ISSN: 2467-4885

Asian Intellect

FOR ACADEMIC ORGANIZATION AND DEVELOPMENT INC.

VOLUME 4

NOVEMBER 2016

RESEARCH and EDUCATION JOURNAL

The *Asian Intellect Research and Education Journal*
is a refereed journal and is published by the

Asian Intellect
FOR ACADEMIC ORGANIZATION AND DEVELOPMENT INC.

with

SEC REGISTRATION NO. CN201539886

and office address at

BLOCK 33B, LOT 1, PHASE 2, KAUNLARAN VILLAGE, NAVOTAS CITY
and
SAN RAFAEL, TARLAC CITY

EMAIL: asianintellectorg@gmail.com

WEBSITE: www.asianintellect.org

Asian Intellect
FOR ACADEMIC ORGANIZATION AND DEVELOPMENT INC.

SEC Registration No. CN201539886

Research and Education Journal

Volume 4, November 2016

Publication Guidelines

1. All articles must be authorized for publication by the author/s.

2. All the research papers published must have a high degree of scholarship.

3 All the research papers published must be approved by the editorial board .

4. All the research papers published must have undergone evaluation from our corps of referees thru double-blind referee process.

5. The articles may either be written in English or Filipino. All articles written in either languages must be accompanied by an Abstract which is written in English.

6. All contributions must be original.

TABLE of CONTENTS

TABLE of CONTENTS

TABLE of CONTENTS

APPROPRIATENESS OF MARITIME PROGRAMS TO THE PHILIPPINE COAST GUARD (PCG)

Ana Liza Gruspe-Taberdo PhD, MNSA
Department of Research and Development
PHILIPPINE MERCHANT MARINE ACADEMY
San Narciso, Zambales
analizagruspe@yahoo.com

Abstract

The Maritime Programs- BSMT and BSMarE are expected to develop competence linked to the practice of the maritime profession and graduates are prepared for the merchant marine profession and the Philippine Coast Guard. The study attempted to analyze which among the competence expected of an officer of the PCG are addressed or not addressed by the Maritime programs. Purposive sampling was employed involving Maritime graduates-officers in the PCG. Review of the competence mandated in RA 9993 and the course content of the maritime programs were analyzed. Curriculum mapping, interview and focus group discussion yielded the competence addressed and not addressed by the programs using frequency and percentages. The Maritime programs are slightly appropriate in developing knowledge and skills to perform duties in the PCG. Maritime graduates-PCG officers need additional trainings/courses in International Maritime Organization Laws and Conventions, maritime ship and port security, maritime customs and activities, prevention and suppression of trafficking and smuggling, maritime law enforcement, maritime border control and maritime search and rescue. They also need intensive instructions in basic laws related to their functions such as fishery law, tariff and custom codes, anti-illegal drug law, revised penal code etc., fundamentals of arrest and investigation, rules of engagement on the use of force, martial arts and basic infantry procedure. The PCG can continue to recruit maritime graduates because it addresses the maritime component of PCG duties but in order to face work and life's issues and challenges, the Maritime graduates-PCG offices should take additional training necessary to fill-up the competence gaps or to address the required competence of PCG which are not addressed by the maritime programs.

Keywords: Maritime programs, Philippine Coast Guard, appropriateness, curriculum mapping

I. INTRODUCTION

When the Philippine Coast Guard separated from the Philippine Navy in 1998, its initial Corps of Officers is composed of men and women with multifarious backgrounds and areas of expertise. In order to cope with the personnel and material growth of the organization, the PCG started its own Officer procurement and Enlisted Personnel recruitment in 2000. The Coast Guard Education and Training Command (CGETC) served the purpose of providing the basic training and education needs of the new Officers and Enlisted Personnel. They were also cross-trained with other maritime training institutions to further enhance their knowledge and skills, thus allowing them to cope with the ever developing standardization requirements of the maritime industry.

According to Somera (2010) giving emphasis to the critical role of officers in steering the helm of leadership of the PCG organization, a demand for standard of performance for the PCG human resource is a concern that lies at the heart of training and education. The Coast Guard Education and Training Command (CGETC) Master Plan outlines a number of cross training with the different agencies in the country such as: Bureau of Fisheries and Aquatic Resources (BFAR), Armed Forced of the Philippines (AFP), Philippine Merchant Marine Academy (PMMA), Philippine Drug Enforcement Agency (PDEA) and Maritime Academy of Asia and the Pacific (MAAP).

Since 2001, Maritime graduates have joined the pool of officers of the Philippine Coast Guard. These Call-on- Active Duty of the Maritime graduates to the PCG are informal links between the agencies and have become strong and sturdy throughout the years.

The PCG Cadets who will be joining the Maritime Cadetship program shall benefit from the International Maritime Organization (IMO) standard training facilities of the Maritime Schools. The PCG is thus, assured of professional competence upon their completion of their Bachelor of Science in Marine Transportation and Bachelor of Science in Marine Engineering courses and upon their eventual entry into the PCG service.

