseng Mammalia
uod	Maliliit at habang hayop na gumagapang na karaniwang nakikita sa mga dahon ng halaman, bagaman may ilang uri nito ang matatagpuan sa marurumi at bulok na bagay.
upo	Ayos ng tao o hayop na nakalpat ang puwit sa silya, sahig o anumang bagay na maaaring malikmuan
urban	Nauukol sa lungsod
usap	Salitaan o pagpapalitan ng salita; pagpupulong
usok	Ang maitim o kulay-abong asong tinatangay ng hangin mula sa ningas ng apoy, singaw ng lupa o kumukulong tubig
ut-ot	Pagsipsip sa utong o tsupon
utak	ang sentro ng control ng gitnang sistemang nerbyos
utang	panghihiram ng anumang bagay lalo na ang pera
uwi	Pagbalik sa sariling bahay o sariling bayan
wala	Nauukol sa mga bagay na hindi makita o hindi matagpuan sa dapat karoonan
walis	isang kagamitan na ginagamit sa panlinis ng dumi sa sahig
walo	isang likas na bilang na pagkatapos ng 7 at bago ng 9
watawat	karaniwang symbol ng isang bansa o organisasyon
wisik	Pagbasa sa anuman, sa pamamagitan ng mga basing daliring iwinawasiwas o iwinawagwag
yakap	Pagkulong sa anuman ng dalawang bisig
yelo	anyong solido ng isang sustansiya o tubig
yero	ang malapad at manipis na aluminyo na ginagamit na pambubong at pandingding at ginagamit ding sangkap sa paggawa ng iba't ibang kasangkapan
yibok	Pagpapataba sa anumang hayop na binabalak katayin.
yoyo	Laruang kahoy o plastic na maliit at bilog, na may malalim na ukit sa buong paligid na halos umabot sa ubod, na siyang pinag-iikiran ng sinulid na nakatali sa nasabing ubod at ang kabilang dulo ay nakatali naman sa daliri ng naglalaro
yuko	Pagtungo ng ulo.

APPENDIX D

Photos during testing

A. Testing in Brgy. Loyola Heights (April 18, 2012)

B. Testing in QCPD Station 10 (July 9-13, 2012)

APPENDIX E

User Acceptance Test – Mobile Teachers

DE LA SALLE UNIVERSITY
College of Computer Studies
Information Technology Department

Teacher Evaluation Form

Name: ANGELYN B. MALABANAN

Ranking: ALS Mobile Teacher

Age: 35

Sex: F

A. Please encircle the number of your choice below.

Use the scale: **4** – Strongly Agree, **3** – Agree, **2** – Disagree, **1** – Strongly Disagree

I. Overall Content

1. The organization of topics by modules provides a systematic way of teaching the lessons. (4) 3 2 1
2. Transition of difficulty from module to module is suitable for teaching Basic Reading. (4) 3 2 1
3. Hyperlinking/hyperlinks enhanced reviewing and relation of different topics. 4 (3) 2 1
4. Choice to present the letter with the written word and/or photo is very useful. (4) 3 2 1
5. The voice over function improves consistency in pronunciation. (4) 3 2 1
6. The dictionary contains an appropriate set of words. (4) 3 2 1

II. Content (Alpabeto Module):

1. The teachware covered accurate & systematized methods that are are significant in teaching the alphabet. (4) 3 2 1

2. The teachware provided enough material to support the topics in the alphabet. 4 (3) 2 1
3. There are sufficient number of word samples to support the material in teaching alphabets. 4 (3) 2 1
4. There are sufficient number of visual representations (pictures) to support the material in teaching alphabets. (4) 3 2 1

III. Content (Pantig Module):

1. The teachware covered accurate & systematized methods that are are significant in teaching syllabication. (4) 3 2 1
2. The teachware provided enough material to support the topics in syllabication. 4 (3) 2 1
3. There are sufficient number of word samples to support the material in teaching syllabication. 4 (3) 2 1
4. There are sufficient number of visual representations (pictures) to support the material in teaching syllabication. 4 (3) 2 1

IV. Content (Salita Module):

1. The teachware covered accurate & systematized methods that are are significant in teaching word recognition and manipulation. (4) 3 2 1
2. The teachware provided enough material to support the topics in word recognition and manipulation. (4) 3 2 1
3. There are sufficient number of visual representations (pictures) to support the material in teaching word recognition

and manipulation.

④ 3 2 1

4. Sample word manipulations are relevant to better understand

Basic Reading.

④ 3 2 1

V. Interface:

1. The visual area provides enough space for instruction.

④ 3 2 1

2. The buttons are clearly defined on where they lead to.

④ 3 2 1

3. Color scheme is comfortable and aesthetic.

④ 3 2 1

4. Icons used in the modules easily depict the topics they represent.

④ 3 2 1

VI. Media Used:

1. Images in the teachware are relevant to the specific

examples on Basic Reading.

4 ③ 2 1

2. Audios in the teachware are consistent in pronunciations.

4 ③ 2 1

3. Audios and images are of high quality.

④ 3 2 1

4. Audios and images enhance instruction.

④ 3 2 1

5. Media (audio/images) used best fit the topic

being taught.

