

Development and Validation of Instructional Modules in Enhancing the Study and Thinking Skills of Learners

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Abstract

This study which utilized the research and development design aimed to develop instructional module in enhancing the study and thinking skills of learners and to validate their functionality, relevance, and acceptability. It was conducted in December, 2019 in the Schools Division of Iloilo. The respondents of this study are the 177 senior high school and hybrid English teachers, 30 teacher-validators and 5 experts. The data were gathered using the researcher-made needs analysis survey, and the evaluation tools for functionality and relevance and an adopted instrument for the acceptability. The development of learning modules underwent four phases: (1) document and needs analysis; (2) the development of modules; (3) the evaluation by teacher-validators and expert-evaluators; and (4) finalization and reproduction of modules in their final form. Results show that the teacher-validators perceive the instructional module as highly functional and highly relevant while the experts evaluated the instruments as excellent in all areas of the modules such as the objectives, instruction, learning activities, physical aspects and evaluation measures.

Keywords: Instructional Module, Study and Thinking Skills, Validation, Development

Introduction

Quality education is a constitutional mandate as provided for in Article XIV, Section 2 of the 1987 Philippine Constitution which states that *“it is the right of every citizen to receive a quality education at all levels, and make education accessible to all.”*

In response to this, the Philippines embarked on reforming the educational landscape through the K to 12 Basic Education Act of 2013 as per Republic Act 10533. Its primary goal is the development of a Filipino learner equipped with 21st-century skills: learning and motivation skills, information, media and technology skills, life and career skills, and effective communication skills.

Effective communication using correct English both in oral and written forms is not just an academic requirement but most importantly a global demand (Rudby & Saraceni, 2011 as cited in Duenas, 2017). With this, English teaching and learning should grow inevitably.

However, the sad reality constantly haunts the English teachers - the alarming status of the English competence of learners. The National Education and Testing Center (NETRC) conducts the annual National Achievement Test (NAT) to measure the achievement levels of students from elementary to secondary levels in the 5 learning areas of English, Math, Science,

Filipino and Araling Panlipunan. The results of the test showed a below standard mean percentage of 75% performance of students. Based on the National Education Testing and Research Center (NETRC), "NAT Overview and 2012 Test Results," for secondary level, the MPS of 4th-year learners is 46.80% in 2005; 44.33 in 2006 and 48.90 in 2012. The MPS for the secondary level is still too far from the target of 75%.

This poor achievement level of performance of the students in English would narrow down to a more specific problem on poor study and thinking skills of many learners and the lack of instructional materials and other intervention materials to address specific reading, grammar, writing and study and thinking skills problems of the learners especially for Senior High School.

According to Duenas (2017), the problem of insufficiency of instructional materials may not be only attributed to the Department of Education, itself, for non-provision of sufficient instructional materials for utilization of both teachers and students, but, as well, to the incapacity of the teachers, themselves, to develop their own teaching materials which are suited to the needs, interests, and context of their learners.

During the implementation of the K to 12 programs, the researcher taught English for Academic and Professional Purposes (EAPP), Reading and Writing, and Practical Research I and II. It was a constant struggle to cover all competencies since all of these

demand higher levels of comprehension, and writing skills with well-founded study and thinking skills. The content standards and the performance standards were so difficult to accomplish because of the poor reading comprehension skills of learners.

These observations were supported by the many Senior High School teachers teaching during the annual conference of English school heads and teachers. They too had difficulty completing all performance tasks in critical reading and technical writing because they have to go back to the basics of library skills, word attack skills, reading skills, and study skills. The majority of them conducted remedial classes on these foundation skills in order to finish the competencies.

Because of these reasons, the researcher is so motivated to address the gap in English instruction and the concerns of teachers by developing an instructional module as intervention material in developing the study and thinking skills of the incoming Senior High School learners.

Research Questions

This study aimed to develop and validate instructional modules as intervention materials in enhancing the study and thinking skills of incoming Senior High School learners. Specifically, it answered the following questions.

1. What specific study and thinking skills perceived by SHS English teachers need to be incorporated in the instructional module?
2. What are the gaps and concerns captured in the document analysis of the curriculum guide and learner's package related to the study and thinking skills of learners?
3. What is the level of functionality and relevance of developed instructional modules as validated by the English teachers?
4. What is the acceptability level of the developed instructional modules as evaluated by experts in terms of their physical aspects, objectives, instruction, learning activities, and evaluative measures after they were revised and refined?

Literature Review

Literacy Among Learners

Educators are dealt the task of figuring out how to

ensure that every student gets beyond the basic, elementary literacy levels and is able to move to more challenging literacy at the middle and high school levels. This is not an easy task since secondary school literacy skills are more complex, especially in specific subject matter. As text complexity increases, intrinsic motivation of adolescents who are struggling readers begins to decrease without interventions and support. Therefore, it is imperative for secondary schools to implement effective, English programs to assist students in overcoming obstacles in their way of achieving success in literacy.

Literacy in the content areas such as science, history and math, requires that the students are able to read and comprehend expository texts. This is primarily done by developing the study and thinking skills of students as foundation for developing higher demands in the English instruction. Not only do students need necessary study and thinking skills to profit from reading and understanding content related materials, but also the students need to know how they are going to actually read the text in order to complete an assignment.

When looking at what it takes to be a good reader and to have the skills necessary in order to succeed more in academics, it is important that "every teacher is a teacher of reading" by emphasizing the study and the thinking skills of the learners. It implies that all teachers need to be able to support readers as thinkers and therefore should be aware of reading strategies to help them think within the content area (Azevedo, 2009). All teachers should be familiar with the reading process and the number of stages a reader passes through in order to become what research call as literate. The content area teachers need to also focus on the different types of skills needed for expository and narrative texts and then apply teaching strategies that promote competent readers. Reading literacy has become a global challenge and an emerging educational issues nowadays.

Globalization of the English Language

Globalization in Asia has led to the emergence of new industries like call centers in the Philippines and India, which are now believed to be experiencing a hypergrowth (Magkilat, 2014 in Anthony, 2015). With these, Anthony (2015) posited that within a more globalized world, English skills are no longer simply an advantage for a worker, but a requirement for success. It was even reported that in some companies, any executive who could not speak English would be fired (Ham, 2011 in Anthony 2015). Companies are

also requiring higher standards of English from new recruits (DODA, 2012 in Anthony, 2015), and making English proficiency skill levels one of the criteria for promotion (Koike, Takada, Matsui, & Terauchi, 2010 in Anthony, 2015). These changes in the policy have given rise to the use of English for Occupational Purposes (EOP) and English for Vocational Purposes (EVP). Meanwhile, in academia (academe), it was noticed that more and more Asian students need English to complete their tertiary education. They are not in U.S., UK, and Canada, but in Asian countries. This phenomenon of preference for localized education in Asia maybe referred to as “glocal” education (ICEF, 2013 in Anthony, 2015).

Globalization in academia has also a strong impact on research, particularly in science and engineering. Researches with various specialties, located in different countries, and with different native languages are becoming new endeavors. These changes made by globalization in academia make English a necessity for achieving success in it. Universities, in order to attract international students need to create educational programs that can be completed only in English, and with this not only the faculty need to be proficient in the language, but the administrative staff as well, in order to interact with international students in English to assist them with their registration, housing, finances, and other day-to-day issues. Green, Fanqing, Cochrane, Dyson, & Paun, (2012) in Anthony (2015) also forwarded that local students also increasingly need English to complete their studies and find an interesting job in a local or international company, since, these companies are requiring higher English standards from new recruits. Hence, schools respond by requiring higher English standards as a criterion for graduation. These phenomena of the indispensability of English for success in the academe gave rise to the need to improve the English proficiency of learners.

