

Development and Evaluation of an Instructional Package for Komunikasyon at Pananaliksik sa Wika at Kulturang Pilipino

Dr. Salvador P. Bacio, Jr.¹, Dr. Roberto G. Sagge, Jr.²

^{1,2} *College of Education, West Visayas State University, Philippines*
Email: ¹ salvador.bacio@wvsu.edu.ph

Abstract

This research aimed to develop and evaluate an instructional package for *Komunikasyon at Pananaliksik sa Wika at Kulturang Pilipino* for Grade 11 students. The study was participated in by two sections of senior high school with 87 Grade 11 students and two Filipino subject teachers. The development of the instructional package utilized the ADDIE model. The instruments used in this study were the researcher-made test, students' and teachers' evaluation questionnaire for the efficiency and usability, and interview schedule. Experts validated these instruments and was pilot-tested to establish its reliability using KR20 and Cronbach alpha. The bottom five least mastered competencies were the basis in the development of an instructional package such as students' module, teachers' manual, and slidetext. The overall evaluation of the efficiency and usability of the instructional package was very high. In addition, this study used thematic analysis on the experiences of teachers and generated the following themes: The instructional package provides engaging activities, and offers less burden in preparing the lesson. Moreover, students' experiences generated the following themes: "The instructional package was interactive, informative, served as an independent tool for learning, and easy to comprehend." Based on these themes, it appears that students and teachers were satisfied with the instructional package. Thus, it recommended that the developed instructional package will be used in the classroom for this can serve as an effective instructional material that will help students learn and understand KPWK better.

Keywords— Development, Evaluation, Instructional Package, KPWK

I. INTRODUCTION

Filipinos are known to be competitive in the international arena. However, the Philippines educational system hinders them from becoming even more competitive (Abueva, 2015). To offer a solution to this problem, Curriculum planners developed the K to 12 program. During the school year 2012-2013, the education system of the Philippines was changed from the 10 years basic education to a 12-year program through an initiative called the K to 12 Education Plan. This is a collaborative effort of the Department of Education (DepEd), the Commission on Higher Education (CHED), and the Technical Education and Skills Development Authority (TESDA).

However, it is undeniable that there were problems that arose as the DepEd implemented the program. These problems include lack of budget, classrooms, textbooks, and teachers (Cruz, 2010). In fact, this year 2020, the students who were part of the program since 2012 had just finished the additional two-year program or the senior high school, but the instructional materials are not yet fully distributed to the different schools.

As observed, the students in the 21st century or generation Z have grown up in a fast-paced digital world, thus they easily tune out of the traditional lecture-based classroom. Researching, communicating and even online job application across the world via computer or cell phone is a snap for them (Burke et al.,

2009). To effectively engage and teach the generation Z students, teachers must help the educational system in meeting this requirement. The school systems must be outfitted with a prerequisite of the ICT resources, and the curricula must be designed to promote a better and appropriate environment to which students will relate and respond. As the ICT is integrated into classrooms, teachers must be skillful and competent as well in utilizing technology in their instruction (Boholano, 2017).

As observed by the researcher, in the institution where he is currently employed, there are limited and insufficient instructional materials, specifically in teaching Filipino subjects. The school lacks teachers' guide, modules, and computer generated instructional materials that can aide teachers in teaching and students in learning the Filipino subject.

Several authors regard instructional materials as a very important tool in the classroom. Wambui (2013) mentioned that learning materials are meaningful in mastering specific skills and acquiring knowledge. He added that instructional materials are not designed to become a substitute to effective teacher or to supplement the textbook but to supplement the instructional process.

The Pacific Policy Research Center (2010) also found out that instructional materials must support curriculum standards and address the needs of the students as a lifelong learner. More so, it must reflect quality writing, and good production technique and must be user friendly. Furthermore, Westbury (1998 as cited in Cruz, 2015) pointed out that textbooks and other printed materials are still considered the best instruments in enhancing positive transfer of learning because they stimulate a good human mentor to teach efficiently and effectively. Such instructional materials enhance quality instruction and therefore guarantee quality education, which can be done by providing appropriate materials which serve as the principal tool and repository of standard knowledge that schools communicate a basic instrument for organizing curricula and a basic tool for teaching and learning.

On the other hand, the study of Patriarca (2013) shows that *computer-generated instructional materials (CGIM)* are beneficial materials for teaching and learning that suit the needs of the students in the present generation. As based on the IT experts' evaluation, technology plays an important role in students' learning. In addition, this was strengthened by the result of the study of Quidato (2014) in Panitikan ng Pilipinas (LIT 101) that CGIM paves way to a better understanding of students about the different literature of the Philippines. This simply proves that using modern technology in teaching and learning is beneficial for both teachers and students.

On the same thought, Mayer (2001) affirms that learners are able to create a deeper understanding of words when they establish connections between words and pictures than from words or pictures alone. Multimedia has broken through the traditional "blackboard and chalk" teaching style. It has conquered the drawbacks of traditional teaching changing abstract and boring contents into funny, visual, audible, and dynamic ones. Multimedia English teaching combines text, images, audio and video which altogether make English teaching and learning colorful, interesting, and stimulating. After the teacher used multimedia in teaching, students can copy down the materials for after-class learning. Through this, students can look for more information they need through technology. More importantly, teacher and students can communicate through a network.

In today's generation, teaching Filipino is no longer limited to the use of chalk and chalkboard in the classroom. Instead, many approaches are used in teaching and learning process. Teachers use a variety of materials to be able to cope up with the demands of time and also to cope with the demands of fast changing society. This includes students' preference of using technology in the classroom. Thus, this study was conducted to develop an instructional package to be used in teaching Filipino 11A *Komunikasyon at Pananaliksik sa Wika at Kultura ng Pilipino* (KPWKP).

1.1. Research Paradigm

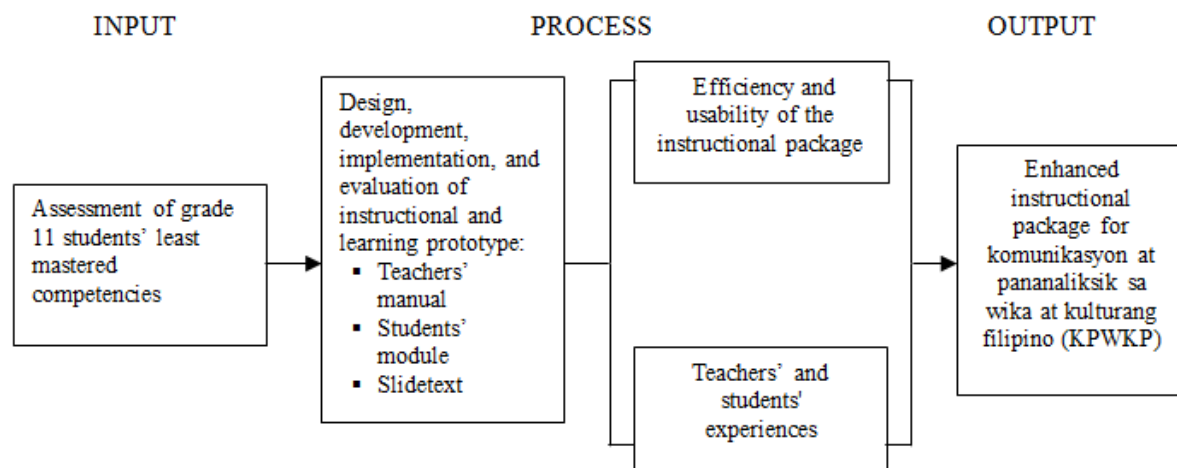


Figure 1. Development and evaluation of instructional package in KPWKP using ADDIE model.