④ 3 2 1

6. The use of animations, audios, and images help the teachware provide better understanding of Basic Reading.

④ 3 2 1

7. Texts on the teachware are accessible and can be read clearly and easily.

④ 3 2 1

VII. Navigation:

1. Menu is easy to access.	4	3	2	1
2. Subtopics are clearly seen and are accessible.	4	3	2	1
3. Navigating among modules is easy.	4	3	2	1
4. Buttons are easily accessible.	4	3	2	1
5. Hyperlinks provide sufficient description of the page they are linked to.	4	3	2	1
6. Navigating among modules is easy.	4	3	2	1

B. Answer the following questions.

What other lessons or topics that could be integrated in the teachware?

A session guide could also be included.

Do you think this is an effective tool for teaching and learning? Why? Why not?

Yes, because its in multimedia form, it can easily catch the attention of the learner and it addresses multisensory skills.

Will this teachware be a help in teaching Basic Reading for Adult Learners? Why? Why not?

Yes. Teachers are no longer going to search for materials that would fit adult basic reading learner. the scenario is, teachers are using wrong materials for them, like using nursery and prep school materials.

Other Insights on the teachware.

A more improved sequencing.

DE LA SALLE UNIVERSITY
College of Computer Studies
Information Technology Department

Teacher Evaluation Form

Name: Irene O. Barzaga
Ranking: Mobile Teacher

Age: 32
Sex: F

A. Please encircle the number of your choice below.
Use the scale: **4** – Strongly Agree, **3** – Agree, **2** – Disagree, **1** – Strongly Disagree

I. Overall Content

1. The organization of topics by modules provides a systematic way of teaching the lessons. (4) 3 2 1
2. Transition of difficulty from module to module is suitable for teaching Basic Reading. (4) 3 2 1
3. Hyperlinking/hyperlinks enhanced reviewing and relation of different topics. (4) 3 2 1
4. Choice to present the letter with the written word and/or photo is very useful. (4) 3 2 1
5. The voice over function improves consistency in pronunciation. (4) (3) 2 1
6. The dictionary contains an appropriate set of words. (4) 3 2 1

II. Content (Alphabets Module):

1. The teachware covered accurate & systematized methods that are significant in teaching the alphabet. (4) 3 2 1

2. The teachware provided enough material to support the topics in the alphabet.

4 3 2 1

3. There are sufficient number of word samples to support the material in teaching alphabets.

4 3 2 1

4. There are sufficient number of visual representations (pictures) to support the material in teaching alphabets.

4 3 2 1

III. Content (Pantig Module):

1. The teachware covered accurate & systematized methods that are are significant in teaching syllabication.

4 3 2 1

2. The teachware provided enough material to support the topics in syllabication.

4 3 2 1

3. There are sufficient number of word samples to support the material in teaching syllabication.

4 3 2 1

4. There are sufficient number of visual representations (pictures) to support the material in teaching syllabication.

4 3 2 1

IV. Content (Salita Module):

1. The teachware covered accurate & systematized methods that are are significant in teaching word recognition and manipulation.

4 3 2 1

2. The teachware provided enough material to support the topics in word recognition and manipulation.

4 3 2 1

3. There are sufficient number of visual representations (pictures) to support the material in teaching word recognition

and manipulation.

4 3 2 1

4. Sample word manipulations are relevant to better understand Basic Reading.

4 3 2 1

V. Interface:

1. The visual area provides enough space for instruction.
2. The buttons are clearly defined on where they lead to.
3. Color scheme is comfortable and aesthetic.
4. Icons used in the modules easily depict the topics they represent.

4 3 2 1

4 3 2 1

4 3 2 1

4 3 2 1

VI. Media Used:

1. Images in the teachware are relevant to the specific examples on Basic Reading.
2. Audios in the teachware are consistent in pronunciations.
3. Audios and images are of high quality.
4. Audios and images enhance instruction.
5. Media (audio/images) used best fit the topic being taught.
6. The use of animations, audios, and images help the teachware provide better understanding of Basic Reading.
7. Texts on the teachware are accessible and can be read clearly and easily.

4 3 2 1

4 3 2 1

4 3 2 1

4 3 2 1

4 3 2 1

4 3 2 1

4 3 2 1

VII. Navigation:

1. Menu is easy to access.	(4) 3 2 1
2. Subtopics are clearly seen and are accessible.	(4) 3 2 1
3. Navigating among modules is easy.	(4) 3 2 1
4. Buttons are easily accessible.	4 (3) 2 1
5. Hyperlinks provide sufficient description of the page
they are linked to.	(4) 3 2 1
6. Navigating among modules is easy.	(4) 3 2 1

B. Answer the following questions.

What other lessons or topics that could be integrated in the teachware?

~~more~~ more words

Do you think this is an effective tool for teaching and learning? Why? Why not?

Yes, because they can hear the sounds & the correct pronunciation of the words.