The present English speakers need to meet the ever-growing demands of communication competence-effective communication, characterized by skills and understandings that enable communicators to exchange messages successfully (Seiler & Beall, 2011).

The Status of the English Proficiency in the Philippines

The K to 12 Education Program is the flagship program of the Department of Education and it has two rationales. First, enhancing the quality of basic education program in the Philippines is urgent and critical. Second, the poor quality of basic education is

reflected in the low achievement scores of Filipino students. The Enhanced K to 12 Basic Education Program seeks to provide for a quality 12- year basic education program that each Filipino is entitled to. This is consistent with Article XIV, Section 2 of the 1987 Philippine Constitution which states that: “The state shall establish, maintain and support a complete, adequate, and integrated system of education relevant to the need of people and society.”

In line with this, the focus now of the Department of Education in the Philippines is to produce competent graduates who can follow the current trends of globalization and modernization of the 21st century. Educators believe that part and parcel of this objective is to equip the Filipino students with quality education to the highest possible level (Dar & Go, 2016).

In the primer on the K to 12 Basic Education Program, published by the Department of Education in 2012, an urgent and compelling concern for those who have stakes in the Philippine education was forwarded as the rationale for the immediacy of its implementation.

Looking into the student achievement in the International and local arena, the TIMSS results showed that the Philippines ranked at the bottom level both in Science and Mathematics. In 2003, the performance in mathematics showed that among the 38 participating countries, the Philippines ranked 34th and 43rd out of 46 countries in Science; for grade 4, the Philippines ranked 23rd out of 25 participating countries in both math and science. The constant decline of the achievement levels of the students is directly attributed the poor study and thinking skills of the learners which took its toll from the poor quality of English language instruction and reading program in schools.

The test performance of the students particularly in the English area of the National Achievement Test (NAT) is the emerging challenge being faced by the K to 12 Education Curriculum. The need to assess the basic education skills and competencies of the learners particularly in the English language must be widened and intensified in its scope in a number of ways. As such, in order to broaden its view of language ability, the curriculum must come to recognize the variety and complexity of factors other than language ability that affect the test performance of the learners (Dar & Go, 2016).

Language proficiency is a key to academic performance. A person who does not know English, for instance, may not have access to the world’s known scientific and technological discoveries that are

predominantly written in English (Fakeye & Ogunsiji, (2009). This means that students need to be proficient in English for a better grasp of knowledge in Technology, Science, and Mathematics. As Aina, Ogundele & Olanipekun, (2013) claim, language proficiency in English is significantly related to academic performance. Academic subjects like Science, Mathematics and English often requires the use of language functions. The language functions play a significant role in critical and analytical thinking required in science and mathematics subjects. The more language functions with which students are adept, the more effective their thinking can be. Thus, the more the students are proficient with the English language, the more they are likely to perform well in their academic subject.

In the article written by Varella (2003), she noted that there is a continuing deterioration in the Filipinos' ability to speak, read, and write in English and this is further supported by the American Chamber of Commerce (2003) as cited in Celis (2006). English Proficiency has been declining as manifested in the poor comprehension skills of learners, below satisfactory competence in English grammar and the poor writing skills of the Filipino learners.

The report of the Department of Education through the National Statistical Coordination Board (NSCB) posted on May 08, 2007 stated that the mastery level of the senior students the National Achievement Test (NAT) results reflected a declining academic performance of the students in the country. According to the report, the National Achievement Test (NAT) results for 2005- 2010 showed that many students who finished basic education do not have the mastery of basic competencies required of a high school graduate. This fact was further explained by a paper on K to 12 Curriculum presented by Crisol (2014) of Mindanao State University and Alamillo (2014) as cited in Duenas (2017) of Iligan Institute of Technology in the De La Salle University's Research Congress 2014 in DLSU, Manila. They quoted DepEd Undersecretary Alberto Muyot, who reported that the average scores of both pupils and students in the National Achievement Tests are really "scary." The scores of elementary school pupils were at a failing 64 percent. In high school, the number slid with the national average at 46 percent. This alarming result is also manifested in the status of the language proficiency of Filipino learners.

Dar & Go (2016) conducted a research study on the National Achievement Test performance in English of selected public secondary schools in Manila. The

descriptive correlational research analyzed the language test results of the students in the NAT and correlated it with their final grades in English subject. The findings revealed that the population of students per class is big in size. Majority of fourth year students showed a moderately satisfactory performance in the English area of NAT as they fell only on the average performance. The obtained Pearson r values of .853 for the overall NAT, English area and 0.120 for the overall mean grade in their English subject manifested a very high positive relationship.

Lasaten and Racca (2016) confirmed the result of Dar & Go (2016) that there is a significant relationship between the students' English language proficiency and their academic performance.

In the Global perspectives, Tan (2017) citing preliminary results of a two-year study indicated the English proficiency level of College graduates in the Philippines is lower than the proficiency target for high school students in Thailand and the competency requirements for taxi driver in Dubai. The average proficiency score of a Filipino college graduate was 631.4, based on the metrics of the Test of English for International Communication." Cab driver in Dubai, the largest city in United Arab Emirates are expected to have a TOEIC proficiency score of 650 while business process outsourcing agents should have a score of 850, Tan said noting the alarming state of English proficiency of Filipino College graduates. This was despite the restructuring of the Philippines' basic educational system through K to 12 program intended to produce competent graduates.

In the article written by Mizon (2018), she pointed out that English standards in the Philippines are slipping. In the same article, she presented the results of a major international testing system which showed Malaysia have taken the top spot in English proficiency among the South- East Asian countries. The result were compiled last year by IPD Education, an Australian Company offering English language testing in 80 countries for students professionals and other wanting to migrate, seeking to work or pursue higher education to English speaking countries. According to Andrew King, IPD Educations country director for the Philippines, the overall average score was disappointing because many Filipinos IELTS takers were supposedly "educated".

According to the study conducted in 2006 by the European Chamber of Commerce as cited in Mizon (2018), 75% of the Philippines annual 400,000 College graduates have "sub-standards" English skills.

Furthermore, the study of Javier (2001) concludes that the students' weaknesses in Science and Mathematics subjects are attributed to the students' difficulty in English. As stated in his findings, the students' difficulty in English included difficulties in making inferences and interpretations of information, deducing meaning, drawing conclusions, and summarizing ideas. All these boil down to problem on comprehension, leading the students not to understand what they are reading. They are not developing proficiency in the language. They have difficulty in expressing their ideas in spoken and written form. Obviously, the skills in English are pre-requisites in learning concepts in Science and Mathematics.

Gemora (2006) conducted a descriptive research study on the English grammar proficiency of college freshmen of west Visayas State University external campuses. He found out that college freshmen had a "low" English grammar efficiency in terms of academic achievement, sex and exposure to English language reading materials. Furthermore, these variables: sex, academic achievement and exposure to English language reading materials are significant predictors of the general English grammar proficiency.

This study is consistent with the results of the study of Lopez (2004) on the influence of English proficiency and attitude towards English on the academic performance of college students. She found out that the first year college students of Western Institute of Technology (WIT) had a "poor" academic achievement due to the "poor" English background they received in elementary and secondary. Students seemed not to have gained sufficient English competence that greatly impacts their academic performance in college.