1.2. Statement of the Problem

This study aimed to determine the least mastered competencies of students in PWKP as bases for the development of an instructional package.

Specifically, this study sought to answer to the following questions:

1. What are the students' least mastered competencies in KPWKP?
2. What instructional and learning materials for KPWKP can be produced to cater the least mastered competencies of students?
3. What is the teachers' and students' evaluation of the developed instructional package for KPWKP?
4. What are the experiences of the teachers and students from using the instructional package?

II. RESEARCH DESIGN AND METHODOLOGY

2.1. Research Design. This study utilized design research using the ADDIE (analysis-design-development-implementation-evaluation) model to develop and evaluate an instructional package to be used as an instructional and learning material. Plomp (2013) defined design research as to design and develop an intervention (like programs, teaching-learning strategies and materials, products and systems) as a solution to a complex educational problem, or alternatively to design and develop educational interventions

(like learning processes, learning environments and the like) with the purpose of developing or validating theories.

2.2. Participants. The study was participated in by two senior high school sections with eighty-seven Grade 11 students and two Filipino subject teachers.

2.3. Instruments. The instruments used in this study were the researcher-made test, students' and teachers' evaluation questionnaire for the efficiency and usability. Experts validated these instruments, was pilot-tested and revealed a reliability coefficient of 0.71 for researcher made test using KR 20. In addition, the efficiency and usability instrument revealed 0.93 and 0.96 values respectively using Cronbach alpha, all indicating that the instruments were reliable. Moreover, teachers validated the developed instructional package and the comments and suggestions made were used as bases of the improvement of the package. The data analysis techniques employed were the frequency count, mean, standard deviation, rank, and thematic analysis. Furthermore, the participants were requested to evaluate the teachers' manual and students' module in terms of physical aspect, objectives, content, activities, and assessment, while the slidetext was evaluated in terms of content, physical aspect, and visual clarity.

2.4. Ethical considerations. Ethics based on the standards of the American Psychological Association (APA) (2009) was properly observed in the conduct of the present study. Furthermore, ethical guidelines such as privacy and confidentiality in conducting research was observed. That is, this study must “do no harm” to participants

The following ethical principles were followed by the researcher in the conduct of the study: (1) permission to conduct the study among the Grade 11 students was solicited from the university president and SHS-coordinator of West Visayas State University and the principal and assistant principal of Iloilo National High School–Senior High School Department; (2) researcher informed the participants that no harm will happen to them in relation to the study; (3) in case the participant will not answer the questions or

he/she feels discomfort, the researcher respects his/her right to incrimination; and (4) students’ anonymity was observed and their confidentiality was respected.

2.5. Interview schedule. The interview schedule for the students and teacher-implementer was composed of open-ended guide questions. These questions helped the researcher gather the information about the experiences of the students and teachers in using the instructional package.

The questions were divided into two parts: (1) Establishing Rapport and (2) Experiences on the Use of Instructional Package. Three experts evaluated the appropriateness of the questions included in the interview schedule only served as a guide for the interview. Some follow up questions were added during the interview. The informants were also informed that the interview will be recorded through an audio/video recorder to insure that no data will be missed during the transcription and analysis.

2.6. Data collection procedure. Before the researcher gathered the data needed, permission was sought from the principal and assistant principal of Iloilo National High School–Senior High School and from the director of West Visayas State University-Iloilo Laboratory

School to conduct the study among the Grade 11 & 12 students.

The process of gathering pertinent data in this study was based on the Analysis, Design, Development, Implementation, Evaluation (ADDIE) Model (McGriff, 2000).

2.6.1 Analysis. In the Analysis stage, the researcher determined the least mastered competencies in KPWKP of the Grade 12 students. Before the administration of the researcher-made test, the researcher asked permission from the principal and assistant principal of the Iloilo National High School–Senior High School Department through a letter.

The researcher-made test was administered to the three sections of Grade 12 students namely, HUMSS 12C-36; GAS 12B-33; and ABM 12B-42 last June 19, 2019. These students had taken KPWKP during the first semester AY 2018-2019. After the administration of the test, it was checked, segregated according to competency, tallied frequency score, solved for the mean of each competency and ranked. Competencies at the bottom five were used for the next stage.

2.6.2. Design. In the Design stage, the outline and the format of the instructional package were created. This outline was based on the data gathered from the Analysis stage which served as a guide for the development of the instructional package.

2.6.3. Development. During this stage, the researcher developed the instructional package based on the outline and format in the Design stage. The content of the instructional package was based on the information gathered using the researcher-made test in the Analysis stage. Moreover, at this stage, a validation of seven teachers validated the prototype instructional package and their comments and suggestions were the bases of the revision.

2.6.4. Implementation. In the Implementation stage, a try-out (see Figure 2) of the developed instructional package was done with the Grade 11 Senior High School students of West Visayas State University and Doctors’ College Senior High School Department. The teachers of the said schools used the instructional package. Then the panel members were invited

to observe if the use of the package was carried out properly. After the try-out, a conference was conducted to discuss what was observed and what components of the package needed more improvement. Also, an in-depth interview was conducted with the teacher-implementer for his/her experiences in the use of the teachers' manual and slidetext. The data were

used for qualitative aspect of the study. Likewise, the researcher conducted an in-depth interview with the students from WVSU-ILS Grade 11. They were asked about their experiences in the use of the students' module and the slidetext presented by their teacher.



Figure 2. The implementation of instructional package.

2.6.5. Evaluation. After the try-out, the students were asked to accomplish the evaluation questionnaire as an assessment of the efficiency of the students' module and slidetext. Furthermore, 10 teachers including the two teacher-implementers were also given an evaluation form to rate the efficiency of the

instructional package and these teachers and students' participants evaluated the usability of the instructional package utilizing the 18-item Likert Scale. Suggestions and comments given by the experts were also considered in the revisions of the instructional package.



Figure 3. Students evaluation of the instructional package.