Will this teachware be a help in teaching Basic Reading for Adult Learners?
Why? Why not?

Yes, they can easily recognize the words because of the images & the sounds.

Other Insights on the teachware.

words first then image.

APPENDIX F

User Acceptance Test – Learners

DE LA SALLE UNIVERSITY
College of Computer Studies
Information Technology Department

Student Evaluation Form

Pangalan: Ferdinand Galle
Kasarian: lalaki

Edad: 21

A. Pakisagot ang mga sumusunod na tanong.

Ano ang masasabi mo sa bagong materyal na ginamit sa panturo?

Ok naman. Oni lang natutunan.

Ano ang masasabi mo sa disenyo ng bagong materyal? Madali bang basahin ang mga letra at salita?

Ok lang. Ok lang, nakikita naman lahat, katulad sa
letra.

Nakakatulong ba ang mga litratong ginamit? Sa paanong paraan?

Oo. Oni palang kasi natutunan ko kaya di ko pa
masasabi talaga.

Nakakatulong ba ang mga audio na iyong naririnig? Sa paanong paraan? Klaro ba at malakas ba ang volume?

Oo Pumaparok sa isip ko ang sounds. Ok naman klaro
naman.

Sa iyong opinion, mas madali ka bang matututo sa ganitong paraan? Bakit? Bakit hindi?

Oo. May natutunan naman kabit onti lang.
Meron naman ako natutunan sa mga salita, sa pagbabasa.

Ano sa tingin mo ang pwede pang baguhin upang mapaganda pa ang bagong materyal na gagamiting panturo sa Basic Reading?

Idamihan examples sa alphabet.

Mga iba pang komento sa teachware

Wala naman, kasi ako gusto ko talaga mag-aral!
para pag labas ko magamit ko.
Natutunahan ako kasi masayahin akong bu.

DE LA SALLE UNIVERSITY
College of Computer Studies
Information Technology Department

Student Evaluation Form

Pangalan: Ermino
Kasarian: lalaki

Edad: 21

A. Pakisagot ang mga sumusunod na tanong.

Ano ang masasabi mo sa bagong materyal na ginamit sa panturo?

Ang ba, ok naman.

Ano ang masasabi mo sa disenyo ng bagong materyal? Madali bang basahin ang mga letra at salita?

Ok lang.

Tama lang, madali naman basahin.

Nakakatulong ba ang mga litratong ginamit? Sa paanong paraan?

Oo. Kasi pag wala yun mahihirapan ako.

Nakakatulong ba ang mga audio na iyong naririnig? Sa paanong paraan? Klaro ba at malakas ba ang volume?

Ok naman.

Oo parang ganun na mga.

Sa iyong opinion, mas madali ka bang matututo sa ganitong paraan? Bakit? Bakit hindi?

Oo. Ngayon pa lang ako tinuturuan magbasa.

Siguro parehal lang i yung pisara at yung materyal.

Nagkaiba lang kasi parang hindi. Tao yung nagsasagita.

Ano sa tingin mo ang pwede pang baguhin upang mapaganda pa ang bagong materyal na gagamiting panturo sa Basic Reading?

Para sa akin, OK na yun.

Mga iba pang komento sa teachware

Wala naman.

DE LA SALLE UNIVERSITY
College of Computer Studies
Information Technology Department

Student Evaluation Form

Pangalan: Anthony Arca
Kasarian: lalaki

Edad: 18

A. Pakisagot ang mga sumusunod na tanong.

Ano ang masasabi mo sa bagong materyal na ginamit sa panturo?

OK lang.

Ano ang masasabi mo sa disenyo ng bagong materyal? Madali bang basahin ang mga letra at salita?

> OK lang rin. Sakto lang.

> OK lang rin.

Nakakatulong ba ang mga litratong ginamit? Sa paanong paraan?

oo, merong natututunan.

importante kasi mag-aral.

para alam niya kahalal para yun

Nakakatulong ba ang mga audio na iyong naririnig? Sa paanong paraan? Klaro ba at malakas ba ang volume?

nakakatulong din. hindi bulol ; natatandaan.

Sa iyong opinion, mas madali ka bang matututo sa ganitong paraan? Bakit? Bakit hindi?

Oo, syempre nakikita ko eh.

Ano sa tingin mo ang pwede pang baguhin upang mapaganda pa ang bagong materyal na gagamiting panturo sa Basic Reading?

Gusto ko dalawang letra na agad eh.

Mga iba pang komento sa teachware

mayroon nang matuturan pag laya mo.

pag labas ng kulungan, magagamit ang lahat ng matuturan.

Makakapag-apply ka na.

Tama yang ginagawa ni teacher I.

DE LA SALLE UNIVERSITY
College of Computer Studies
Information Technology Department

Student Evaluation Form

Pangalan: Edwin Lushoy
Kasarian: lalaki

Edad: 22

A. Pakisagot ang mga sumusunod na tanong.

Ano ang masasabi mo sa bagong materyal na ginamit sa panturo?

Meron din natutunan, pati.

Ano ang masasabi mo sa disenyo ng bagong materyal? Madali bang basahin ang mga letra at salita?