In support to this, Descarfal-Sina-on (2006) found out that the English Entrance Examination Performance of college students is "poor" and students had "severe" English language needs.

Leonoras (2003) studied the relationship between teachers' English language competence and pupils' academic performance in English. She found out that teachers have "satisfactory" level of teaching competence in teaching English and students also have "satisfactory" academic performance in English. Hence, she noted a significant relationship between teachers' teaching competence in English and the pupils' academic performance in English.

Meanwhile, Gullas (2006) highlights in his article that poor English proficiency and English reading comprehension skills are major factors that are

severely handicapping Filipino learners in Science and Mathematics. He attributed the deficient English of graduates to their failed mastery of the language arts skills in elementary and high school. Bondoc (2005) attributed the poor mastery to the quality of teaching of teachers where he noted that 19 out of 100 public school teachers have confidence and competence to teach English.

Teaching English in the K to 12 Curriculum

According to the Department of Education, a 21st-century Filipino learner should develop effective communication skills, among other skills which he needs to equip himself with. It simply means that the curriculum recognizes the role of effective communication in producing Filipino graduates who are globally effective communicators who can communicate meaningfully and effectively in order to be competitive and successful in the 21st century. These effective communication skills involve: teaming, collaboration, and interpersonal skills; personal, social, and civic responsibility skills, and interactive communication skills. With this, the Department of Education instituted the K to 12 Language Arts and Multiliteracies Curriculum which is grounded on the philosophy that proficiency in the language enables people to access, process and keep abreast of information, to engage with the wider and more diverse communities, and to learn about the role of language in their own lives, and in their own and other cultures. Anchored on the principles of language acquisition, learning, teaching, and assessment, one of its basic features is contextualization. It posits the idea that learners learn language authentically and meaningfully when learning tasks and activities are designed relevant to their own contexts or situations. Hence, lessons are planned around learning outcomes, a theme, or a type of text to help learners use related language skills, grammatical items/structures and vocabulary appropriately in spoken and written language to suit their purpose, audience, context and culture. This principle is also related with the principles of interaction and integration. The former adopts the belief that when language learning is situated in real-life situations of varying demands, students learn how to interact with others, thereby improving their socialization skills. The latter believes that when the areas of language learning- receptive skills, productive skills, and grammar and vocabulary are taught in an integrated way, together with the use of print and non-print resources, they lead to multiple perspectives and meaningful connections among learners.

Contextualization may be seen in the implementation of the mother tongue based multilingual education (MTB-MLE) policy in 2009 implemented through Executive Order 209 issued by the Department of Education which mandated the use of the learner's mother tongue (native language) in the teaching of specific subjects from Grades 1 to 3. Through this innovation, it is hoped that Filipino learners will find education to be more relevant with the use of the local vernacular with which they are most comfortable, making them multi-literate, multi-lingual, and multi-cultural in meeting the demands of both local and global markets. Contextualization is seen on the part that learners learn the language of their community in learning specific lessons and that their proficiency in their first language could lead to their proficiency in learning the second language which is English.

Another feature of language learning in the K to 12 Curriculum is the concept of spiral progression. In the context of language learning, it means that skills, grammatical items, structures, and various types of texts are taught, revised, and revisited at increasing levels of difficulty and sophistication. This strategy is believed to enable the students to progress from the foundational level to higher levels of language use. Furthermore, spiral progression can be related to the principle of language acquisition which forwards the idea that learners learn when they use what they know to understand what is new. Hence, teachers should start with what the students know and use it to introduce new concepts. Learners should be taught how to use language to examine new experiences and knowledge in relation to their prior knowledge, experiences, and beliefs.

Communicative competence is a synthesis of knowledge of basic grammatical principles, knowledge of how language is used in social settings to perform communicative functions, and knowledge of how utterances and communicative functions can be combined according to the principles of discourse. It can be classified into (1) grammatical/linguistic competence, which deals with the acquisition of phonological rules, morphological words, syntactic rules, semantic rules, and lexical items; (2) sociolinguistic competence, which refers to the learning of the pragmatic aspect of various speech acts, namely, the cultural values, norms, and other socio-cultural conventions in social contexts; (3) discourse competence, which deals with the knowledge of rules regarding the cohesion (grammatical links) and coherence (appropriate combination of communicative actions) of various

types of discourse (oral and written); and (4) strategic competence, which has something to do with the knowledge of verbal and non-verbal strategies to compensate for breakdown such as self-correction and at the same time to enhance the effectiveness of communication such as recognizing discourse structure, activating background knowledge, contextual guessing, and tolerating ambiguity. Being the foremost goal of the language curriculum in developing effective 21st century communicators in English, communicative competence is developed in every grade level where the learner engages himself/herself in. Hence, each language subject from Kindergarten to Grade 12 has formed expectancies in the form of content and performance standards that are specified in the curriculum of each learning area. Content standards are what the students should know (facts and information), what they do (process or skills), and what understanding they construct as they process the information.

On the other hand, performance standards are what students do or how they use their learning and understanding. The students are expected to produce products and/or performances to prove that they can apply what they learn in real-life situations. These said performance standards can be measured by assessment. The language curriculum is anchored on the principle of holistic assessment which means that there is an ongoing gathering of information on different facets of a child from various sources, with the aim of providing qualitative and quantitative feedback to support and guide the child's development. The holistic assessment also informs our teachers of their teaching practices and guides them in the design and delivery of student learning. It also enables parents to support their children's development and growth.

The following is a figure showing how communicative competence is developed through performance standards at certain grade levels in basic education of the K to 12 Curriculum. It should be read upwards to show how the competence should evolve beginning in Grade three. Grade 12- Students should be able to integrate communication and language skills for creating meaning using oral and written texts, various genres, and discourse contexts for personal and professional purposes.

Grade 10 students should be able to interpret, evaluate and represent information within and between learning area texts and discourses.

Grade 6 pupils should be able to construct meanings

and communicate them using creative, appropriate, and grammatically correct oral and written language.

Grade 3 pupils should be able to demonstrate an eagerness to explore and experience oral and written texts and to communicate meanings and feelings effectively from various sources, with the aim of providing qualitative and quantitative feedback to support and guide the child's development. Holistic assessment also informs our teachers of their teaching practices and guides them in the design and delivery of student learning. It also enables parents to support their children's development and growth.

The following show how communicative competence is developed through performance standards at certain grade levels in basic education K to 12 Curriculum. It should be read upwards to show how the competence should evolve beginning Grade three.

In order to develop English language proficiency among the Filipino learners, the government made sure that English instruction should be given primary concern among the programs implemented in the educational system of the country. From the time of Revised Secondary Education Program (RSEP), to the Secondary Education Program (SEDP), to the Revised Basic Education Program (RBEC), English was given emphasis making it the sole language of communication in schools except during the time of the implementation of Bilingual Education Policy in 1974 when Pilipino (Filipino) became a co- equal to English in schools (Vizconde, 2006). Teaching English post a big challenge in term of the English teachers' competence. On the teachers' proficiency in English, Madrunio reported the results of the TEPT (Test of English Proficiency for Teachers) conducted by the NETRC (National Education Testing and Research Center) of the DepEd in 2012 showed that the teachers who took the test were found out to have low proficiency in both structure and written expression and moderate in reading comprehension yielding an over- all result of low for the total test. In other areas, results showed that in process skills of observing, measuring/quantifying, interpreting data, and making models, the teachers scored moderately, and in skills such as: classifying, predicting, communicating, analyzing data, evaluating, experimenting, making conclusions and defining operationally, teachers' scores were low. In the skill of inferring, the scores of the teachers were even pegged to be very low. Thus the process skills were given a mean performance score of 46.00 percent with a descriptive equivalent of low.