It was assumed that the Maritime program is appropriate and its graduates possess the needed competence in the performance of their PCG functions.

The appropriateness of the Maritime programs has no assessment yet until this time. The researcher embarked in this endeavor and attempted to analyze which among the competence expected of a PCG officer are addressed and which are not addressed by the Maritime programs (BSMT and BSMarE).

II. STATEMENT OF THE PROBLEM

The education and training of PCG personnel practically determines the performance level in the discharge of one's assigned duties and responsibilities. The researcher works with the assumption that the Maritime program is appropriate and its graduates possess the needed competence in the performance of their PCG functions. Discrepancies or gaps between the PCG personnel's actual competence and the competence required for effective current job performance is a threat to maritime security interest.

Specifically, it answered the following questions:

1. What are the competence expected of an officer of the Philippine Coast Guard (PCG) as required by PCG Law of 2009 or RA 9993?
2. What are the competence needed to perform duties in the PCG?
3. Which among these competence are addressed in the maritime programs? Which are not?

What are the implications of the Maritime graduates-PCG officers' competence to maritime security interest?

III. METHODOLOGY

This research study focused on the appropriateness of the maritime programs and its implication to maritime security interest. The assessment of the appropriateness of the programs was generally based on curriculum mapping and the realities of the respondents provided in the course of the study. The researcher believed that the existing social phenomena on the appropriateness of the training and education in the Maritime schools can be quantified, measured and expressed numerically. Thus, the quantitative research type was primarily utilized in gathering the needed responses to compose the study.

The research utilized the descriptive method to gather the needed responses concerning the existing phenomena. The research study involved a one-time interaction with Maritime graduates- PCG officers. It involved interviews, focus group discussion and curriculum mapping to identify which technical and general education courses in the BSMT and BSMarE curriculums address the expected competences of the PCG. The following methods were used:

1. Documentary research/analysis – review of the competence mandated in the RA 9993 and its implementing rules and regulations, the program/course content of the maritime programs and related literature on competence.
2. Interview- a face to face interview or via phone was utilized to verify the data being studied. A structured set of questions were used for this method. The interviews help validate the results of the curriculum mapping and document analysis.
3. Focus Group Discussions- there were a gathering together of maritime graduates in the PCG. The group of participants was guided by a moderator (researcher) who introduced topics for discussion and helped the group to participate in a lively and natural discussion.
4. Curriculum mapping –is the process of indexing or diagramming a curriculum to identify and address competence gaps for the purpose of improving the overall coherence of maritime programs, and by extension, its effectiveness.

The following steps were made for the curriculum mapping:

1. Identify the PCG competence required by RA 9993, those needed to perform their duties and those needed to cope with challenges associated with the positions were identified through documents analysis.
2. Since the maritime curriculum was developed using a competence-based, outcome oriented approach, the course specifications/syllabi of the 21 technical BSMT technical courses, 19 BSMarE technical courses and 24 general education courses were reviewed to identify the objectives and the competence intended to be developed by each course.
3. The courses were mapped to each of the competence and *"x"* mark was placed to those that do not address the competence and *"√"* mark was placed to those that address the competence.
4. Frequency count for *"x"* and *"√"* marks were made and percentage was computed for each.

IV. FINDINGS

Expected Competence of an Officer of the PCG as Required by RA 9993

The Coast Guard Law of 2009 or RA 9993 listed the PCG powers and functions in Section 3 and require the following competence of an officer of the PCG:

(1) Enforce regulations in accordance with all relevant maritime international conventions, treaties or instruments and national laws for the promotion of safety of life and property at sea within the maritime jurisdiction of the Philippines and conduct port state control implementation;

(2) Conduct inspections on all merchant ships and vessels, including but shall not be limited to inspections prior to departure, to ensure and enforce compliance with safety standards, rules and regulations;

(3) Detain, stop or prevent a ship or vessel which does not comply with safety standards, rules and regulations from sailing or leaving port;

(4) Conduct emergency readiness evaluation on merchant marine vessels;

(5) Subject to the approval of the Secretary of the DOTC, issue and enforce rules and regulations for the promotion of safety of life and property at sea on all maritime-related activities;

(6) Coordinate, develop, establish, maintain and operate aids to navigation, vessel traffic system, maritime communications and search and rescue facilities within the maritime jurisdiction of the Philippines;

(7) Remove, destroy or tow to port, sunken or floating hazards to navigation, including illegal fish traps and vessels, at or close to sea lanes which may cause hazard to the marine environment;

(8) Issue permits for the salvage of vessels and to supervise all marine salvage operations, as well as prescribe and enforce rules and regulations governing the same;

(9) Render aid to persons and vessels in distress and conduct search and rescue in marine accidents within the maritime jurisdiction of the Philippines, including the high seas, in accordance with applicable international conventions. In the performance of this function, the PCG may enlist the services of other government agencies and the merchant marine fleet;

(10) Investigate and inquire into the causes of all maritime accidents involving death, casualties and damage to properties;