Nababasa din, pero hindi ako masyado marunong
magsalita

Nakakatulong ba ang mga litratong ginamit? Sa paanong paraan?

Oo. Nakikita eh. madaling matandaan.

Nakakatulong ba ang mga audio na iyong naririnig? Sa paanong paraan? Klaro ba at malakas ba ang volume?

Klaro naman. Maganda nagsasalita eh. Mawuna magsalita
baso makuku yung letra

Sa iyong opinion, mas madali ka bang matututo sa ganitong paraan? Bakit? Bakit hindi?

Oo. Madali sa blackboard eh. Pero gusto ko
din yung dalawa.

Ano sa tingin mo ang pwede pang baguhin upang mapaganda pa ang bagong materyal na gagamiting panturo sa Basic Reading?

ABCD. Puong alpabeto.

Mga iba pang komento sa teachware

Ayos lang. Maganda. Maraming naman siya
magturo. Maayos ang paggamit.
Masaya na eh.

DE LA SALLE UNIVERSITY
College of Computer Studies
Information Technology Department

Student Evaluation Form

Pangalan: Ronald Flores
Kasarian: lalaki

Edad: 18

A. Pakisagot ang mga sumusunod na tanong.

Ano ang masasabi mo sa bagong materyal na ginamit sa panturo?

ok naman
maganda yun para ituro sa amin.

Ano ang masasabi mo sa disenyo ng bagong materyal? Madali bang basahin ang mga letra at salita?

madali rin.

Nakakatulong ba ang mga litratong ginamit? Sa paanong paraan?

oo, mas matatandaan ko pag may larawan.

Nakakatulong ba ang mga audio na iyong naririnig? Sa paanong paraan? Klaro ba at malakas ba ang volume?

Nakaka...
Ok naman yung sounds
mas madaling maalala ang pag-bigkas.

Sa iyong opinion, mas madali ka bang matututo sa ganitong paraan? Bakit? Bakit hindi?

harunong ako dati kaso na-ano ng droga.
mas madali akong pag maghasa na lang ako.

Ano sa tingin mo ang pwede pang baguhin upang mapaganda pa ang bagong materyal na gagamiting panturo sa Basic Reading?

ok lang yun.

Mga iba pang komento sa teachware

wala akong maisip e.

DE LA SALLE UNIVERSITY
College of Computer Studies
Information Technology Department

Student Evaluation Form

Pangalan: Benedict To
Kasarian: lalaki

Edad: 24

A. Pakisagot ang mga sumusunod na tanong.

Ano ang masasabi mo sa bagong materyal na ginamit sa panturo?

Manirap din pero kanya.

Ano ang masasabi mo sa disenyo ng bagong materyal? Madali bang basahin ang mga letra at salita?

Maliit yung letra.

Mahirap big katin.

Nakakatulong ba ang mga litratong ginamit? Sa paanong paraan?

Oo. Mai madali siya...

Kilala mo yung 'hagoy tapos madali sahihin

yung letra lami alam mo.

By kilala mo yung 'hagip, tsaka yung letra malarabi mo agad gaya ng
elephant, ng aso.

Nakakatulong ba ang mga audio na iyong naririnig? Sa paanong paraan? Klaro ba at malakas ba ang volume?

Nakakatulong din, pwede naman. Klaro din.

Sa iyong opinion, mas madali ka bang matututo sa ganitong paraan? Bakit? Bakit hindi?

Oo. Malalaman mo naman yan kagay nilabas
mo yung lalawan ng hayop at letra eh.
Malalaman.. Makikita mo agad eh.

Ano sa tingin mo ang pwede pang baguhin upang mapaganda pa ang bagong materyal na gagamiting panturo sa Basic Reading?

Day dagan ng konting picture pa.

Mga iba pang komento sa teachware

Wala akong maisip.

Manunong ako kunti magbasa, problema lang
hindi ako manunong magmulat.

DE LA SALLE UNIVERSITY
College of Computer Studies
Information Technology Department

Student Evaluation Form

Pangalan: Alex Rivera
Kasarian: Lalake

Edad: 29

A. Pakisagot ang mga sumusunod na tanong.

Ano ang masasabi mo sa bagong materyal na ginamit sa panturo?

wala akong masabi. Ngayon lang ako nakaranas
mag-aral eh.

Ano ang masasabi mo sa disenyo ng bagong materyal? Madali bang basahin ang mga letra at salita?

Hindi ko pa nababasa eh. Pero klaro naman ang
nakasulat.

Nakakatulong ba ang mga litratong ginamit? Sa paanong paraan?

oo. Nakakatulong.

para matuto magbasa. Naalala ko nang onti
ang mga salita dahil sa litrato.

Nakakatulong ba ang mga audio na iyong naririnig? Sa paanong paraan? Klaro ba at malakas ba ang volume?

oo. may nagsasabi kaya nasasabi ko rin.

Sa iyong opinion, mas madali ka bang matututo sa ganitong paraan? Bakit? Bakit hindi?

oo. madali ring basahin at natuturuan kaming lahat.