III.RESULTS AND DISCUSSIONS

3.1. Least mastered competencies in KPWKP

Out of the 23 competencies for KPWKP, the five least mastered competencies were the following: “*Natutukoy ang iba’t ibang paggamit ng wika sa mga nabasang pahayag mula sa mga blog, social media posts at iba pa*” ($M = 38$, $SD = 9.55$) in rank 19, “*natutukoy*

ang mga kahulugan at kabuluhan ng mga konseptong pangwika” ($M = 37$, $SD = 12.86$) in rank 20, “*nabibigyang-kahulugan ang mga salitang ginamit sa talakayan*” ($M = 31$, $SD = 2.31$) in ranked 21, “*nagagamit ang mga cohesive device sa pagpapaliwanag at pagbibigay halimbawa sa mga gamit ng wika sa lipunan*” ($M = 30$, $SD = 4.16$) in rank 22,

and “*natutukoy ang mga pinagdaanang pangyayari/kaganapan tungo sa pagkabuo at pag-unlad ng wikang pambansa*” ($M = 29$, $SD = 23.03$) as rank 23.

3.2. Developed instructional package for KPWK

The developed instructional package for Grade 11 includes the students’ module, teachers’ manual, and slidetext. This package entitled “*Modyul sa Komunikasyon at Pananaliksik sa Wika at Kulturang Pilipino*” was constructed

based on the five least mastered competencies of KPWK. The students’ module and teachers’ manual have the same parts and contents, such as, preliminary, table of contents, pretest, unit title, title, objectives, content (activity, analysis, abstraction, application), references, and posttest. The slidetext, on the other hand, is made up of the following parts: Title, objectives, activity, and analysis. Inputs from the experts were considered in the development of the module.



3.3. Overall efficiency of teachers’ manual and students’ module

Table 1 reveals the teachers’ and students’ evaluation of the overall efficiency of the students’ module and teachers’ manual.

In general, the students’ module and teachers’ manual, had an overall rating of *very high* ($M = 4.68$, $SD = 0.49$) in terms of their overall efficiency. This shows that the instructional package excellently met the standards, thus, no revision was needed.

More particularly, the students rated the efficiency of the content the highest, ($M = 4.60$, $SD = 0.62$). While the teachers rated the objectives the highest

($M = 4.88$, $SD = 0.30$). Moreover, the overall ratings of both the teachers and the students revealed that the activities received the highest rating ($M = 4.70$, $SD = 0.46$) while the physical aspect and presentation was rated the lowest ($M = 4.64$, $SD = 0.56$). Yet, they were all rated *very high* in terms of efficiency. This result of

the evaluation became the basis of revising the physical aspect and presentation of both the teachers’ manual and students’ module.

In general, the overall rating of efficiency of the instructional package was *very high* both the students ($M = 4.56$, $SD = 0.60$) and the teachers ($M = 4.80$, $SD = 0.37$).

The *very high* efficiency rating of the physical aspect and presentation, objectives, content, activities, assessment of the students’ module implies that it can serve as an effective instructional material in learning and *Komunikasyon at Pananaliksik sa Wika at Kulturang Pilipino*. The interview with the students can further strengthen this claim. Student B said, “*Ang nagustuhan ko is, ang lesson gid eh! Kay syempre ang lesson didto mo maintindihan kag makalearn kay straight to the point na siya kag damo na siya mga facts kag interesting para sa mga students nga para maka-learn*”

[What I really like is the lesson, because it is straight to the point has sufficient facts and is very interesting for the students to learn.].

Similarly, teachers' manual appeared to be worthy as a guide for teachers in teaching the subject, KPWK. This is also supported by the response of Teacher B during the interview. She said, "*Ahmm...siguro ang modyul na ito ay isang kapaki-pakinabang na kagamitan para sa pagtuturo ng asignaturang ito. Sa katunayan, nabanggit ko nga na ang modyul ay nagsisilbi nang bibliya ng guro at pati na rin mga mag-aaral sa pagtuturo at pagkatuto ng asignatura.*" [This module is a useful instructional material for teaching and learning the subject. In fact, I already said that this module serves as a teachers' and students' bible in teaching and learning the subject.]

This result of the study is confirmed by the study of Robles (2009) where the respondents strongly agreed that the developed learning package was a reliable as instrument. The

developed CALP had valid objectives, contents, manner of presentation, and usefulness; therefore, this could be used as an alternative instructional material for enrichment and remediation.

In addition, the findings of this study also support the result of the study of Lumabit (2018), which developed and produced inquiry-based module that can help enhance students' critical thinking and mathematics performance. The objectives, content, activities, style and presentation, organization, and assessment activities of the module were adequate, sufficient, and appropriate for the intended users. A well-functioning sequence through analysis of the curriculum guide was observed. Thus, the researcher had developed an effective, ready and usable instructional materials that can be utilized in the classroom to facilitate teaching and learning process as well as enhance the necessary knowledge and skills.

Table 1. Overall Efficiency of Students' Module and Teachers' Manual

	Student		Teacher		SD	M	Description
	SD	M	SD	M			
Physical Aspect and Presentation	0.57	4.59	0.55	4.68	0.56	4.64	Very High
Objectives	0.64	4.45	0.30	4.88	0.47	4.66	Very High
Content	0.62	4.60	0.41	4.78	0.51	4.69	Very High
Activities	0.59	4.58	0.34	4.82	0.46	4.70	Very High
Assessment	0.61	4.57	0.27	4.82	0.44	4.69	Very High
Overall Rating	0.60	4.56	0.37	4.80	0.49	4.68	Very High

Note: Description is based on the following scale: 4.51-5.0 (Very High), 3.51-4.50 (High), 2.51-3.50 (Moderate), 1.51-2.50 (Low), 1.0-1.50 (Poor).

3.4. Overall efficiency of the slidetext

Table 2 reveals the teachers' and the students' evaluation of the overall efficiency of the slidetext.

As to the overall efficiency of the slidetext, the rating was "very high" ($M = 4.57$, $SD = 0.64$). This shows that the slidetext excellently met the standards of an instructional materials, thus, no revision was needed.

In particular, the students rated the visual clarity the highest ($M = 4.58$, $SD = 0.57$), while the teachers, rated the content the highest ($M = 4.70$, $SD = 0.73$). Furthermore,

when the students and teachers were taken as a whole, the content came out to have the highest rating ($M = 4.63$, $SD = 0.65$) while the physical aspect was rated the lowest ($M = 4.51$, $SD = 0.64$). Yet, both aspects had *very high* efficiency. The result of evaluation as well as the feedback of evaluators also became the basis for the revision of some of the parts of the slidetext to improve the physical aspect of the slidetext.

In general, the overall rating of the students ($M = 4.55$, $SD = 0.58$) and teachers ($M = 4.60$, $SD = 0.71$) of the physical aspect was *very high*.

This implies that the developed slidetext if used in the classroom could improve learning because students pay more attention to the lesson presented. The use of dual coding of the information presentation-visual and auditory, leads to increased comprehension among the students. This result is further strengthened by the interview.