(11) Assist in the enforcement and maintenance of maritime security, prevention or suppression of terrorism at sea, and performance of law enforcement functions in accordance with pertinent laws, rules and regulations;

(l2) Assist in the enforcement of laws on fisheries, immigration, tariff and customs, forestry, firearms and explosives, human trafficking, dangerous drugs and controlled chemicals, transnational crimes and other applicable laws within the maritime jurisdiction of the Philippines;

(13) Board and inspect all types of merchant ships and watercrafts in the performance of its functions;

(14) Enforce laws and promulgate and administer rules and regulations for the protection of marine environment and resources from offshore sources of pollution within the maritime jurisdiction of the Philippines;

(15) Develop oil spill response, containment and recovery capabilities against ship-based pollution;

(16) Grant, within its capabilities and consistent with its mandate, requests for assistance of other government agencies in the performance of their functions;

(17) Organize, train and supervise the PCG auxiliary (PCGA) for the purpose of assisting the PCG in carrying out its mandated functions; and

(18) Perform such other functions that may be necessary in the attainment of the objectives of this Act.

The Philippine Coastguard Competence

The PCG required cognitive competence includes: **knowledge in the fundamentals of:** International maritime Organization (IMO), International Labor Organization (ILO), International Safety Management (ISM), Code Safety of Life at Sea (SOLAS), Marine Pollution (MARPOL), Basel Convention, Stockholm Convention, London dumping Convention, Collision Regulation (COLREGS), Tonnage 69, Loadline Convention, Standards Training, Certification and Watchkeeping (STCW), International Ship and Port Facility Secuirty (ISPS) Code, International Maritime Dangerous Goods (IMDG) Code, United Nations Convention on the Law of the Sea (UNCLOS), and **Basic laws related to its function** such as: Fishery Law (RA 8850), Tariff and Custom Codes, Anti-illegal Drug Law (RA 6425), Revised Penal Code.; **knowledge in the Fundamentals of:** Arrest and Investigation, Rules of Engagement on the use of Force, Basic Infantry Procedure e.g. tactical maneuvers, and Martial Arts.

The PCG required functional competence includes: **Skill and know how in:** Maritime Safety including Vessel Traffic Management, Maritime Ship and Port Security, Maritime Customs Activities, Prevention and Suppression of Trafficking and Smuggling and Connected Maritime Law Enforcement, Maritime Boarder Control, Maritime Monitoring and Surveillance, Maritime Environmental Protection and Response, Maritime Search and Rescue, Ship Casualty and Maritime Assistance Service, Maritime accident and disaster response and Fisheries Inspection and Control.

The above mentioned competency requirements are over -emphasized when PCG officers and personnel conduct enforce laws, inspect, investigate, do readiness evaluation, issue permits, conduct search and rescue, assist other government agencies, and organize, train and supervise people within and outside the PCG organization.

The Maritime Program

Commission on Higher Education Memorandum (CHED CMO 20 s.2015) describes the maritime program as follows:

The **Bachelor of Science in Marine Transportation** is a higher education degree program that deals with the study of navigation, cargo handling and stowage, controlling the safe operation and care for persons onboard ship at the operation.

The **Bachelor of Science in Marine Engineering** is a higher education degree program that deals with the study of marine propulsion system, its operation and maintenance as well as controlling the operation of the ship and care for persons on board at the operational level of marine engineering.

A graduate of the BSMT or BSMarE program shall have acquired the knowledge and competence necessary to perform the following:

a. Demonstrate the ability to perform the competence, at the operational level under Section A-II/1 of the STCW Code (BSMT) or Section A-III/1 of the STCW Code (BSMarE).
b. Apply knowledge in mathematics, science and technology in solving problems related to the profession and the workplace.
c. Work in multi-cultural and/or multi-disciplinary team.
d. Demonstrate professional and ethical responsibilities.
e. Communicate effectively in oral and written English.
f. Demonstrate the impact and implication of various contemporary issues in the global and social context of the profession.
g. Engage in lifelong learning and keep abreast with developments in the field of specialization and/or profession.
h. Use appropriate techniques, skills and modern tools in the practice of the profession in order to remain globally competitive; and
i. Conduct research using appropriate research methodologies.

Appropriateness

Appropriateness means that the program corresponds to competence needed to perform duties in the PCG which includes cognitive and functional competence.

The appropriateness of the BSMT program was computed by adding the percentages of BSMT Technical courses and General Education courses. In the cognitive competence, It yielded 22.23% or slightly appropriate. It means that only 22.23% of the cognitive competence needed by PCG to perform its function is being addressed by the BSMT program. On the other hand, in the functional competence, it yielded 34.96% or somewhat appropriate. It means that only 34.96% of the functional competence needed by PCG to perform its function is being addressed by the BSMT program. A computed average percentage of 28.59% or slightly appropriate means that the BSMT program addresses only 28.59% of the needed competence to perform duties in the PCG.