In the case of the students' proficiency in the English language, tests like the NAT (National Achievement Test) for Grade 3 pupils showed that their performance retrogressed when compared with the results of the previous years. However, in high school, 4th year students who took the test in 2012 showed that their performance improved when compared to their results in the years 2005 and 2006, but in the TIMSS (Trends in Math and Science Survey) test, in which English was the language used, the Philippines rated poorly. The study conducted by Basilan (2018) revealed that the outstanding experiences in the teaching-learning process: time consuming accumulation of the materials, inadequacy of the available materials and unavailability and incongruence of instructional materials toward the DepEd curriculum guides.

In the World Data on Education, 6th Edition, UNESCO reported that among the current and pressing priorities and concerns of Philippine education are unqualified and poorly trained teachers, inadequate facilities and equipment, and lack of instructional materials (textbooks and teachers' manuals).

Instructional Materials Development

Instructional materials are, according to Olumorin, Yusuf, Ajidagba, & Jekayinfa (2010) those materials that facilitate the teachers to teach with ease and the learners to learn without stress. Instructional materials appeal to the sensations of seeing, touching, sensing, touch, and hearing.

According to Olayinka, (2016), the importance of instructional materials in the development of learners' intellectual abilities and attainment of teaching/learning objectives cannot be overemphasized. The students taught with instructional materials have excellent achievement scores compared with those taught without any material. It was also noted in the study that there is no significant interaction effect of treatment and gender on students' achievement in Social Studies. While, according to Aina, (2013) instructional materials are very important because what students hear can easily be forgotten but what they see cannot be easily forgotten and last longer in their memory.

Instructional materials are essential tools in developing English communication skills of learners. These allow the learners to interact with words, images and ideas in ways that develop their reading ability, study skills, listening, viewing, thinking, speaking and writing skills (NCTE, 2002) as cited in Celis (2006).

Moreover, Celis (2006) pointed out that instructional modules can prove to be the best alternative for lack of textbooks and other instructional materials.

Instructional material is a pre-eminent factor toward academic performance. It is remarkable for the teacher to develop instructional material to guide the student in their academic performance. With the presence of this instructional material, the learning process can be fun because of the healthy exchange of information from the student and teacher (Cinco, Caluza, Gotardo, Quisumbing & Verrecio, 2017).

For effective teaching and learning to take place, Abdu-Raheem (2011) suggested that improvisation of local and simple instructional materials by the teachers has become necessary for the uplift of academic standard. Eniayewu (2005) also agreed that it is very significant to use instructional materials during teaching and learning to make students gain more knowledge and to promote the academic standard. Hence, Oluwagbohunmi (2008) asserted that students enjoy learning through the use of instructional materials and the best direction to assist them to learn is to relate them to real life situation.

Teaching with relevant instructional materials is an exceptional one, going into any class without these materials is a problem on its own. In the teaching of computer science, instructional materials perform such functions as an addition to the series of experiences available to learners, an add-on to the teacher's voice explanations thereby making learning experience better off and providing the teacher with interest into an extensive variety of learning activities (Bawa, 2016). The importance of instructional materials in the development of learners' intellectual abilities and attainment of teaching/learning objectives cannot be over-emphasized. The students taught with instructional materials have excellent achievement scores compared with those taught without any material (Olayinka, 2016).

According to Salandanan (2009), self-instructional materials are those which are described to be self-contained and the manner of presentation is such that the learning activities can be undertaken individually or in small groups. These materials are most effectively used in individualized instruction programs. The self-instructional module helps in providing remedial instruction for slow learners and enrichment materials for fast learners. Topics can best be presented through these self-instructional materials. With the use of one, the student is allowed ample time and assistance to finish the prescribed learning activity

at his own pace. The lesson will surely be enjoyed and the experience gained will be satisfying.

An approach to self-directed learning requires the utilization of instructional materials that are designed to help the students to learn by themselves. These self-instructional materials, which could be in module form, consisted of self-contained, independent unit of instruction prepared for the purpose of attaining defined instructional objectives (Macarandang, 2009). Two distinctive features of self-instructional modules are the following: promotes self-paced learning and its availability at any time and at any place. As a self-paced learning material, it allows a learner to work at his/her own pace rather than the pace of the group, which can be too fast or too slow. The availability of the self-instructional material likewise allows students to learn when they wish rather than according to an external timetable.

Paderes (2012) conducted a study to develop and evaluate instructional materials aligned to discovery approach and to determine the level of appropriateness, acceptability, and usability of the developed instructional materials for science teaching. The study used the Students and Teacher Collaborative Instructional Materials Development Model (STCIMD) to develop and evaluate instructional materials exclusively for Physics, Chemistry, and Biology. Students from Fourth Year, Third Year, and Second Year of ASIST Laboratory High School and subject teachers served as the evaluators of the prepared instructional materials. Majority of the instructional materials developed were evaluated by the teachers as Strongly Appropriate (SA), Acceptable (A), and Usable (U). The students evaluated the instructional materials as Appropriate (A), Acceptable (A), and Usable (U). Results showed that the instructional materials captured their interest and curiosity in discovering the scientific principle behind the activity. Accordingly, these instructional materials that were aligned to discovery approach were proven valuable in achieving meaningful learning.

Salvacion (2000) found out that experimental group exposed to the instructional material in teaching Fundamentals of Math performed better than the control group. The modules were acceptable as textbook in the subject.

Receno (2001) developed and evaluated instructional materials for the enhancement of listening skills among freshman students of St. Michael College of Laguna. Among others, she concluded that freshman students need instructional materials that will help

them realize and make use of their internal language resources to be able to attend to and appreciate listening.

Meanwhile, Aquino-Danganan (2001) proposed instructional modules in developing computational skills in College Algebra. She mentioned that the proposed instructional modules had titles, instruction to the learners, rationale, objectives, pretest with answer keys, worksheet assignment, progress check with answer key and post-test with answer key. The format and language of each were properly organized, clear and simple. The objectives of each module were specific and were based on the course syllabus. The topics were properly developed and explained and the activities and exercises facilitated student learning in College Algebra.

Aggabao (2002) made a study aimed at developing individualized self-instructional modules on selected topics in Basic Mathematics for instructional use at the Teachers College in Isabela State University. After making use of the experimental method, he concluded that instructional materials used at the college for Basic Mathematics are inadequate and are not designed for self-instruction; that instruction through self-instructional materials is as effective as the prevailing teaching method of instruction; and students as well as teachers generally have a positive attitude toward the use of individualized, self-instructional materials as a mode of instruction in Basic Mathematics. The study of Madriaga (2004), "Effects of Modular Instruction in Teaching Physics" revealed that the use of modules give the teacher more time to deal with the students on one-on-one basis. She found out that the performance was better on the experimental group exposed to modular instruction.

Lacdao (2004) in his thesis "A Comparative Study of the Effects of Modular Instruction and Lecture Discussion Method on the Achievement of Grade VI Pupils in Mathematics" mentioned that the experimental group in his study who were taught using the instructional modules, performed better than the control group who were taught using the traditional method of teaching.