Teacher B said, “*Dahil sa slidetext, mas makukuha mo ang atensyon at interes ng mga bata na kung saan attractive o makakukuha ng atensyon sa kanila ang colors na ginamit sa powerpoint presentation at sa mga larawan.*” [Through the use of slidetext I can get the attention and interest of my students. You can get the interest of the students with the attractive colors and images used in the powerpoint presentation.]

Furthermore, because students nowadays are technology savvy, they can use their gadgets to copy the presentation from the teacher and use it to review or for advance study. Student D

said, “*Yung mga ibinigay na sa amin beforehand ang mga powerpoint, parang kahit wala kami sa silid aralan ay parang napag-aralan namin ang mga topikong ibinigay.*” [Our teacher gave the powerpoint beforehand, so we are able to study study the topic given to us even if we are outside the classroom].

The findings above are further supported by the study of Dillon-Marable and Valentine (2006). They reported that technology integration into education could be achieved by establishing constant interaction between teachers and students, by facilitating technology use and providing students with opportunities to use technology effectively. In addition, the study by Ubogu (2006) supports the view that multimedia resources facilitate access to all human knowledge anytime and anywhere in a friendly, multi-modal, efficient, and effective way by overcoming barriers of distance, language and culture, and by using multiple Internet-connect devices.

Table 2. Overall Efficiency of Slidetext

	Student		Teacher		SD	M	Description
	SD	M	SD	M			
Content	0.57	4.56	0.73	4.70	0.65	4.63	Very High
Physical Aspects	0.60	4.50	0.68	4.52	0.64	4.51	Very High
Visual Clarity	0.57	4.58	0.71	4.57	0.64	4.57	Very High
Overall Rating	0.58	4.55	0.71	4.60	0.64	4.57	Very High

Note: Description is based on the following scale: 4.51-5.0 (Very High), 3.51-4.50 (High), 2.51-3.50 (Moderate), 1.51-2.50 (Low), 1.0-1.50 (Poor).

3.5. Overall usability of an instructional package

Table 3 reveals the teachers' and students' evaluation of the usability of the developed instructional package. The data showed that the usability of the instructional package, had an overall rating of *very high* ($M = 4.75$, $SD = 0.47$). This shows that the instructional package excellently met the standards of a good instructional material; thus, no revision was needed.

In particular, the students have rated the indicator “the instructional package gives meaningful learning in language concepts and reading comprehension” the highest ($M = 4.73$,

$SD = 0.51$). While the teachers rated the statement “the instructional package has numerous contributions in teaching KPWKP” the highest ($M = 5.00$, $SD = 0.00$). When the teachers and students were grouped the indicator “the instructional package can help the curriculum implementers in addressing the needs in instructional materials in teaching”, obtained the highest mean ($M = 4.80$, $SD = 0.41$), while the indicator, “the instructional package has various and well integrated functions ($M = 4.68$, $SD = 0.60$) obtained the lowest rating. However, both appeared to have *very high*” usability.

Table 3. Usability of Instructional Package

	Student		Teacher		SD	M	Description
	SD	M	SD	M			
The instructional package...							
1. has numerous contributions in teaching KPWKP.	0.63	4.57	0.00	5.00	0.31	4.79	Very High
2. is a useful reference in the effectiveness of the discussion.	0.64	4.61	0.32	4.90	0.32	4.76	Very High
3. can be used by teachers and students as instructional and learning materials.	0.59	4.66	0.32	4.90	0.45	4.78	Very High
4. can help the curriculum implementers in addressing the needs in instructional materials in teaching.	0.49	4.70	0.32	4.90	0.41	4.80	Very High
5. can help teachers provide more exercises for students to learn.	0.56	4.66	0.32	4.90	0.44	4.78	Very High
6. is useful to teachers in the basic education.	0.58	4.67	0.42	4.80	0.45	4.74	Very High
7. addresses the pace of learning of the students.	0.57	4.61	0.32	4.90	0.50	4.76	Very High
8. gives meaningful learning in language concepts and reading comprehension.	0.51	4.73	0.42	4.80	0.41	4.76	Very High
9. widens the interest of the teachers and students in KPWKP.	0.61	4.56	0.32	4.90	0.51	4.73	Very High
10. useful to researchers working on instructional materials.	0.61	4.66	0.32	4.90	0.47	4.78	Very High
11. can be used frequently by teachers and students frequently.	0.60	4.61	0.42	4.80	0.46	4.71	Very High
12. was easy to use and follow.	0.56	4.67	0.32	4.90	0.49	4.79	Very High
13. addresses the 21 st century skills of students and teachers.	0.57	4.64	0.32	4.90	0.44	4.77	Very High
14. has various and well integrated functions.	0.60	4.57	0.42	4.80	0.60	4.68	Very High
15. is consistent with the content of teachers' manual, students' module, and slidetext.	0.56	4.66	0.48	4.70	0.46	4.69	Very High
16. saves time in preparation for teaching and learning KPWKP.	0.61	4.56	0.32	4.90	0.54	4.73	Very High
17. enhances one's confidence in teaching and learning KPWKP.	0.57	4.60	0.42	4.80	0.64	4.70	Very High
18. addresses the competencies in the curriculum guide for KPWKP.	0.58	4.67	0.42	4.80	0.61	4.74	Very High
Over-all Rating	0.58	4.63	0.36	4.86	0.47	4.75	Very High

Note: Description is based on the following scale: 4.51-5.0 (Very High), 3.51-4.50 (High), 2.51-3.50 (Moderate), 1.51-2.50 (Low), 1.0-1.50 (Poor).

In general, both the students ($M = 4.63$, $SD = 0.58$) and the teachers ($M = 4.86$, $SD = 0.36$) rated the usability of the instructional package very high.

This results seems to imply that the developed instructional package is very useful for both the teachers and the students. The students can get all the information that they need to learn the subject and at the same time, they can work at their own pace. On the other hand, the teachers can save time for they don't need to prepare their instructional materials anymore. This was further verified through in depth interview among teachers and students about their experiences in using the module. Teacher A said,

"Ito rin ay nakatutulong sa aking mga mag-aaral sa kadahilanang sila ay... nasisiyahan at nagkakaroon ng pansariling oras para sa paggawa ng mga gawain, ibig sabihin nagiging independent sila..ahmm pwede naman silang humingi ng tulong ng mga kamag-aral or guro sa ilang gawain na hindi nila masyadong nauunawaan pero sa kabuuan masasabi ko na ito'y nagbibigay sa kanila ng kritikal or lumilinang ng kanilang kritikal na pag-iisip at nakagagawa sila ayon sa kanilang oras, ayon sa kanilang bilis sa pagkatututo sa nasabing aralin." [It also helps my students because they feel happy and they also have an independent time to work with the activities that they cannot understand well. But in totality, it enhances their critical thinking. They can also work at their own pace and time in learning the lesson.] Student D added, *"Doon naman sa presentation at modyul, kapakipakinabang ito at nakakatulong nga ito kasi hindi na kami ganoong nahirapan sa paghahanap ng mga impormasyon na talagang kailangan namin para matutunan yung topiko."* [Regarding the presentation and module, yes it is very useful and it is a great help because all the information that we need to learn the subject are already there].