TABLE I. Distribution of Percentages for Appropriateness of Maritime Programs to PCG Competence

COMPETENCE	BSMT	BSMarE	Total %	Interpretation
Cognitive	22.23	27.09	**24.66**	Slightly Appropriate
Functional	34.96	16.07	**25.51**	Slightly Appropriate
TOTAL	**28.59**	**21.58**	**25.08**	Slightly Appropriate
Interpretation	Slightly Appropriate			

With the BSMarE program, the cognitive competence yielded 27.09% or slightly appropriate. It means that only 27.09% of the needed cognitive competence to perform PCG duties is being addressed by the BSMarE program. A 16.07% in the functional competence means that it slightly address the functional competence needed to perform PCG duties.

A computed average of 21. 58% or slightly appropriate. It means that the BSMarE program address only 21.58% of the competence needed to perform duties in the PCG.

The computed over-all appropriateness of both programs in the cognitive competence is 24.66% or slightly appropriate and the computed over-all appropriateness of both programs in the functional competence is 25.51% or slightly appropriate and an over-all percentage of 21.08% or slightly appropriate which means that the maritime programs address only 21.08% of the competence needed to perform PCG duties. It means that the Maritime graduates-PCG officers need trainings/courses that will enhance their cognitive and functional competence in order to effectively and efficiently perform their PCG duties.

TABLE II. List of PCG Required Cognitive Competence and BSMT/BSMarE Curriculum that address PCG Required Cognitive Competence

COGNITIVE Competence required by PCG	BSMT/BSMarE Curriculum that address PCG required Cognitive competence
Knowledge in the fundamentals of: *International Maritime Organization (IMO) *International Labor Organization (ILO) *International Safety Management Code (ISM) * Safety of Life at Sea (SOLAS) *Marine Pollution (MARPOL) *Basel Convention *Stockholm Convention *London Dumping Convention *Tonnage 69 *Loadline Convention *Collision Regulation (COLREGS) * Standards, Training, Certification and Watchkeeping (STCW) * International Ship and Port Facility Security (ISPS) Code * International Maritime Dangerous Goods (IMDG) Code * United Nations Convention on the Law of the Sea (UNCLOS) * Basic Laws related to its function: Fishery law (RA 8550), **Tariff and Custom codes**, Anti-illegal **Drug Law** (RA 6425),Revised Penal Code, etc. * **Fundamentals of Arrest and** Investigation * **Rules of** Engagement **on the Use of** Force * Basic Infantry Procedure e.g. Tactical Maneuvers	*International Maritime Organization (IMO) * Safety of Life at Sea (SOLAS) *Marine Pollution (MARPOL) Collision Regulation (COLREGS) * International Maritime Dangerous Goods (IMDG) Code

Table III. List of PCG Required Functional Competence and BSMT/BSMarE Curriculum that address PCG Required Functional Competence

Functional Competence required by PCG	BSMT/BSMarE Curriculum that address the PCG Required Competence
Skill and know-how in: ***Maritime Safety, including Vessel Traffic Management** ***Maritime Ship and Port Security** *** Maritime Customs Activities** *** Prevention and Suppression of Trafficking and Smuggling and connected Maritime Law Enforcement** *** Maritime Boarder Control** *** Maritime Monitoring and Surveillance** *** Maritime Environmental Protection and Response** *** Maritime Search and Rescue** *** Ship Casualty and Maritime Assistance Service** *** Maritime Accident and Disaster Response** *** Fisheries Inspection and Control**	*Maritime Safety, including Vessel Traffic Management *Maritime Monitoring and Surveillance * Maritime Environmental Protection and Response *Ship Casualty and Maritime Assistance Service * Maritime Accident and Disaster Response

The Interview with the 11 Key Informants Reinforced the Findings of the Curriculum Mapping as Follows:

1. *What is your over-all impression of the learning experience in the Maritime School?*

- Their training is just a foundation or a preparatory course for PCG functions but compared to those who are not maritime education graduates in the PCG, they still have the advantage.
- Their education and training prepared them to be a good mariner and a leader

- They value the onboard assignments in international vessels that further enhanced their skills and character.

2. Do you think your education and training in the Maritime school is enough to make you successful in your career in the PCG?

- No. Their education and training in the Maritime School is not sufficient for PCG duties and functions.
- They understand the importance of mandatory courses like fishery law and other related local laws, port state control, law enforcement and maritime security etc.
- They think that military protocol, practices, customs and traditions should be incorporated in the Maritime curriculum for PCG cadets think that military protocol, practices, customs and traditions should be incorporated in the maritime curriculum for PCG cadets.

3. What are the training/courses you needed to attend to as a requirement for your position in the PCG?

- They are required to attend the Coast Guard Officers Course, Coast Guard Command Staff course and Coast Guard Station Commander's Course

4. What training/courses do you still need as a requirement to your present position in the PCG?

- They need to take specialization courses, master's degree in Maritime studies and updating on international laws and conventions

5. What are the training/courses offered by Maritime Training Centers that can complement/supplement the requirements of your present position?

- They believe that Maritime Training Centers can supplement the required trainings in simulator and bridgework, radar plotting/ARPA and Basic stability.