Ano sa tingin mo ang pwede pang baguhin upang mapaganda pa ang bagong materyal na gagamiting panturo sa Basic Reading?

mas maraming salita.

Mga iba pang komento sa teachware

Natuto naman ako

DE LA SALLE UNIVERSITY
College of Computer Studies
Information Technology Department

Student Evaluation Form

Pangalan: Jonnel Florento
Kasarian: lalaki

Edad: 19

A. Pakisagot ang mga sumusunod na tanong.

Ano ang masasabi mo sa bagong materyal na ginamit sa panturo?

Ayos lang.

Ano ang masasabi mo sa disenyo ng bagong materyal? Madali bang basahin ang mga letra at salita?

Ayos lang, maganda naman. Natututo ng paanti-anti.

Sa hindi manunong, mahirap. Sa manunong magbasa, madali.

Nakakatulong ba ang mga litratong ginamit? Sa paanong paraan?

Oo. Hindi pa nababasa ang salita alam ko na ayad dahil sa picture.

Nakakatulong ba ang mga audio na iyong naririnig? Sa paanong paraan? Klaro ba at malakas ba ang volume?

Hindi, kaili paang nakakodigo ch.

Sa mga hindi manunong magbasa, nakalaman ayad ang salita dahil naririnig gum.

Sa iyong opinion, mas madali ka bang matututo sa ganitong paraan? Bakit? Bakit hindi?

Do. Eh Ghepre, dumadaan kay sa madaliit na letra
bago sa mababaki.
Bakit - konti mong matutunan.

Ano sa tingin mo ang pwede pang baguhin upang mapaganda pa ang bagong materyal na gagamiting panturo sa Basic Reading?

Pagpapalagan ng salita.

Muna muna yung salita bago larawan para magagat na nila
tsaka pafakita ang larawan.

Mga iba pang komento sa teachware

Alam ko na kasi maybasa kasi natutunan ko na mung high school.

DE LA SALLE UNIVERSITY
College of Computer Studies
Information Technology Department

Student Evaluation Form

Pangalan: Raymundo Angak
Kasarian: Lalaki

Edad: 20

A. Pakisagot ang mga sumusunod na tanong.

Ano ang masasabi mo sa bagong materyal na ginamit sa panturo?

Ang naman. Kahit pagano meron naman kami
natutunan.

Ano ang masasabi mo sa disenyo ng bagong materyal? Madali bang basahin ang mga letra at salita?

Nahirapan ako eh kasi first time ko magkara.

Nakakatulong ba ang mga litratong ginamit? Sa paanong paraan?

Nakakatulong naman.

Nas madali magbasa kapag walang litrato,
sagabal lang nyan eh.

Nakakatulong ba ang mga audio na iyong naririnig? Sa paanong paraan? Klaro ba at malakas ba ang volume?

Oo naman.

Natatandaan ko ang mga salita kasi paulit-ulit.

Sa iyong opinion, mas madali ka bang matututo sa ganitong paraan? Bakit? Bakit hindi?

Oo. Kasi nakapantig-pantig na yung mga salita, nakikita ko ang mga pantig.

Ano sa tingin mo ang pwede pang baguhin upang mapaganda pa ang bagong materyal na gagamiting panturo sa Basic Reading?

Wala naman, OK naman yun.

Mga iba pang komento sa teachware

Wala naman. Haha

DE LA SALLE UNIVERSITY
College of Computer Studies
Information Technology Department

Student Evaluation Form

Pangalan: Rene Rosel
Kasarian: Lalaki

Edad: 32

A. Pakisagot ang mga sumusunod na tanong.

Ano ang masasabi mo sa bagong materyal na ginamit sa panturo?

Natuto rin ng konti sa pagbabasa.

Ano ang masasabi mo sa disenyo ng bagong materyal? Madali bang basahin ang mga letra at salita?

Pag mahaba ang salita, di ko pa magandang maintutuhan.

Malaki naman yung mga titik, pero di ko pa nabasa.

Nakakatulong ba ang mga litratong ginamit? Sa paanong paraan?

Oo - Siyempre, kung nakikita mo, nababasa mo rin.

Nakakatulong ba ang mga audio na iyong naririnig? Sa paanong paraan? Klaro ba at malakas ba ang volume?

Opo - Siyempre naririnig mo, magagaya mo.

Sa iyang opinion, mas madali ka bang matututo sa ganitong paraan? Bakit? Bakit hindi?

Oo. Sigempre nakatutong sa mga di marinong
magbasa't magulat.

Pag malaya, marinong na magbasa.

Ano sa tingin mo ang pwede pang baguhin upang mapaganda pa ang bagong materyal na gagamiting panturo sa Basic Reading?

Sana marami din magtuturo samon magbasa.

Mahirap pag halang ng tuturo.

Mga iba pang komento sa teachware

Ok naman ang paghilo samon kanina.

Malaking bagay na rin yun.