This particular result of the study conforms to the findings of Maranan (2004) that the criteria such as usability, content, and clarity of presentation were considered by the respondents as the most important among factors acceptable for a learning material. Moreover, the study of Sagge and Bacio (2018) showed that developed and produced CGIM is very useful as indicated in the ratings of the

evaluators. The findings further stress that evaluators considered the CGIM as valuable instructional material in the teaching-learning process. Similarly, to the findings of this research, the result of the study of Nabayra (2019) showed that the respondents agreed that the e-module is highly useful; thus, the developed e-module is worthy and can serve as an instructional material in a flipped classroom model and will help students learn at their own pace.

3.6. Students' and teachers' experiences in using the instructional package

After the trying-out of the KPWKP instructional package, two teachers utilized the said package at West Visayas State University and at Iloilo Doctor's College Senior High School Department. Moreover, seven students from Grade 11 of West Visayas State University-Senior High School Department were interviewed by the researcher about their experiences in using the instructional package.

3.6.1. Teachers' experiences

Upon reading the transcript of the in-depth interview about the experiences of teachers in the use of teachers' manual and slidetext presentation, the researcher came up with the following themes: (1) provides engaging activities, (2) offers less burden in preparing lesson, and (3) teachers' were satisfied with the instructional package.

Provides engaging activities. Engaging means tending to draw favorable attention or interest (Meriam-Webster dictionary, 2019). This is one of the prevailing characteristics of the instructional package, according to the teachers, when they implemented the said package among the students. The colors and images as well as the samples that are trending in today's generation attracted the interest and attention of the students. This is evident on what teacher A said during the interview. She said,

"Mas nakukuha ko ang atensyon ng mga estudyante ko sa pamamagitan ng paggamit ng modyul at sa powerpoint presentation mas makukuha mo ang interes ng mga bata na kung

saan attractive o makakukuha ng atensyon sa kanila ang colors na ginamit sa powerpoint presentation at sa mga larawan.” [Through the use of module and powerpoint presentation I can get the attention of my students. You can get the interest of the students with the attractive colors and images used in the powerpoint presentation.] Also she added, “*Ang nagustuhan ko dito ay yong mas makakarelate yong mga estudyante sa kasalukuyang panahon, na kung saan ang ginamit ko talaga sa pagtuturo ay yong mga spoken poetry,fliptop, hugot lines, na kung saan relate na relate talaga yong mga estudyante na isang bigay mo pa lamang ng halimbawa ay lahat gustong sumagot ng kanilang mga opinion kanilang hugot lines at kanilang mga pinagdadaanan, so ang hindi ko nagustuhan siguro ay wala naman, dahil nga, bukod tangi” oo at syempre mas nakarelate ang mga estudyante.*” [What I liked here was that, my students can relate to the present situation. I actually use in my teaching the spoken poetry,fliptop, hugot lines, where my student can relate much. Even if you give one example only once, all of them wanted to answer and share their opinions, their hugot lines and all their experiences.

So, don’t have anything against the module because it is impressive and my student can relate to it.].

For an instructional package to be engaging, it should be done properly and creatively as mentioned by Teacher B. She said,

“*Sa katunayan, halos lahat ng bahagi ng modyul ay aking nagustuhan. Lalong lalo na yung iba’t ibang pagsasanay na... nakasulat doon para sa mga mag-aaral at para naman sa presentasyon, nagustuhan ko ang mga ginamit na larawan pati na rin ang mga background na talagang nagpapakita ng kahandaan ng gumawa noon pati na rin ang kanyang pagiging masining at pagkamalikhain.*” [In fact, I really like all the parts of the module, especially those written activities for students, and for the presentation, I liked all the pictures used as well as the background because it shows the preparedness of the one making it and also it shows his artistry and creativeness].

Hence, to become an effective teacher one needs an engaging material to support the needs of students to learn and help them become interested in the subject by providing them good instructional materials.

Offers less burden in preparing the lesson. It is a fact that the responsibility of the teachers does not only end in facilitating learning, but they also have to perform other tasks like preparation of documents for accreditation, evaluation, audit, and other related assignments. Teachers also have to take care of their family and sometimes the personal life of the students. With these responsibilities, oftentimes, teachers do not have enough time to prepare for their lessons. But with the development of an instructional package, such task will become easier and less time consuming. This was the experience of Teacher B. She said,

“*Unang-una, sa akin bilang guro hindi ko na kailangang paglaanan ng mahabang oras ang mga aralin. Kailangan ko lamang maging pamilyar doon sa gawain pati na rin sa paglalahad ng aralin, ng sa ganoon ay mabisa ko itong maibahagi at maituro sa aking mga mag-aaral.*” [Of course, it helps! First and foremost, I, as a teacher, don’t need to spend a lot of time for lessons preparation. I only need to be familiar with the activities and in presenting the lesson. In that way, I can effectively share it to my students]. Likewise Teacher A, testified that,

“*So, noong nakaraang taon, ang unang taon ko ng pagtuturo ay gumagamit ako ng mahigit tatlong aklat, batayang aklat sa pagtuturo ng Filipino 11, at sa ngayon, dahil sa pinahiram ako ni Sir Bacio ng aklat na kanyang ginawa, ahmm masasabi ko na....summary na o buod ng mga aklat na ginamit ko ang nakasulat sa aklat na ipinahiram o ginawa ni Sir Bacio.*” [Last year, my first year of teaching, I used more than three books, a textbooks in teaching Filipino 11, and now that sir Bacio let me borrow his developed module, I can say that, what is written (module), is a summary of all the books I’m using before.].

With the help of the instructional package introduced, a teacher can give more time to the

more important aspects of the lesson, and this will result to a more holistic understanding of a subject matter.

Gives the feeling of satisfaction. The *Komunikasyon at Pananaliksik sa Wika at Kulturang Pilipino* is one of the many new subjects offered in the Senior High School curriculum that has no instructional materials. Oftentimes the teacher teaching the subject is the one preparing the materials and he or she uses several books as references. So, sometimes teachers find it difficult to choose the strategies and the appropriate activities to be used for that topic. But with the developed instructional package, teachers are already provided with all the things they need in teaching, and their task is lot easier and convinient. Like what Teacher B said during the interview. She said,

“Sa katunayan ako ay lubhang nasisiyahan ng malaman ko na may isang mananaliksik na gagawa ng Instructional Package sa KPWKP dahil ang asignaturang ito ay wala pang masyadong maraming kagamitan na magagamit sa kadahilanang itoy bagong subject pa lamang. Ako ay ahmm.. maliban sa nasisiyahan, ako din ay ahmm..nasasabik dahil magkakaroon ng panibagong estratehiya at kagamitan na magagamit ko sa pagtuturo ng nasabing asignatura kahit na ang mga naihanda doon ay para lamang sa mga least mastered skills ng mga naunang ng nakakuha ng asignaturang ito.” [In fact, I am very happy when I learned that there is a researcher who will develop an instructional package for KPWKP because this new subject has limited materials available. Aside from being happy, I am excited because I will be having new strategy and materials to be used in teaching the said subject even the prepared activities are just for the least mastered skills of those who had taken this subject.].