6. What are your comments/ recommendations on Maritime graduated joining the PCG?

- They believe that joining the PCG is a sacrifice (lower income than seafaring) but a promising career; it is an honor to serve the country and fellow Filipinos.

IMPLICATIONS TO MARITIME SECURITY INTEREST

Many companies rely on maritime transport of their goods. The maritime domain is crucial to developing Philippine markets and maritime security could potentially foster economic development. The Maritime programs to some extent address the PCG competence on maritime transport of goods. Since Coast Guard administration competence is wanting, additional training on the fundamentals of immigration law, tariff and customs Law, human trafficking and drug trafficking, firearms and explosive trafficking, smuggling, illegal fishing, and fundamentals of arrest and investigation. This will lead to legal transport of goods that will foster economic growth and development.

The maritime programs promote skill and knowledge in the operation and maintenance of vessels and watercraft, operation of aids to navigation, coordination and maintenance of vessel traffic system and operation and maintenance of maritime communications. This provides security of crew, vessels and cargo in the Philippine waters.

V. CONCLUSION

In the light of the foregoing findings, this conclusion was drawn:

The training arrangement between the Philippine Coast Guard and Maritime Schools concerning cadets training to become Coast Guard officers can be continued because it addresses the maritime component of PCG duties and functions but considering Section 2 of RA 9993 on interoperability of PCG with the Armed Forced of the Philippines (AFP) in times of war, additional training and workshops is necessary to fill- up the competence gaps or to address the needed and required competence of PCG which are not addressed by Maritime curriculum.

VI. RECOMMENDATIONS

Based on the findings and conclusion of the study, the following recommendations are given:

1. Craft a new curriculum for PCG cadets –the present BSMarE and BSMT curriculum must be revised to suit the needs of the PCG. Additional course on PCG administration which can be given during semestral and summer breaks or on weekends. They can also reflect and study the possibility of creating BSMT or BSMArE programs major in Coast Guard administration to be approved by the Commission on Higher Education (CHED)
2. Strengthen the Maritime School-PCG coordination to improve the appropriateness of the Maritime curriculums to PCG.
3. A trainorship program sharing that will mutually benefit Maritime Schools and PCG should be created as a capacity building measure.

Similar study on the relevance, responsiveness and appropriateness of other baccalaureate programs to the Philippine Coast Guard competences should be made to address the competency gaps of these baccalaureate programs.

SOCIAL BENEFIT

The Philippines has one of the longest coast lines in the world and the country depends heavily on its rich coastal and marine resources for the many economic, employment and biodiversity values and services they provide. The Maritime Graduates-PCG officers have the competence in the removal, destroy or tow floating objects causing hazard to marine environment, supervise salvage operations of vessels, development of oil spill response, containment and recovery against ship-based pollution. Given additional training to enforce law of fisheries, forestry and maritime environment and resources law will secure the country's marine ecosystem.

VII. ACKNOWLEDGMENT

AGT would like to express gratitude to VADM Richard U Ritual, PMMA Superintendent for the generous support and encouragement, Maritime graduates-PCG officers who assisted her with the data needed in this research, and the National Defense College of the Philippines Academic Board whose lucid suggestions, scholarly comments and magnanimous support help significantly in the completion of this study.

VIII. REFERENCES

Government Issuances and Publications

[1] Commission on Higher Education. CHED CMO 20 S 2015 Consolidated Policies, Standards and Guidelines for the Bachelor of Science in Marine Transportation (BSMT) and Bachelor of Science in Marine Engineering (BSMarE) Programs.
[2] Republic Act 9993 approved on February 12, 2010. An Act establishing the Philippine Coast Guard as an Armed and Uniformed Service attached to the Department of Transportation and Communication thereby repealing Republic Act 5173 as amended and for other purposes, otherwise known as the Philippine Coast Guard Law of 2009.

Unpublished Master's Thesis
[3] Somera, Rudyard (2010). An Assessment of the Education and Training of the Philippine Coast Guard. Unpublished thesis, National Defense College of the Philippines, Quezon City.

SCIENTIFIC LITERACY IN SCIENCE-ORIENTED CLASSES IN CAMARINES NORTE

Consuelo R. Saenz*
Instructor I, College of Education
Camarines Norte State College
Dr. Jose R. Abaño Campus, Brgy. II (Pasig), Daet, Camarines Norte

This study determined the extent of implementation and level of scientific literacy in Science-oriented classes in selected secondary schools in Daet, Camarines Norte. The descriptive-evaluative design determined the extent of implementation and level of scientific literacy of the two schools. The population consisted of four Science I teachers and 67 students each from Camarines Norte National High School and Camarines Norte State College.

A researcher-made questionnaire for the teacher respondents gathered the data to determine the extent of implementation. A validated 40-item scientific literacy test was administered to the student respondents to determine their level of scientific literacy along the aspects sufficiency of scientific knowledge, understanding of scientific knowledge, applying scientific knowledge to daily life and explaining natural phenomena. Weighted mean and ranking determined the extent of implementation and level of scientific literacy; Pearson's r established the significant relationship between the extent of implementation and scientific literacy level and ANOVA found out significant differences in the extent of implementation of the program between schools.