DE LA SALLE UNIVERSITY
College of Computer Studies
Information Technology Department

Student Evaluation Form

Pangalan: Emerlinda Breg
Kasarian: Female

Edad: 59

A. Pakisagot ang mga sumusunod na tanong.

Ano ang masasabi mo sa bagong materyal na ginamit sa panturo?

Maganda, nakakatutuwag

Ano ang masasabi mo sa disenyo ng bagong materyal? Madali bang basahin ang mga letra at salita?

Opo

Nakakatulong ba ang mga litratong ginamit? Sa paanong paraan?

Nakakatutulong dahil madaling makilala / mabasa

Nakakatulong ba ang mga audio na iyong naririnig? Sa paanong paraan? Klaro ba at malakas ba ang volume?

Opo dahil nakakasunod kami

Sa iyong opinion, mas madali ka bang matututo sa ganitong paraan? Bakit? Bakit hindi?

Opo. Dahil maganda sa.

Ano sa tingin mo ang pwede pang baguhin upang mapaganda pa ang bagong materyal na gagamiting panturo sa Basic Reading?

Wala

Mga iba pang komento sa teachware

Wala

DE LA SALLE UNIVERSITY
College of Computer Studies
Information Technology Department

Student Evaluation Form

Pangalan: Rosita G. Burgos
Kasarian: Female

Edad: 57

A. Pakisagot ang mga sumusunod na tanong.

Ano ang masasabi mo sa bagong materyal na ginamit sa panturo?

Masaya. Ok

Ano ang masasabi mo sa disenyo ng bagong materyal? Madali bang basahin ang mga letra at salita?

Mas masayang basahin.

Nakakatulong ba ang mga litratong ginamit? Sa paanong paraan?

Opo. kasi maganda ang mga picture sa computer.

Nakakatulong ba ang mga audio na iyong naririnig? Sa paanong paraan? Klaro ba at malakas ba ang volume?

Madaling masundan sa pagbasa.

Sa iyong opinion, mas madali ka bang matututo sa ganitong paraan? Bakit? Bakit hindi?

Oo kasi tumatatak ang mga larawan. Nakakasabay sa mga larawan.

Ano sa tingin mo ang pwede pang baguhin upang mapaganda pa ang bagong materyal na gagamiting panturo sa Basic Reading?

Wala

Mga iba pang komento sa teachware

Wala

DE LA SALLE UNIVERSITY
College of Computer Studies
Information Technology Department

Student Evaluation Form

Pangalan: Milagros Ibanez
Kasarian: Female

Edad: 43

A. Pakisagot ang mga sumusunod na tanong.

Ano ang masasabi mo sa bagong materyal na ginamit sa panturo?

kaiba kaysa sa libro, maganda.

Ano ang masasabi mo sa disenyo ng bagong materyal? Madali bang basahin ang mga letra at salita?

OK. kaaya-aya. Makulay

Nakakatulong ba ang mga litratong ginamit? Sa paanong paraan?

Oo, Malinawag, mas nakukuha

Nakakatulong ba ang mga audio na iyong naririnig? Sa paanong paraan? Klaro ba at malakas ba ang volume?

Oo dahil mayroong sinusundan

Sa iyong opinion, mas madali ka bang matututo sa ganitong paraan? Bakit? Bakit hindi?

Do dahil masusundan ko at maganda kaysa sa libro, may tunog, buhay.

Ano sa tingin mo ang pwede pang baguhin upang mapaganda pa ang bagong materyal na gagamiting panturo sa Basic Reading?

Wala

Mga iba pang komento sa teachware

Wala

APPENDIX G

Certification of Testing

De La Salle University – Manila

C E R T I F I C A T I O N

This is to certify that Ma. Katrina Carmela T. Barrios, Lian Sabella V. Castillo, and Ma. Clarissa Andrea C. Tenorio, students of De La Salle University, has handed over the software of their thesis on A Teachware for Mobile Teachers on Basic Reading to the Alternative Learning System – Barangay Loyola Heights and successfully tested the teachware last April 17-18, 2012.

Signed by:

Ms. Angelyn Malabanan
ALS Mobile Teacher

Ma. Katrina Carmela T. Barrios
De La Salle University

Lian Sabella V. Castillo
De La Salle University

Ma. Clarissa Andrea C. Tenorio
De La Salle University

De La Salle University – Manila

C E R T I F I C A T I O N

This is to certify that Ma. Katrina Carmela T. Barrios, Lian Sabella V. Castillo, and Ma. Clarissa Andrea C. Tenorio, students of De La Salle University, has handed over the software of their thesis on A Teachware for Mobile Teachers on Basic Reading to the Alternative Learning System – Quezon City Police Department Station 10 and successfully tested the teachware last July 9-13, 2012.