Based from the response of Teacher A, it can be implied that she was satisfied because of the appropriate content of the instructional package. She commented,

“So, noong nakaraang taon, ang unang taon ko ng pagtuturo ay gumagamit ako ng mahigit tatlong aklat, batayang aklat sa pagtuturo ng

Filipino 11, at sa ngayon, dahil sa pinahiram ako ni Sir Bacio ng aklat na kanyang ginawa, ahmm masasabi ko na....summary na o buod ng mga aklat na ginamit ko ang nakasulat sa aklat na ipinahiram o ginawa ni Sir Bacio.” [Last year, my first year of teaching, I used more than three books, a textbooks in teaching Filipino 11, and now that sir Bacio let me borrow his developed module, I can say that, what is written (module), is a summary of all the books I’m using before.] Moreover, *gumagamit ako ng ppt pero ako lamang ang gumagawa, at syempre may mga kakulangan talaga na, sa mga presentasyon, na aking ipinapakita dahil nga sa tatlong aklat ang ginagamit ko at hindi ko mabatid kung ano ba talaga ang gagamitin ko sa pagbibigay ng kahulugan sa mga konsepto/ salita na ginagamit sa talakayan.”* [I’m using a powerpoint (ppt), but I just personally made it. Of course, my presentation is not that perfect because using three books confuse me more. I don’t know which definition is appropriate from a certain concept or words in a discussion].

One of the purposes of developing an instructional package is make the lesson simple, make the teaching and learning process easier, and make technology a part of learning the millennials and 21st century learners. With the use of instructional package for KPWKP, all these purposes were met and teachers are very satisfied.

3.6.2. Students’ experiences

In this study, seven randomly selected students from the 50 grade-11 students at WVSU-SHS were requested to give testimony regarding their experiences in using the module and slidetext presentation. In-depth and multiple interviews were conducted. Polkinghorne (1989) recommends that researchers interview from 5 to 25 individuals who have all experienced the phenomenon. During the interview, the students were allowed to speak in their mother tongue so that they can express their thoughts better. Code switching was applied to translate the response of the students. The themes that came out during the interview were the following: (1) the module is

interactive, (2) the module is informative, (3) the module served as an independent tool for learning, (4) the module is easy to comprehend, and (5) the students were satisfied with the instructional package.

The module is interactive. Interactive modules are not web-based lessons, instead they offer experiential learning opportunities as part of a lesson. Interactive modules are meant to be used in creative ways by teachers, parents, and students - in ways that the original designer may have never anticipated (Rieber, n.d.). One of the distinct features of the instructional package the inclusion of a performance task. A performance task is any learning activity or assessment that asks students to demonstrate their knowledge, understanding, and proficiency (McTghe, n.d.).

This performance and other activities in the module make learning interactive. This was attested by Student A, He said:

“So sa grade 11 student na nagtatake-up ng Filipino as one of my subjects I can really describe my learning experience as more of an interactive one. Because first in foremost the module provided activities wherein the students can answer and ponder on after a lesson. So, with Ma’am Cepeda after namun mag lesson may gina provide gid sya nga something that we can answer to deepen–deepen our understanding about the lesson. That’s, that’s why I describe my learning as an interactive one.” [As a Grade 11 student who is taking up Filipino as one of my subjects I can really describe my learning as more of an interactive one. Because first and foremost the module provided activities wherein the students can answer and ponder on after a lesson. So, with Ma’am Cepeda, right after the lesson she provides us with something that we can answer to deepen our understanding about the lesson. That is why I describe my learning as an interactive one].

In addition, Student B, testified that,

“Ang design appropriate man kag indi sya dull kag makakwa gid siya sang attention sang mga estudyante kag ang design sang mga fonts appropriate man siya dayun ang mga facts appropriate man siya and then makabulig gid

ang mga lessons kay straight to the point gid siya. Ang definition kag ang mga activities makabulig gid siya makaintindi sang lessons.”

[The design specifically the fonts used in the module is appropriate and can catch the attention of the students. The facts used in the module are also appropriate. The lessons are straight to the point and by using definition and activities, the lessons are easy to understand.]

Moreover, for the module to become interactive it should intertwine with the series of activities that will create interaction between the material and students. This is apparent in the statement of Student A:

“Ang nanamian ko gid sa module mo sir is that it provides activities not only that simple activity but it has a wide array of activities lik for example there is an identification, uh matching type, fishbone organizer, concept mapping because I think these different types can really help the student in understanding the lesson and when it comes to the presentation daw na notice ko lang because the designs na gin gamit sa presentation are really relevant when it comes to lesson. For example, culture, ang designs na gin gamit mag present is ethnic related and I think if the presentation is good for the eyes the student ay maganahan gid na mamati so amu gid ni ang nanamian ko sa module and presentation. [What I like the most in the module is that it provides activities not only simple activities but it has a wide array of activities like for example there is an identification, matching type, fishbone organizer, [and] concept mapping because I think these different types can really help the student understand the lesson, and when it comes to the presentation, I noticed that the designs used during the presentation were really relevant with the lesson. For example, for culture, the designs were ethnic related and I think the presentation was good for the eyes of the student, thus they became more interested in listening so that’s why I really like the module]. Furthermore, Student C emphasized that, *“Kasi maraming assignment, paperworks at performance task.”* [Because there are many assignments, paperwork and performance tasks], and Student D mentioned that,

“Nakabulig man, damu mga questions, mga activities nga nakahelp sa amun sa pagtuon mayo sang topic regarding sa subject nga na.” [It actually helped, there are lots of questions, activities that helped us in our study the subject.].

These testimonies strengthen the need for the the inclusion of activities after each lesson and the performance tasks and add more interactive learning materials.

The module is informative. The essence of the current century brings about an overwhelming amount of information which involves using efficient mechanisms to enrich learning and teaching activities (Çakir, 2015). With this, the researcher developed an instructional package as a mechanism to supplement class discussion. The researcher made sure that the instructional material developed is informative and can provide necessary information needed by the students. The results revealed that indeed, the materials is informative. This is supported by the responses of some informants as presented in the following transcripts. Student A said, *“The module provided appropriate information and is suited to our learning as a Grade 11 student... That’s why naka help gid sya sa akun kay indi lang sya naghatag sang information through definition but also it provided concrete examples for us to learn.* [The module provided appropriate information suited to our learning needs as a Grade 11 student...That’s why, it really helped me learn because it did not only give information through definition but it also provided concrete examples].