Scientific literacy was very extensively implemented, most especially evident in activities that will help develop scientific literacy. The level of scientific literacy of students was average, and there was a high significant relationship between extent of implementation and level of scientific literacy along application, explanation, and understanding aspects. The extent of implementation of scientific literacy was the same among aspects and between schools but the level was significantly different among aspects with high significant difference between schools.

Keywords: Scientific literacy; science-oriented classes; extent of implementation; level of scientific literacy; scientific literacy test

A. INTRODUCTION

Science is an indispensable element of our daily life. Scientific knowledge and processes have become part of the things we see, create, use and do. It has been the basis for the development of materials and equipment that provided man with comfort. It is also considered to be at the heart of significant individual and political decisions. Scientific information is used in dealing with every issue and event that occur every day, including those that pertain to the environment. For this reason, the general good of the society is more stable when the individuals are scientifically knowledgeable. Being scientifically informed will enable our government to thresh out ecological problems such as managing our natural resources and protecting the environment.

Science is life because of the fact that it is always related to our personal experiences and daily activities. Science teachers should look forward to learners having an understanding of how to read and write science from the context of science itself. When students are scientifically literate, they have enhanced competence in daily life and have greater ability to make informed decisions.

On the other hand, despite the importance of Science, the National Achievement Test (NAT) and Regional Achievement test results in Science showed poor student performance and apparently underprivileged teacher performance as well. In the Grade 6 NAT of 2008, the average mastery level in science was only 57.90 %. According to the University of the Philippines Institute of Science and Mathematics Education (UPNISMED) Director Merle Tan (2008), "Filipino students have low level of scientific and mathematics literacy and a large number cannot apply concepts to real life." Moreover, she reported that there seems to be a serious gap between science education and the knowledge needed for day-to-day living.

Consequently, the Department of Education (DepEd) has initiated reform in the curriculum to deal with unsatisfactory student performance in science and set scientific literacy as the ultimate goal of science instruction. The heart of the new curriculum, the Secondary Education Curriculum (SEC), is achieving scientific literacy. The implementation of this new program started the school year (2010-2011) in Science I and for the school year (2011-2012), in Science II. In this new curriculum, content and performance standards have been defined and set and that it focuses on essential understanding of science concepts and develops readiness and passion for work and lifelong learning.

This research on Scientific Literacy was conducted for the purpose of verifying the extent to which scientific literacy is attended to by Science I teachers and its relation to science learning. Cognizant of the need to improve the quality of science education, assessment of the extent of implementation of scientific literacy is urgent. The researcher believes that this study could, in one way or another, assist both the teachers and the school administrators and most crucially the DepEd to connect the gap between scientific literacy as a general goal of science instruction for the nation's economic security and global competitiveness and the current teaching and learning practice. This study is deemed beneficial in providing baseline information for holistic the improvement of the science education program.

Furthermore, it may provide basis for planning and implementing science faculty development programs and appropriate development in the science curriculum.

B. STATEMENT OF THE PROBLEM

This study determined the extent of implementation and level of scientific literacy in selected Science-oriented classes in the secondary schools in Daet, Camarines Norte, S/Y 2011-2012.

Specifically, it pursued the following questions:

1. What is the extent of implementation of scientific literacy program along teaching strategies, activities and assessment methods?

2. What is the level of scientific literacy of students along sufficiency of knowledge, understanding, application and explanation?

3. Is there a significant relationship between the extent of implementation of the program and level of scientific literacy in Science-oriented classes?

4. Are there significant differences in the extent of implementation and scientific literacy level among aspects and between schools?

Hypotheses

1. There is a significant relationship between the extent of implementation and level of scientific literacy in the science-oriented classes.

2. There is a significant difference in the extent of implementation and scientific literacy level among classes and between schools.

Definition of Terms This section includes the conceptual and operational definition of terms used in this study.

Applying scientific knowledge. In this study, this refers to the ability of the students to use scientific knowledge to a variety of real life situations.

Explaining natural phenomena. This refers to the ability of students to explain the observable facts or events that occur around him using scientific information at hand in making judgments.

Extent of implementation. This refers to the degree of implementation of scientific literacy program in terms of the strategies, activities and methods of assessment used by the teachers.

Level of scientific literacy. This refers to the level of scientific literacy that the students attained as determined by the scientific literacy test.

Science-oriented High School. In this study, it refers to secondary schools that offer special science-oriented curriculum or advanced science subjects to its clienteles.

Scientific literacy. It is the knowledge and understanding of science concepts and processes needed for making personal decisions, involvement in civic issues and being economically productive. In this study, it refers to having sufficient scientific knowledge, understanding scientific knowledge, applying scientific knowledge to everyday life and explaining natural phenomena measured by a scientific literacy test given to the student respondents.

Sufficient scientific knowledge. In this study, this refers to the ability of students to recall the concepts and specific facts, learned in the lessons in first and second quarters.