Signed by:

Ms. Irene Barzaga
ALS Mobile Teacher

Noted by:

Esterlina A. Quilab
ALS Officer-in-Charge

Ma. Katrina Carmela T. Barrios
De La Salle University

Lian Sabella V. Castillo
De La Salle University

Ma. Clarissa Andrea C. Tenorio
De La Salle University

Bibliography

Books

- (Arabit, 1989) Arabit, P. (1989). *Madaling paraan sa pagbasa*. Manila: Saint Mary's Publishing.
- (Aspillera, 1985) Aspillera, P. (1985). *Basic Tagalog*. M&L Licudine Enterprise: Las Pinas, Metro Manila
- (Ashlock, 1970) Ashlock, P. (1970). *Teaching Reading To Individuals with Learning Difficulties*. Chicago: Bannerstone House.
- (Cooper, Warncke & Shipman, 1988) Cooper, D., Warncke, E. & Shipman, D. (1988). *The What and How of Reading Instruction*. Merrill Publishing Company: Melbourne, Australia
- (Ehri et al, 2002) Ehri, L., Nunes, S., et al(2002). Retrieved March 20, 2011, from Dyslexie: http://www.dyslexie.lu/JDI_02_02_04.pdf
- (Mayer, 2001) Mayer, R. E. (2001). *Multimedia learning*. New York: Cambridge University Press. (pp 63, 81, 96, 113, 134, 147, and 161).
- (Moyle, 1968) Moyle, D. (1968). *The Teaching of Reading*. The Trinity Press, Worcester, and London. (p. 46, pp. 85-87)
- (Paivio, 1991) Paivio, A. (1991). Dual coding theory: Retrospect and current status. *Canadian Journal of Psychology*, 45, 255-287.
- (Sadoski & Paivio, 2004) Sadoski, M. & Paivio, A. (2004). A dual coding theoretical model of reading. In R. B. Ruddell & N. J. Unrau (Eds.), *Theoretical models and processes of reading* (5th ed.) (pp. 1329-1362). Newark, DE: International Reading Association.
- (San Miguel, 1975) San Miguel, R. (1975). *Beginning Pilipino, Pilipino for Non-Tagalog Speakers*. JMC Press: Quezon City, Metro Manila.
- (Rubin, 1993) Rubin, D. (1993). *A Practical Approach to Teaching Reading*. Allyn and Bacon: Boston.

World Wide Web:

- (App-Zoo, 2011) App-Zoo. (2011). A Phonics Introduction app. Retrieved July 21, 2011, from: <http://itunes.apple.com/ph/app/a-phonics-introduction-app/id413887683?mt=8#>
- (Explicit Systematic Process, n.d.) Explicit Systematic Process. (n.d.). Retrieved March 20, 2011, from: http://www2.scholastic.com/content/collateral_resources/pdf/r/reading_bestpractices_phonics_explicit_systematic.pdf
- (Fast ForWord, 2008) Fast ForWord. (2008). Fast ForWord for Adults. Retrieved March 5, 2011, from: http://www.fastforword.com.au/Content_Common/pg-FastForWord forAdults.seo
- Fast ForWord. (2008). Child Learning Software, *Fast ForWord for Primary School*. Retrieved: March 5, 2011, from: http://www.fastforword.com.au/Content_Common/pgFast-ForWord-for-Primary-School.seo
- (Freedom Scientific Inc., 2011) Freedom Scientific Inc. (2011). WYNN Overview. Retrieved: March 20, 2011, from: <http://www.freedomscientific.com/lsg/products/index.asp>
- Freedom Scientific Inc. (2011). WYNN Interface. Retrieved: March 20, 2011, from: Freedom Scientific Learning System Group, http://www.freedomscientific.com/lsg/products/wynn_interface.asp
- (Garcia, 2009) Garcia, A. (2009, September). 15 Million Filipinos Can't Read, Write. Retrieved February 27, 2011, from: <http://www.mb.com.ph/node/222033/15-m-filipino>
- (Kindersley, 2010) Kindersley, D. (2010). I Love Phonics! Software. Retrieved: July 21, 2011, from: http://www.childrensoftwareonline.com/i_love_phonics_software.html
- (Kurzweil, 2011) Kurzweil Educational Systems. (2011). Kruzweil 3000 – Solutions for Struggling Reader. Retrieved March 20, 2011, from: <http://www.kurzweiledu.com/kurz3000.html#q2>
- (Paivio, 1986) Paivio, A. (1986). Dual Coding Theory. Retrieved February 28, 2011, from: <http://www.lifecirclesinc.com/Learningtheories/IP/paivio.html>
- (Phonemic Awareness Lessons, 2010) Phonemic Awareness Lessons. (2010). Retrieved July 21, 2011, from: <http://www.learningtoday.com/corporate/Phonemic-Awareness.asp>