In addition the study of Rizaldo (2007) "Comparative Effects of Modular and Traditional Methods in Teaching Analytic Geometry", concluded that students performed better and mastered the subject matter using the modular method of teaching. Lim (2016) conducted a study to test the effectiveness of modular instruction in the word problem-solving skills of BEED students. The study used a Quasi-experimental

Design to determine the effects of modular instruction to third year BEED students of Eastern Samar State University (ESSU) who were exposed to lecture method and modular instruction in teaching word problem solving. The experimental group who were taught by modular instruction performed significantly better than the control group who were taught using the traditional lecture method. Based on this, he concluded that modular instruction in teaching Math specifically word problem solving, is an effective teaching approach.

A module is a self-contained, independent unit of planned series of learning activities designed to help students accomplish certain well-defined objectives. Modules emphasized analysis and application of concepts and techniques and concrete style on concepts. It also provides active participation of students in responding to learning materials to meet areas of individual interest and helps the teacher extend more individualized instruction in school and at home (Guido, 2014).

Amonceda (2001) as cited in Celiz (2006), pointed out the advantages of modular instruction. It allows the students to work at their own pace, as they assume responsibility for learning. They would also find out that textbooks are not the only source learning. They know exactly what they have learned. They are encouraged to master the module and the competition for grades is reduced. On the other hand, teachers would have more time to pay attention to individual learning problem and to fulfill their roles as facilitators and guide rather than disseminators of information. Modular instruction also fosters better cooperation between teacher and students.

Modular instruction is an attempt to individualize learning by allowing a student to achieve mastery of one unit of content before moving on to another. Module, as a self-instructional material, can be used as a supplementary material to help the student improve his/her mastery and as means to help the student catch up with the missed lessons (Torrefranca, 2017).

Studies on instructional modules in the Philippines on the English language give sufficient evidence of its significant advantages and improvements on the learners.

Using a teaching module to teach the English language as compared to the traditional method of using a textbook is meant to increase active learning and improve critical thinking, as well as problem solving skills. It also gives the lecturer the opportunity for conducting formative assessment in the classroom.

Standardized textbooks have their own styles, and their contents, depth of coverage of materials, and organization, may affect the teaching and learning environment. Thus, the use of a module presents a more flexible learning environment for both instructors and learners (Bakar & Cheng, 2002).

The limited learning materials found in the library, would lead to the difficulty of the students to participate and understand the lesson and therefore it can affect the academic performance of the students (Cinco et al., 2017).

The study of Cabanias (2005) affirmed that modular instruction is effective in raising performance in the Philippine literature than the tradition methods of teaching the subject.

Torre Franca (2017) developed instructional modules on rational and expressions and variation. He subjected the developed modules to the validation process. Findings revealed that all the evaluators strongly agreed that the instructional modules satisfied the criteria for evaluating the modules. Meanwhile, the significant change in the pretest and posttest scores of student-participants before and after they were exposed to the modules signify that the modules brought out improvement in their knowledge of Rational Expressions and Variations.

Likewise, Fox (2010) developed a self-paced program of instruction that has proven to be a useful technique for presenting background on letters and sounds of phonics, onsets-rhymes, syllables and word structure to future and practicing teachers. The program can be used to teach word recognition skills among third, fourth and fifth graders.

Padmapriya (2015), in his study on the effectiveness of self-learning modules on the achievement in Biology among secondary school students revealed that students treated with a modular approach achieved higher mean scores than those students taught through activity oriented method. The study reveals the effectiveness of self-instructional module on achievement among secondary school students and the administrators must take necessary steps to give special training to teachers in developing modular packages. Modules help develop self learning capacity among the learners.

Naval (2014) pointed out that instructional materials such as modules, handbooks and worksheets are essential in providing quality instruction. As such, the Department of Education (DepEd) issued a memo that recommends to enhance the competencies needed to

improve the performance of all students across the country. One recommendation states that “provide supplementary materials (modular form) to enhance the competencies of those in schools with more than one shifts as an enabling mechanism to extend time” (NAT overview, 2012, p 28).

Almario (2002) in her study as cited in Naval (2014) concluded that the students who used her developed materials obtained higher scores in the posttest than in the pretest. The manual she developed in Elementary Mathematics V proved to be an effective tool in teaching Mathematics. Her study also stressed the importance of the content organization of topics, mechanics and language used appropriateness of presentation, illustrations and pedagogical approaches in the development of instructional materials.

The study conducted by Bakar & Cheng (2002) aimed at analyzing lecturers’ views and perceptions on the impact of using modules in the teaching and learning of English in Malaysian Polytechnics. The study was conducted on 9 polytechnics situated in the Eastern zone, the Southern zone and East Malaysia. The subjects of the study were language lecturers who were teaching the English course in these polytechnics. There were altogether 113 respondents in the study. Based on the findings, more than 75% of the lecturers agree that the module is useful as a resource book for both students and lecturers and very helpful in providing guidance and support for new and inexperienced lecturers.

On the purpose of the modules to allow the learners to learn even without the presence of the teacher, Celis (2006) in her study on the development and use of instructional modules on selected topics in study and thinking skills in English for first year students of the West Visayas State University- Janiway Campus for the school, the year 2005- 2006, posited that modules, when adequately constructed, may serve as alternative teaching tools for students and can be a good substitute for a face-to-face teaching method, hence reducing teachers’ burden of doing lectures and another face-to-face class. Furthermore, she found out positive results in her students’ performances after using the modules. The study further revealed that significant improvement in the use of instructional modules indicated a significant improvement in teaching English 102. She also found out all indications that instructional modules promised great potential and were effective as an alternative teaching strategy.

Methodology

Research Design

The main purpose of this study was to develop instructional modules as intervention materials to enhance the study and thinking skills of learners. It shall further determined the acceptability, functionality and relevance of the instructional modules.

This research investigation employed mixed method of research. Qualitative method through document analysis was used to gather inputs in developing the instructional modules while descriptive-survey research design was used for quantitative method for the need analysis survey and the validation of instructional module in terms of functionality, relevance and acceptability. This research design attempts to explain the existing situation under study (Cabag, 2008). This descriptive study falls under the research and development (R & D) type as it does not only aim at describing the functionality, relevance and acceptability level of the instructional materials but also attempts to develop instructional materials based on data-gathering measures.

The functionality, relevance, and acceptability of the learning modules were based on the jurors' (teachers) and experts' assessment using the modified researcher-made evaluation tool for relevance and functionality and for acceptability level adopted from Dequilla (1999). Composite weighted mean (M) was the statistical tool utilized for determining the functionality, relevance, and acceptability level of the modules.

Locale of the Study

This research investigation was conducted in the selected public secondary schools in the Schools Division of Iloilo offering Senior High School program specifically Oton National High School, Pavia National High School, Mina National High School, and Iloilo National High School.

Respondents/Subjects of the Study

The participants of this study were the 177 out of 320 randomly selected Senior High School teachers under the subject group HUMSS 1-A and the hybrid teachers in the Schools Division of Iloilo. They were selected using the Slovin formula. These teachers answered the needs analysis survey.

Simple random sampling was used to determine the

sample participants for this study.

To assess the the relevance and functionality of the developed instructional module, 30 randomly chosen English teachers in the Senior High School coming from different schools: Oton National High School, Pavia National High School, Mina National High School and Iloilo National High School were investigated.

To evaluate the acceptability of the developed instructional modules, 5 experts were tapped: a Professor of English from West Visayas Sate University Pototan Campus, a Doctor of Philosophy in English Studies from Antique State University, the English Education Program Supervisor, the Senior High School Coordinator of the Schools Division of Iloilo and the Outstanding Remedial Reading Teacher and Metrobank's Most Outstanding Teacher. They were all PhD and EdD holders in English, Curriculum Development, and Educational Management.