Understanding scientific knowledge. This means the ability of students to tell and translate the meaning of scientific knowledge from one verbal form to another.

Use of activities that will develop scientific literacy. This refers to the kind and number of times student activities relative to developing scientific literacy such as research/investigation, problem solving and laboratory activities are used. Use of pertinent teaching strategies. In this study, it refers to the frequency of using strategies that will enable the students to acquire scientific knowledge and promote scientific literacy.

Use of relevant assessment methods. In this study, this refers to the kind and frequency at which relevant assessment methods such as performance-based assessment and paper and pencil tests are used.

C. METHODOLOGY

The descriptive-evaluative design determined the extent of implementation and level of scientific literacy of the two science-oriented secondary schools in Daet, Camarines Norte. The descriptive method described the present condition concerning the extent of implementation and level of scientific literacy of selected students in the said schools. The evaluative method assessed the significant relationship between the extent of implementation and level of scientific literacy in the said schools and the significant difference in the extent of its implementation by Science I teachers and scientific literacy level of students among classes and between the schools.

The time frame was from November-December, 2011. The two Science-oriented secondary schools in Daet, Camarines Norte that served as the research sites were the Camarines Norte National High School and Camarines Norte State College Laboratory High School.

There were two schools, with a total of four (4) Science I teachers. All the Science I teachers were the respondents of the study. The sampling technique used for the student respondents was the Slovin's Formula, 67 out of 80 students each from Camarines Norte National High School and Camarines Norte State College were selected at random. Of the 67 students of Camarines Norte State College Laboratory High School, 30 were male and 37 were female; while in Camarines Norte National High School, 31 were male and 36 were female. The Slovin's formula was used because the researcher does not know the behaviour of the entire population or how the group of students will perform in the scientific literacy test.

A researcher-made questionnaire gathered the data to determine the extent of implementation and level of scientific literacy of the respondents. The questionnaire was administered to teacher respondents consisted of two parts namely, Part I: Profile of the Respondents and Part II: Extent of Implementation of Scientific Literacy in Science I. Additionally, Part II was subdivided into three categories: Use of Pertinent Teaching Strategies, Use of Activities That Will Develop Scientific Literacy, and Use of Relevant Assessment Methods. Equivalent scale was assigned to each alternative: 4.20 - 5.00 = Very Much Extensive (VME); 3.40 - 4.19 = Very Extensive (VE); 2.60 - 3.39 = Extensive (E); 1.80 – 2.59 = Less Extensive (LE); 1.00 – 1.79 = Not Extensive (NE). The 40-item scientific literacy test was taken from the Trends in International Mathematics and Science Study (TIMSS), the Dep Ed Test Item Bank and the Division of Camarines Norte Periodical Test questions and Diagnostic/Achievement Test (Refer to the appendix).

A pilot test to few selected first year students which were non-respondents was conducted for the purpose of validating the test. A request for validation by experts in the division was prepared duly approved by the Division Superintendent. The survey questionnaire for the teachers was evaluated by the lone regional trainer of Camarines Norte on the new curriculum in Science I (Understanding by Design) before it was used in order to gather suggestions and comments on the content and structure of the test.

The scientific literacy test for students consisted of ten (10) items for each of the four categories namely: Sufficient scientific knowledge (items 1-10), Understanding Scientific Knowledge (items 11-20), Applying Scientific Knowledge to Daily Life (items 21-30) and Explaining Natural Phenomena (items 31-40). Two questions each from the five topics covered in the first and second quarters comprised the 10-item questions in each category. The scope of the test was as follows: First Quarter: The Scientific Method and Matter: Its Properties and Changes; Second Quarter: Laws of Motion, Energy Transfer and Plate Tectonics. The scope of the scientific literacy test were the lessons taken up during the first and second quarters, congruent to the proficiency and skills that must have been taught and learned as prescribed in the curriculum guide for first year under the new curriculum in order to assure the test validity.

Weighted mean and ranking determined the extent of implementation and level of scientific literacy. Pearson's r established the significant relationship between the extent of implementation and scientific literacy level among classes and between schools. ANOVA found out significant differences in the extent of implementation of the program between science-oriented schools.

D. FINDINGS

E.

<u>Extent of Implementation</u>

<u>Teaching Strategies</u>. The data in Table 2A present the extent of implementation of scientific literacy along teaching strategies. Data on the strategies showed that the strategy cooperative learning topped the list (4.83); followed by predict-observe-explain and practical work approach, both with a mean of 4.50. The last three parameters were computer simulation and drama and dance strategies both with mean of (2.17) and field trips (1.67).

With teaching strategies that lead to developing the students' scientific skills and habits of mind that are required to construct understandings of science and apply these understandings or ideas to realistic problems and issues, the extent of implementation was very extensive. These can be confirmed by the very extensive implementation of scientific literacy teaching strategies as evident application of teacher education inputs.