Also student B mentioned that,

“Ang nagustuhan ko is, ang lesson gid eh. Kay syempre ang lesson didto mo maintindihan kag makalearn kay straight to the point na siya kag damo na siya mga facts kag interesting para sa mga students nga para maka-learn and activities amu gid ang nagustuhan ko kay gabulig gid siya makapaintindi sa mga students kag wala man ko sang may hindi nagustuhan kay syempre complete man ang mga explanation.” [What I really like is the lesson because it is straight to the point, has sufficient facts and is very interesting for the students to

learn. Also, I like the activities because they help the students understand the lesson. I have no negative feedbacks since the module has complete explanation]. Student C asserted that, *“Nakatulong sapagkat ito’y nagbibigay ng impormasyong aming kinakailangan at pomupukos ito sa wika at sumusunod ito sa aming course outline sa Kurikulum ng K-12.”* [It was helpful because it provided the information we needed and it focused on the language and it aligns with our course outline in the K-12 Curriculum].

Moreover, Student D also said, *Naexplain lahat bala sa libro kung ano ara sa amon nga...course outline nga ginhatag sa amun sang fist sem.... Regarding naman sa presentasyon naman inilahad niya kompleto naman po na naipakita yung lahat na mga impormasyong na aming kinakailangan especially doon sa modyul..Nakabulig man, damu mga questions, mga activities nga nakahelp sa amun sa pagtuon mayo sang topic regarding sa subject nga na.”* [The topics found in our course outline during our first semester were thoroughly explained in the book. Regarding the presentation, the information we needed for the module was discussed completely and elaborately. The questions and topics also aided us in studying and understanding the topic at hand with regards with the subject].

Further, student E stated that, *“It really helps kay complete ang information nga ginhatag kag daw wala man siya mga errors and ahmm..daw hapos lang siya maintindihan because sa mga facts kag definition.* [It really helps because it has complete information and it has no errors and hmm. It can be easily understood because of the facts and definition].

These statements emphasizes that it is important that the instructional material used is useful, interesting, and should cover all aspects of information necessary to the subject taught. In other words, the instructional materials need to be informative so that this could really serve its purpose in the classroom.

Served as an independent tool for learning. Holec (1981, as cited in Benson & Voller, 1997) stated that independent learning is "the

ability to take charge of one's learning." Students can do independent study to further developed their ability to understand and it can be done through the use of appropriate materials. Instructional package in KPWKP served as an independent tool for students learning as it was obviously evident in the statement of student A, "*Amo to sya sir, na gets ko gid sya kay biskan ako lang bala mag tuon kag wala may ga explain ma-explain gid sya sang book, sang definition kag sang examples kung anu gid ang gina lahad sang lessons.*" I really learned it Sir. Though nobody explains when you study, you still learn because the book explains the difination and there are concrete examples of what are meant].

Likewise, Student D cited that,

"Nakakatulong siya Sir, kasi kahit hindi kami nasa silid-aralan, dahil dala namin ang modyul o yung mga ibinigay na sa amin beforehand ang mga powerpoint, parang kahit wala kami sa silid aralan ay parang napag-aralan namin ang mga topikong ibinigay." [It helps because even we are outside the classroom and we have the module that was given beforehand, the powerpoint, it just like even outside the classroom we can study the topic given to us].

Additionally, student E, mentioned that,

Nakatutulong ang modyul dahil kompleto ito at mayroon akong guide kung paano ako makapag-aral sa aking leksyon, sa asignaturang ito at naging madali sa akin ang pag-aaral sa wikang Filipino. Ginagamit ko rin ito kapag may free time ako at sa paggawa ng assignment." [The module helped me a lot because aside from being thorough it also served as my guide on how to study my lessons from this subject, and it made me study the Filipino language easily. I use it during my free time in making my assignment].

Based from the transcripts above, this simply shows that the developed instructional package indeed has served as an independent tool for students learning.

The module is easy to comprehend. An instructional material can become effective in students' learning if learners really understand the lessons. Futhermore, evaluation results on the developed instructional package for

KPWKP showed very high efficiency and usability rating. Thus, the developed instructional package maybe a great help in students' understanding. In the study of Torrefranca (2017) the evaluators strongly agreed that the content of each lesson is directly relevant to the defined objectives, and it is easy to understand. Furthermore, they strongly agreed that the topics of each lesson are fully discussed and supported by illustrative examples and practice tasks that are suited to the level of the students. These findings are also evident with the results of an interview with the four students. Student D detailed that,

"Oo nga nakaayon na ang mga impormasyon na andyan sa libro sa course outline na ibinigay sa amin ni Ma'am kaya hindi na kami ganoong nahirapan sa paghahanap ng mga impormasyong na talagang kailangan namin para matutunan yung topiko." [Yes, the information found in the book are arranged according to the outline given by our teacher, that is why, it was easy for us to search for information that we really need in order to understand the topic]. Student E, further narrated that,

"Ang aking karanasan, sir sa paggamit ng modyul na ito ay naging madali ang pag-unawa at pag-intindi sa...tungkol sa wika, tungkol sa kanyang mga katangian at iba pang mga bahagi nito at pati na rin ang kanyang mga kahulugan at ng iba ibang paggamit nito." [My experience in using the book was that it was fast and easy for me to learn things about language, like its characteristics, its other aspects, as well as its meaning and usage]. In addition, Student F pointed out that, "*Sa experience ko, hapos sya gamiton kay indi ka na magsala*"... [In my experience, it's really easy to use since you won't get confused].

Moreover, Student F, further added that,

"Ang nagustuhan ko, hapos sya gamiton kag isa pa easy lang sya intyindahon kag mga nabudlayan sa Filipino parehos sa akon daw maka intyindi gid mayo." [What I like about the module is that it is easy to understand and students who find Filipino hard like me seems to understand it well]. Furthermore, Student G, cited that, "*Ang pwede kong ilarawan sa aking*

karanasan sa paggamit ng modyul na ginawa mo po ay nagagamit ko siya ng husto at madali po siyang maintindihan at hindi po siya mahirap gamitin sa pang-araw-araw na paggamit tapos ahmm... nakakaintindi talaga at nakapagbibigay talaga ng tamang impormasyon sa aming pag-aaral.” [My experience in using the module is pleasant because I was able to use it well. It was easy to understand, and it was convenient to use daily. The module really gave us the correct information].

It is clearly evident from the students’ testimonies that the developed instructional material is easy to understand and can be of great help for students.

Students were satisfied with the instructional package. Satisfaction is defined as fulfillment of one’s wishes, expectations, or needs, or the pleasure derived from this (Meriam-Webster dictionary, 2019). Happiness is one of the manifestations that students are satisfied with the developed instructional materials that they used. On the same thought, student reactions portray satisfactions as what student B mentioned that,

“Sa akon nga experience sa modyul nasadyahan gid ako because of the activities nga gin present kay educational gid sya since sa modyul dapat nga tun-an mo gid sya kag damu ka makwa nga mga facts kag appropriate ang mga lessons kag clear gid ang pagpresent ni maam.” [Based on my experienced, I am happy using the module because the activities presented are very educational and you really need to study it, and also you can gather many facts. In addition, the lessons in the module are appropriate and clearly presented by our teacher.]