Data Gathering Instrument

The researcher-made need analysis survey checklist was used in gathering data needed for this study. The instrument is made up of 20 item study and thinking skills topics. These were checked by the Senior High School teachers in terms of the degree of need to be included in the instructional module.

Prior to the use of the instrument in gathering data, it was subjected to face validation by the panel composed of 4 members to determine the appropriateness of each item in measuring the given construct. Suggestions and recommendations given by the validators were included in the modification of the final instrument. After the validation, it was pilot tested among 30 English teachers in the Division of Iloilo to establish its reliability coefficient by determining its Cronbach Alpha level. According to McDaniel (1994), an instrument with a correlation coefficient index of .70 and above is considered reliable.

Meanwhile, The functionality and relevance of the modules was measured through a researcher's jury-validated evaluation tool which is in a form of survey questionnaires for teacher- evaluators. The instrument's reliability was be ensured using Cronbach's alpha.

Data-gathering Procedures

Written permission to conduct the study was secured from the Division Superintendent of the Iloilo

Division. When the request was approved, the different secondary school principals and English teachers in the Division of Iloilo were met and be given letters with the attached approved request from the Division Superintendent. During the meeting with the principals and teachers the purpose and the procedure in the conduct of the study were explained to them by the researcher. The need analysis survey was conducted as soon as the schedule was approved by the school head.

The desired sample size was computed using the Slovin formula. The participants were identified through lottery method drawing from the pool of rolled numbers that correspond to the school listing. The researcher personally gave the instruments to the randomly selected school teachers for each school category. The instruments were retrieved, encoded and processed using the Statistical Package for Social Sciences (SPSS).

After the conduct of the survey checklist, the mean scores were analyzed and the rank was determined. The results served as the basis for the development of the instructional modules. To further strengthen the results, document analysis was undertaken to find out what specific content and competencies are suited to be included in the development of the module to enhance the study and thinking skills of the learners. This ends the Phase 1 of this research study.

The second phase is the development of instructional modules. Then Phase 3 is further divided into the validation process by the English teachers in terms of functionality and relevance and the evaluation of modules' acceptability by experts. The last phase is the revision, refinement and finalization of the module.

Results and Discussion

Needs Analysis of the Different Study and Thinking Skills

Table 1 presents the results of the needs analysis. The different study and thinking skills and competencies were assessed by the teachers teaching in the Senior High School including the hybrid teachers. These competencies were identified as to the intensity of the the needs to be enriched, developed or enhanced as foundation skills in Senior High School. These competencies and skills were then ranked which served as basis for the inclusion of the skills to the developed module.

Mean analysis reveals that the top nine (9) study and thinking skills which are identified to be "very highly needed" are the following: rank 1 - context clues (M=4.68); rank 2 - library skills (M=4.65); rank 3 - outlining (M=4.59); rank 4 - structural clues (M=4.57); rank 5- methods of paragraph development (M=4.42); rank 6 - summarizing (M=4.42); rank 7 - making inferences (M=4.42); rank 8 - scanning and skimming (M=4.40); and rank 9 - drawing conclusions (M=4.36).

Meanwhile, ranks 10 – 20 were rated as "highly needed" were the following: identifying supporting details (M=4.14); organizing information (M=4.02); differentiating facts from opinion (M=4.02); paraphrasing (M=3.81); determining the author's purpose (M=3.80); noting details (M=3.80); predicting outcomes (M=3.80); differentiating literary from academic texts(M=3.57); reading for information and details (M=3.50); making comparison and contrast (M=3.45); and interpreting non-Prose text (M=3.42).

The results mean that the teacher-respondents perceive learning vocabulary through contextual and structural clues together with developing the library skills and outlining competence of learners to be of utmost importance in order to enhance other study and thinking skills. This further implies that teachers need to give emphasis on these skills because they might be the ones that are often ignored or not enhanced. All the other eleven are also highly important skills or competencies that have to be underscored, noted and emphasized by the teachers. The last three competencies may just be the offshoot if other competencies are addressed and thoroughly learned by the learners.

The result of the need analysis is in consonance with the findings of the Department of Education on the identified critical contents in English. All the identified study and thinking competencies are considered critical contents that English curriculum implementers are expected to immediately undertake intervention programs and activities in order to address if not to totally solve them.

Furthermore, the results therefore imply that these competencies specifically the ones in the top 10 be included as inputs for the development of the instructional module and the remaining 10 competencies will be for the Module 2 after a successful evaluation of Module 1.

Table 1. *Mean, standard deviation and rank of the different study and thinking skills*

Topics and Competencies	Mean	SD	Rank	Description
Context Clues	4.68	.15	1	Very Highly Needed
Library Skills	4.65	.53	2	Very Highly Needed
Outlining	4.59	.58	3	Very Highly Needed
Structural Clues	4.57	.61	4	Very Highly Needed
Methods of Paragraph Development	4.42	.70	6	Very Highly Needed
Summarizing	4.42	.59	6	Very Highly Needed
Making Inferences	4.42	.82	6	Very Highly Needed
Scanning and Skimming	4.40	.72	8	Very Highly Needed
Drawing Conclusions	4.36	.69	9	Very Highly Needed
Identifying Supporting Details	4.14	.80	10	Highly Needed
Organizing Information	4.02	.96	11.5	Highly Needed
Differentiating Facts from Opinions	4.02	.96	11.5	Highly Needed
Paraphrasing	3.81	.89	13	Highly Needed
Determining the Author's Purpose	3.80	.84	15	Highly Needed
Topics and Competencies	Mean	SD	Rank	Description
Noting Details	3.80	.96	15	Highly Needed
Predicting Outcomes	3.80	.76	15	Highly Needed
Differentiating Literary From Academic Text	3.57	.81	17	Highly Needed
Reading for Information And Details	3.50	.85	18	Highly Needed
Making Comparison and Contrasts	3.45	.86	19	Highly Needed
Reading and Interpreting Non-prose text	3.42	.81	20	Highly Needed

Document Analysis of the Curriculum Guide and the Learner's Package

Based on the document analysis, the study and thinking skills and competencies in the Grade 7 curriculum guide and learner's manual are not sequentially arranged specifically on the basic reading and vocabulary skills. There are limited activities and drills for the enhancement of the skills. Added to this is the insufficient presentation of the skills and competencies that are not directly or explicitly taught to the learners. Most notably, there is lacking instructional material for the 1st and 2nd quarters which could result to a haphazard attack of subject teachers in teaching these competencies stipulated in the curriculum guide.

In the curriculum guide, the basic reading strategies

like skimming and scanning appear in the 1st quarter while the use of the library and other sources of information could be found in the 2nd quarter. The competencies are not sequentially arranged so as to complement each skill focus.

Reading skills such as making inference, making predictions, identifying the author's intention, and distinguishing fact from opinion are embedded in the Listening Comprehension competency but no listening comprehension materials are made available for teachers to use.

Contextual clues appear in the 4th quarter separated from the structural clues which appear in the 1st quarter. Reading Comprehension strategies are embedded in the viewing and Listening Comprehension strategies but are not taught explicit as a skill.

As to the learner's Package, there is no available learner's package for 1st and 2nd quarters of Grade 7. There are limited provisions for drills, exercises and activities for the development of the skills especially on vocabulary development and on the reading strategies.

Integrated approach is used in enhancing the skills where learners use the reading skills in the context of reading, listening and viewing but no specific ways on directly attacking the identified skills.