- (Reading Skills Pyramid, 2011) Reading Skills Pyramid. (2011). Retrieved March 21, 2011, from: <http://www.reading-skills-pyramid.org/reading-phonemic.htm>
- (Roundy & Round, 2009) Roundy, A & Round, P. (2009). The Effect of Repeated Reading on Student Fluency: Does Practice Always Make Perfect? *International Journal of Human and Social Sciences* 4:1 2009. Retrieved: June 22, 2011, from: <http://www.readingresource.net/reading-fluency.html>
- (Salcedo, 2003) Salcedo, N. (2003). Literacy Information in the Philippines. Retrieved February 27, 2011, from: http://lcc.deped.gov.ph/lcc/index.php?option=com_content&view=article&id=71:literacy-information-in-the-philippines&catid=45:secretariat&Itemid=76
- (Tagalog, 2005) Tagalog. (2005). Retrieved March 20, 2011, from Phrase Base:<http://www.phrasebase.com/archive/tagalog/82-ponolohiya-honology.html>
- (Time4Learning, 2011) Time4Learning. (2011). Phonemic Awareness. Retrieved March 21, 2011, from: <http://www.time4learning.com/readingpyramid/awareness.htm>
- (The Quezon City Jail Project, n.d.) The Quezon City Jail Project. (n.d.). Retrieved March 21, 2011, from: <http://www.upd.edu.ph/~upocdil/qcjail.htm>
- (PCOO, 2007) Presidential Communications Operations Office (PCOO) News Archive. Retrieved February 27, 2011 from: <http://www.pcoo.gov.ph/archives2007/dec19.htm>
- (SIL, 2011) Summer Institute of Linguistics (SIL) International. (2011). *Literacy and Development: Opening New Doors, Creating New Horizons*. Retrieved February 26, 2011, from: <http://www.sil.org/literacy/lit90/litedeve.htm>
- Summer Institute of Linguistics (SIL) International. (2011). *Adult Literacy: Where the Future Is Now*. February 26, 2011, from: <http://www.sil.org/literacy/lit90/adultlite.htm>
- (UNESCO, 2003) United Nations Educational, Scientific and Cultural Organization (UNESCO). (2003). National Literacy Policies, Philippines. Retrieved February 26, 2011, from: <http://www.accu.or.jp/litdbase/policy/index.htm>

(UNESCO, 2011)

UNESCO. (2011). Basic Literacy Retrieved February 27, 2011
from: [http://www.sil.org/lingualinks/literacy
/referencematerials/glossaryofliteracyterms/WhatIsBasicLiteracy.htm](http://www.sil.org/lingualinks/literacy/referencematerials/glossaryofliteracyterms/WhatIsBasicLiteracy.htm)

(Young, 2007)

Young, B. (2007). Preparing Teachers to Teach Reading
Effectively. Retrieved March 21, 2011, from:
[http://www.calstate.edu/teacherEd/
docs/Reading_Report.pdf](http://www.calstate.edu/teacherEd/docs/Reading_Report.pdf)

Dictionary

(Webster's Online Dictionary, 2011)	Webster's Online Dictionary. (2011). Languages of the Philippines. Retrieved March 21, 2011, from:
http://www.websters-online-dictionary.org/Tagalog/
(American Heritage Dictionary, 2007)	American Heritage Dictionary. The American Heritage® Dictionary of the English Language, Fourth Edition Copyright © 2007, 2000 by Houghton Mifflin Company. Updated in 2009. Published by Houghton Mifflin
(McGraw-Hill Science & Technology Dictionary, 2003)	McGraw-Hill Science & Technology Dictionary. McGraw-Hill Dictionary of Scientific and Technical Terms. Copyright © 2003, 1994, 1989, 1984, 1978, 1976, 1974 by McGraw-Hill Companies, Inc. All rights reserved.
(Diksyunaryo ng Wikang Filipino Unang Edisyon, 1989)	Diksyunaryo ng Wikang Filipino Unang Edisyon, 1989. Karapatang-Sipi 1989. Linangan ng mga Wika sa Pilipinas Instructional Materials Corporation Kagawaran ng Edukasyon, Kultura at Sports Republika ng Pilipinas Inilimbag sa Pilipinas ng Cacho Hermanos, Inc.

Resource Persons

Dr. Lloyd Espiritu

Full time Professor

De La Salle University

College of Computer Studies, Information Technology Department

espiritu.lloyd@gmail.com

Mr. Roderick Corpuz

Education Program Specialist

Bureau of Alternative Learning System

3rd floor Meralco Avenue, DepEd Complex, ULTRA Pasig City

+632-635-5193

Mr. Joselito B. Castro

Education Program Specialist II

Bureau of Alternative Learning System

3rd floor Meralco Avenue, DepEd Complex, ULTRA Pasig City

+632-635-5193

+63939-553-7584

jsltcastro@yahoo.com

Ms. Irene Barzaga

ALS Mobile Teacher

+63928-485-2622

irenebarzaga@gmail.com

Mrs. Angelyn Malabanan

ALS Mobile Teacher

+63918-628-6745

angelynmalabanan@gmail.com

Personal Vitae**Barrios, Ma. Katrina Carmela, T.**

2456 Maryville Dormitory, Taft Avenue, Malate, Manila

+632-8333845

+63917-7009098

kcbarrrios@gmail.com

Castillo, Lian Sabella, V.

5179 Padre Gomez Street, Makati City

+632-8950777

+63917-9219133

liansvc@gmail.com

Tenorio, Ma. Clarissa Andrea, C.

9 First Street St. Ignatius Village, Quezon City

+632-911-6713

+63917-3127081

crissa.tenorio@gmail.com