Student C pointed out that, *“Sa paggamit ng modyul at presentasyong inilahad ng guro ay maayos naman at komportable sapagkat ang nilalaman ng modyul ay nakapagbibigay ng aming mga pangangailangan.”* [The teacher presentation and use of module were also in order and easy because the content of the module provides what we need]. Moreover, Student E, found the use of the module interesting and enjoyable. She said, *“Para sa*

akin naging interesado ako at nagustuhan kong gumamit ng modyul na ito.” [I am personally interested with this module and I want to use it]. Furthermore, Student F added, *“Sa akon nga nakita kag na learn, okay man ang paggamit namon sang modyul kay waay kami libro daan nga gamiton, tani hatagan kami sang gamiton para mahapos ang amun nga learnings.* [Based on what I saw and learned, it was okay to used the module since we don’t have a book to use. However, we hope that we will be given a copy so that it will be easy].

Thus, if students were happy with the instructional materials provided, learning will take place since these materials can be tools to facilitate student learnings.

Generally, the thoughts and experiences stated above by both teachers and students were part of the triangulation process to further validate the *very high* evaluation of the efficiency and usability of the instructional package.

IV. CONCLUSIONS

Even if the students have already taken the subject in KPWKP there are still some who have low mastery of some competencies as shown by the least mastered competencies which were more on recalling language concepts. This poor retention may be a factor in the students’ learning.

The inclusion of the teacher’s manual and slidetext seems to promote convenience in the teaching and learning of the subject KPWKP. As revealed by statistics and interview data, the combination of module and slidetext results to a more effective learning. The students have a deeper understanding of the concepts because aside from reading, they are also guided by the illustrations and graphics that further explain the concepts.

The instructional package has excellently met the standard for instructional materials and no major revision was needed as reflected in the evaluation by the teachers and the students. Thus, the developed instructional package can be used to help teachers and students in teaching and learning of KPWKP.

The instructional package has offered a big help for teachers in preparing and delivering the

lessons. It saves them time and effort preparing for their visual aids. In addition, activities in the package lessen the burden of teachers in creating their own activities for meaningful learning because the module provides suggestions and options.

On the other hand, the developed instructional package is appropriate for target learners and it may be a good material in honing their intellectual capacity and in aiding the students to achieve the competencies.

REFERENCES

1. Abueva, A.T. (2015). *Why does the philippines need the K-12 education system?* Retrieved from <https://soapboxie.com/social-issues/The-Implementation-o-the-K-12-Program-in-the-Philippine-Basic-Education-Curriculum>
2. Boholano, H. (2017). Smart Social Networking: 21st Century Teaching and Learning Skills. *Research in Pedagogy*, 7 (1), pp. 21-29.
3. Burke, M., Marlow, C., & Lento, T. (2009). Feed me: Motivating newcomer contribution in social network sites. In *Proceedings of the SIGCHI conference on human factors in computing systems* (pp. 945-954). ACM.
4. Cakir, I. (2006). The use of video as an audio-visual material in foreign language teaching classroom. *The Turkish Online Journal of Educational Technology-TOJET*, Retrieved from <http://www.tojet.net/articles/v5i4/549.pdf>
5. Dillon-Marable, E., & Valentine, T. (2006). Optimizing computer technology integration. *Adult Basic Education*, 16(2), 99-117. Retrieved from <https://www.learntechlib.org/p/98907/>.
6. Lumabit, A. M. C. (2018). *Development and evaluation of an inquiry-based learning module for general mathematics* (Unpublished doctoral dissertation).
7. West Visayas State University, Philippines.
8. Maranan, E. B. (2004) "The Effectiveness of Worktext in Physics", Master's Thesis: University of Rizal System- Antipolo, Philippines.
9. Mayer, R. (2001). *Multimedia learning*. Cambridge University Press: USA. Retrieved from <http://dx.doi.org/10.1017/CBO9781139164603>
10. McGriff, S. J. (2000). *Instructional System Design (ISD): Using the ADDIE Model*.
11. Instructional Systems, College of Education, Penn State University.
12. McTghe, J. (n.d.). What is a performance task? Retrieved from <https://www.definedstem.com/blog/what-is-a-performance-task/>
13. Merriam-Webster's Dictionary and Thesaurus. (2014).
14. Nabayra, J. N. (2019). *E-Module as a tool for flipped classroom* (Unpublished masteral thesis). West Visayas State University, Philippines.
15. Pacific Policy Research Center. (2010). *21st century skills for students and teachers*.
16. Retrieved from www.21stcenturyskills.com
17. Patriarca, J. (2013). Computer generated instructional materials (cgim) para sa komunikasyon at akademikong Filipino (Fil 101): Pagbuo at ebalwasyon. (Unpublished master's thesis). West Visayas State University, Iloilo City, Philippines.
18. Plomp, T. (2013). Educational design research: An introduction. In T. Plomp, & N.
20. Nieveen (Eds.), *Educational de*. Retrieved from www.international.slo.nl
21. Polkinghorne, D. E. (1989). Phenomenological research methods. In R. S. Valle & S.
22. Halling (Eds.), *Existential-phenomenological perspectives in psychology* (pp. 41-60). New York: Plenum.
23. Quidato, J. G. (2014). Computer generated na kagamitang pampagtuturo sa literature 101. (Unpublished master's thesis). West Visayas State University, Iloilo City, Philippines.
24. Robles, N.T. (2009). The effect of computer aided instruction on the development of student skills in drafting pattern in clothing 1 at Pasay city North High School, Pasay City, Manila (Unpublished master's Thesis). EARIST, Manila.
25. Sagge, R. & Bacio, S. (2017). Improving students' performance, habits of mind, and problem solving skills through developed and evaluated mathematics instructional

- materials (*Unpublished Faculty Research*). West Visayas State University. Philippines
26. Torre Franca, E. C. (2017). Development and Validation of Instructional Modules on Rational Expressions and Variations. *The Normal Lights*, 11(1). pp. 43-73.
 27. Ubogu, F. N. (2006). *Trends in digital library services in academic libraries in South Africa: library profiles and ETD system*. Conference proceeding of the 44th Annual National Conference and AGM of Nigerian Library Association, Abuja, Nigeria.
 28. Wambui, S. E. (2013). Effect of use of instructional materials on learner participation in science classroom in preschool in kiine zone kirinyaga county Kenya. Retrieved from [http://cees.uonbi.ac.ke/sites/default/files/cees/final project August 2013_0.pdf](http://cees.uonbi.ac.ke/sites/default/files/cees/final%20project%20August%202013_0.pdf)