The result of this document analysis implies the great need for an instructional module that will serve as supplementary material for teachers and learners to bridge the gap for the 1st and 2nd quarters' lack of instructional material. The module is also expected to be logically arranged with provisions for more activities for diagnostic, formative and summative assessments.

Document Analysis of the Grade 8 Curriculum Guide and Learner's Package

The results of the document analysis of the Grade 8 curriculum guide and learner's manual revealed that the skills and competencies are not properly sequenced and there are some that do not adhere to the spiral progression as stipulated in the K to 12 program. Likewise, the study and thinking skills must first be integrated in the reading comprehension competency before they could be incorporated in the writing and composition component. The learner's package is limited with learning activities to further develop the reading skills. The approach is integrative in nature which adheres to communicative approach instead of

attacking the skill itself.

In the Grade 8 curriculum guide there is no reinforcement of basic reading strategies such as scanning, skimming from the 2nd to 4th quarters. However, the 1st quarter emphasizes on determining logical connectors in the text. The sequence of the reading skills is not properly arranged because of the communicative approach. Drawing conclusions, identifying the author's purpose and differentiating facts from opinion are the focus of the 4th quarter. This serves as an enrichment of the competencies presented in the Grade 7 English curriculum.

Furthermore, analyzing the paragraph such as identifying the topic sentence is taught in the 4th quarter. There should be a preliminary presentation of this skill or competency in Grade 7. This notes that this identified competency is not in spiral progression. Outlining and using graphic organizers as skills are presented in the writing and composition competency. This skill must be integrated to the reading comprehension component.

In the learner's package, the reading skills are incorporated in the viewing and listening skills competencies. These competencies include making predictions, drawing conclusions, identifying the author's purpose which is limited with activities. It is only manifested in 1 question during the processing of the lesson.

These results imply that the developed module must offer logical arrangement of competencies and the spiral progression of the skills and competencies, and intensive practice and engaging enrichment activities to enhance learning.

Document Analysis of the Grade 9 Curriculum Guide and Learner's Package

Grade 9 curriculum guide and learner's package are packed with several reading skills. There seems to be congested competencies in only one quarter which might affect the deepening of such skills. The 2nd, 3rd and 4th quarters jumped to higher order reading skills which means that by the time learners reach this grade level, they shall have fully-developed the study and thinking skills. The activities in the learner's package are more on reading long texts and varied literary pieces with focus on the application of the different foundation skills. This analysis has an implication on decongesting the skills and competencies to address the developmental needs of the learners. Extreme

demand on learning different competencies and skills defeats the purpose of skills development principles. Learner must be given just the right volume of information and skills for them to absorb and assimilate the expected learning outcomes.

In the curriculum guide, the entire 1st quarter is packed with several reading strategies starting with making inferences, sequencing events, paraphrasing, making a summary, drawing conclusions, and making comparison and contrast. These competencies seem so heavy for the entire 1st quarter that may not be able to absorb all these skills as presented in the lesson.

The 2nd quarter highlights complex skills such as making judgments of the text read, making conclusions, differentiating linear from non-linear text and analyzing and judging the relevance of the text. There should be an introduction of the pre-requisite skills for these competencies or even more exercises on foundation skills so that there is deepening of the reading skills.

Contextual analysis is repeatedly underscored in the curriculum to aid difficult reading tasks. The 3rd and the 4th quarters focus on analysis and interpretation of the one-act play. In addition, making value judgment, identifying biases, connecting the social content of the text and taking a critical stand on the topic are also part of the reading, listening and viewing competencies. These require higher order thinking skills. Furthermore, there is no more focus on the foundation skills but instead on the literary appreciation skills.

In the learner's manual, the activities presented to address the reading skills and competencies are limited only to questions and simple tasks like: What can you infer in the text? What conclusion could be made? Make a summary of the text presented. The manual manifests an approach that assumes that learners have already assimilated and learned the reading and study skills.

Document Analysis of the Grade 10 Curriculum Guide and Learner's Package

Document Analysis of Grade 10 curriculum guide and learner's package revealed that the curriculum emphasizes on literary analysis, non-linear texts and the development of research skills of learners. Vocabulary development activities and assessment techniques demand higher expectation with applications to other fields and disciplines. The Grade 10 curriculum guide presented the study and thinking

skills as foundation skills are not anymore directly presented in the curriculum. 1st to 4th quarters highlight analysis of the non-linear texts, graphs, tables, and maps. Literary analysis and judging the artistic value of the literary pieces including the social content implications of the reading materials cut across the entire 1st to 4th quarters. Vocabulary development and writing and composition competencies are leading towards learning research such as identifying technical and operational terms.

In the development of the modules, the results imply that research skills be integrated in the learning tasks and activities in the instructional module. Furthermore, integration as a strategy be manifested in the lesson or content.

In the learner's guide, literature is greatly given importance. There are numerous activities, performance tasks, and authentic assessment strategies presented to intensify deepening and appreciation of the literary texts.

Activities are more research-related such as making review of related literature, making citations and doing library search.

Functionality and Relevance of the Modules as Evaluated by Teachers

The functionality and relevance of the developed instructional module was evaluated by 30 teachers. In terms of functionality, the developed instructional module is rated "highly functional" ($M=4.98$) and for relevance, "highly relevant" with a mean of 4.47.

The result of the functionality means that the teacher-evaluators agreed to all areas of the evaluation tool. The teacher-evaluators perceive that the module excellently addresses the areas for quality learning such provision for checking prior knowledge of learners, clear presentation, variety of engaging learning activities, the use of current knowledge, provisions for the different learning modalities, sound assessment, development of the study and thinking skills and processes, presence of immediate feedback, appropriateness of vocabulary and clarity of instruction, and lastly the simplification of contents and the appealing and well-organized presentation.

Meanwhile, the module was evaluated highly relevant which means that teacher-evaluators see the need for the said module for instructional or remedial purposes. They agree that the module shall develop the metacognitive skills of learners through timely and

updated feedback and content, the alignment of objectives and learning activities, the integration of skills, the interesting texts, the flexibility of the learning activities, the accuracy of the assessment, the ease in learning, the development of the critical thinking, the use of learning scaffold, the suitability and the user-friendly features of the module. These features allow the learners and teachers to relate to the content, presentation and style of the developed instructional module.

This result further confirms the result of the study of Divinagracia (2014) that the development of instructional modules requires the above stated characteristics in order to make them relevant and functional.

Table 2. *Teachers' ratings on the functionality and relevance of the modules*

Categories	Mean	SD	Description
Functionality	4.89	.50	Highly Functional
Relevance	4.47	.55	Highly Relevant

Acceptability of the Module as Evaluated by Experts

Table 3 reveals the acceptability rating of the 5 experts in the field of English and in Instructional Materials Development. Generally, the acceptability of the entire developed study and thinking skills module is "Excellent" ($M= 4.57$). Specifically, the following areas of the instructional module are also rated as "Excellent": Objectives ($M=4.60$), Instruction ($M=4.80$), Learning Activities ($M=4.66$), Physical Aspect ($M=4.40$), and Evaluation Measure ($M=4.40$).

The results mean that the objectives are achievable and are stated in behavioral terms, the instructions and directions are clear and the learning activities are relevant, developmentally appropriate, aligned, varied, properly sequenced, and user-friendly with an immediate feedback mechanism.

This implies that the instructional module could already be used as intervention materials not just for Senior High School but also for other grade levels with identified needs of the specific study and thinking skills.

To address the physical aspect, the cover and the

layout should be presented to ICT experts in textbook writing and for the evaluation measures, more provisions for other learning activities must be explored.

The result of this study corroborates with the result of the study of Duenas (2017) which states that quality instructional modules must be highly functional, relevant and very highly acceptable. To realize this, the module writer must see to it that the needs of the learners are of prime importance. Moreover, proper process in instructional materials development must be undertaken to ensure quality.

The high acceptability of the module may be attributed to its features such as conversational approach, tabular and graphical presentation for ease in learning, the use of icons to make it more interesting to the 21st century learners, integration of other disciplines, varied assessment activities and the logical sequence of the content, competencies and skills.

However, further improvement may also be undertaken such as the use of localized and contextualized activities, provision for Blended Learning including integration to ICT. The developed module may also be transformed to digital format that learners can install in their tablet or laptops for convenience and relevance to the modern learning styles of the learners.

Table 3. *Experts' ratings on the acceptability of the modules in different evaluation areas*

Evaluation Areas	Mean	SD	Description
Physical Aspects	4.40	.65	Excellent
Objectives	4.60	.89	Excellent
Instruction	4.80	.25	Excellent
Learning Activities	4.66	.54	Excellent
Evaluation Measures	4.40	.89	Excellent
Whole	4.57	.56	Excellent

Conclusion

Based on the findings, the following conclusions are drawn: (1) Vocabulary, library and outlining skills are highly regarded as critical skills that need to be developed and enhanced among learners. Reading for comprehension and critical reading skills together with study skills such as summarizing, note-taking and

understanding paragraph development are perceived as equally essential skills for learning. These skills are identified as critical content areas in English based on the consultative conference of the DepEd Curriculum and Learning Division (DepEd, 2018). Additionally, teachers must realize that good readers should be equipped with skills necessary in order to succeed more in academics. It is important that "every teacher is a teacher of reading". It implies that all teachers need to be able to support readers as thinkers and therefore should be aware of reading strategies to help them think within the content area (Azevedo, 2009). Addressing these study and thinking skills is tantamount to responding to literacy initiative expected of all schools (ASCD, 2015). (2) Alignment, congruency and completeness of the curriculum standards vis-avis the learner's package shall ensure effective enrichment and enhancement of the study and thinking skills. There are areas for improvement in terms of the development of the competencies, the provision for a logical sequence of competencies and spiral progression, the formulation of tasks and activities and the choice of relevant materials. The DepEd provided materials in teaching English such as the Curriculum Guide, and the Learner's Package need to be further reviewed, and somehow, need to be modified by the teachers teaching the subject, particularly among the learners needing more interventions in study and thinking skills. Furthermore, English teachers need to supplement the Teacher's Guide and the Learner's Package with relevant learning methods, strategies, reading texts, and activities that are suited to the specific needs, interests, and contexts of specific group of learners enrolled in the different tracks and strands in the senior high school, most especially to the learners enrolled in the TVL Track. The director of the Bureau for Learning Resource emphasized the need for continuous improvement and setting high standards for instructions materials. Carag (2017) reiterated that the Bureau shall ensure that Manuscripts respond to the requirements of the prescribed curriculum, and only textbooks and teacher's manuals of suitable quality are made available to public schools nationwide.

Furthermore, (3) it may be deduced from the results of this study that the developed learning modules are functional, and relevant to the end- users of the said materials: the teachers. These materials made use of the learners' previous knowledge, long- term memory, and language and problem solving skills in order to transfer their learning successfully to their daily work tasks. Furthermore, they were perceived as promoting learning experiences that are either directly applicable to the personal aspirations, interests, or cultural

experiences of students and are connected in some way to real- world issues, problems, and contexts. Moreover, this instructional module was evaluated to be adequate and serviceable in all aspects and commended that they could effectively aid the learners in their understanding of the required competencies. One of the teaching- learning materials which can help the learners acquire the required learning competencies across all subject areas in English in Senior High school is the instructional modules.

Moreover, (4) the objectives, instruction, learning activities, physical aspect and the evaluation measures are very acceptable. Instructional modules are considered to be the More Knowledgeable Others (MKO) of the learners in their zones of proximal development (ZPD). The modules can assist them in learning the competencies which may seem difficult for them to acquire, through the use of lay- outs which are appealing to them, objectives, which are deemed achievable on their part, instructions and directions which are clear to them, learning activities, which are adequate and varied and engaging, and evaluative measures which truly measure the competencies that are intended to be measured. Furthermore, the objectives per lesson which are in forms of learning competencies provided in the curriculum guide are stated in behavioral terms and they are achievable through the content and learning activities provided. The instructions in the module are clear and can be easily understood by the learners and the directions of activities are clearly worded. As to learning activities, jurors found out that the lessons are relevant to the specific needs of learners, and at the same time, suited to their level. Also, these learning activities are deemed to carry out the objectives of the modules as they are varied, adequate, properly sequenced, can be executed with relevant ease and speed, and immediate feedbacks are provided. However, the instructional module is perceived by the jurors to have minor improvement in the physical aspects that need to possess clear lay- outs and are handy. As to the activities or tasks for evaluation, the modules need to provide varied learning tasks and evaluative measure as to deepen the target competencies or skills. Hence, the instructional module may still be fine-tuned or further refined in terms of the design and layout that are more appealing to the specific group of learners at the same time may provide more interactive, engaging and authentic assessment techniques for independent learning.

In the light of these research findings and conclusions advanced, the following recommendations are offered: (1) The result of this study may be shared to the

Department of Education officials specifically the policy makers, with the LRMSD Supervisors, and to the Curriculum and Instruction Division Chief and Education Program Supervisors. They may allocate more funds for more quality trainings on instructional materials development to ensure that teachers are well-trained and guided in producing relevant and functional instructional materials based on the specific needs and concerns of their own learners for their own use and other's use in their own respective classes. Furthermore, they may craft functional and quality training design on instructional materials development, one that is simple in presentation, efficient and output-based. This can be done by creating a mechanism or system of monitoring and evaluating the trainings conducted bottom-up or top-down approaches.

Hence, (2) School heads may also be directed to support teachers' initiatives on instructional materials development by intensifying training programs and learning activities on how to develop instructional materials in schools. They may include this target in the School Improvement Plan under the quality area so that this activity is well-directed and substantially funded. School head may also set this as one of his or her annual main targets as a component in the School-based Management under Curriculum and Instruction and to the teachers as well since it is stipulated in the Philippine Professional Standards for Teachers (PPST) Domain number 9 and in the Results-based Performance Management System (RPMS) Objective Number 9 which states that teachers should select, develop organize and use appropriate learning resources including the use of ICT. This mandate in the PPST and RPMS deem it necessary for teachers to innovate in terms of instructional materials development such as contextualizing their modules, enhancing the presentation in a graphical or tabular manner, providing ICT links in the module or presenting metacognitive or conversational or global approaches. In order to motivate other teachers to be material developers, a sample lesson of one of the modules may be distributed among the teachers as guides on how to come up with their own learning materials, so as to augment the insufficiency of learning materials in the public education sector. This may be done during LAC sessions and during InSet in May and in October.

Lastly, (3) to the future researchers, they may use other instructional designs models in developing instructional modules specifically the ADDIE's model which is Analyze, Design, Develop, Implement and Evaluate. The present study emphasizes on the process

of developing the instructional materials and it would be more meaningful if the material is tested using experimental designs. Other researchers may also devise other tools using other criteria for instructional materials development more specifically the standards and criteria set by the LRMDs for quality assurance of instructional materials developed by teachers.

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