Table 2 A
Extent of Implementation of Scientific Literacy Along Teaching Strategies

Strategy	School A			School B			Overall		
	Mean	Rank	Int	Mean	Rank	Int	Mean	Rank	Int
Library Assignment	3.00	*13.5*	*E*	3.33	*14*	*E*	3.17	*14*	*E*
Concept Mapping	2.00	*17*	*LE*	4.00	*9*	*VE*	3.00	*15.5*	*E*
Cooperative Learning	5.00	*2*	*VME*	4.67	*3.5*	*VME*	4.83	*1*	*VME*
Computer Aided Instruction	2.00	*17*	*LE*	2.67	*19.5*	*E*	2.33	*19*	*LE*
Field Trips	1.00	*20.5*	*NE*	2.33	*21.5*	*LE*	1.67	*22*	*NE*
Interactive Strategies	1.00	*20.5*	*NE*	4.33	*6*	*VME*	2.67	*17*	*E*
POE (Predict-Observe-Explain)	5.00	*2*	*VME*	4.00	*9*	*VE*	4.50	*2.5*	*VME*
Problem-based Learning	4.00	*7.5*	*VE*	4.67	*3.5*	*VME*	4.33	*4.5*	*VME*
Practical Work Approach	4.00	*7.5*	*VE*	5.00	*1*	*VME*	4.50	*2.5*	*VME*
Discovery Learning	4.00	*7.5*	*VE*	4.67	*3.5*	*VME*	4.33	*4.5*	*VME*
Interactive Demonstrations	3.00	*13.5*	*E*	4.00	*9*	*VE*	3.50	*11.5*	*VE*
Analysis of second hand information	4.00	*7.5*	*VE*	4.00	*9*	*VE*	4.00	*7*	*VE*
Film and Video	4.00	*7.5*	*VE*	2.67	*19.5*	*E*	3.33	*13*	*E*
Role Playing	3.00	*13.5*	*E*	4.67	*3.5*	*VME*	3.83	*8*	*VE*
Panel Discussion	1.00	*20.5*	*NE*	4.00	*9*	*VE*	2.50	*18*	*LE*
Laboratory Method	5.00	*2*	*VME*	3.33	*14*	*E*	4.17	*6*	*VE*
Computer Simulation	2.00	*17*	*LE*	2.33	*21.5*	*LE*	2.17	*20.5*	*LE*
Drama and Dance	1.00	*20.5*	*NE*	3.33	*14*	*E*	2.17	*20.5*	*LE*
Inquiry Teaching	3.00	*13.5*	*E*	3.00	*17.5*	*E*	3.00	*15.5*	*E*
Guided Inquiry Laboratory Method	4.00	*7.5*	*VE*	3.33	*14*	*E*	3.67	*9.5*	*VE*
Bounded Inquiry Laboratory	4.00	*7.5*	*VE*	3.00	*17.5*	*E*	3.50	*11.5*	*VE*
Free Inquiry Laboratory	4.00	*7.5*	*VE*	3.33	*14*	*E*	3.67	*9.5*	*VE*
Overall	**3.14**		***E***	**3.67**		***VE***	**3.40**		***VE***

Legend:
4.20 - 5.00 = Very Much Extensive (VME)
3.40 - 4.19 = Very Extensive (VE)
2.60 - 3.39 = Extensive (E)
1.80 – 2.59 = Less Extensive (LE)
1.00 – 1.79 = Not Extensive (NE)
Int = Descriptive Interpretation

Science teachers particularly on those suitable to science instruction availed of trainings on new and updated teaching strategies. Demonstration teaching on execution of a particular strategy in carrying out a particular lesson objective has always been part of science trainings in order to model the process and its effectiveness to science students. Cooperative learning has always been demonstrated by science teachers believing that it is effective in holistic learning process of students. Collaboration of efforts and ideas are more preferred by students rather than learning alone and this strategy have also being done in integration with other strategies.

Liu (2009) emphasized that scientific literacy is a life-long participation in science, and that training science and public educators especially through graduate programs on science and the public is one of the two needed approaches to achieve science literacy. On the other hand, field trip ranked last and was not implemented in the two schools. These findings can be attributed to the fact that field trips require expenditure on the part of the students especially when the route is out of the town.

As a whole, data revealed that the extent of implementation of teaching strategies was very extensive (3.40). Over-all findings implied that the teachers of the science-oriented schools were putting into practice the teaching strategies that would attain scientific literacy.

These findings conform to the study of Miller (2007) which disclosed that when students are exposed to quality science experiences, e.g., predict-observe-explain and then engaged hands-on science inquiry explorations, students are given science content information that leads to scientific literacy. This was further supported by the study of Cowie, et al. (2011) that classrooms should be regarded as venue for students working and doing science. These findings are further sustained by the Constructivist theory (Oronce, 2002) which states that teachers should use diverse styles of learning or strategies particularly those that encourage their shared responsibility in order to maximize the learning potential of the students.

Another is the Social cognition theory by Lev Vygotsky (Dahms, et al., 2008) which states that learning is enhanced through their social interaction as well as interaction between the learners and their tasks.

Activities. The data in Table 2B present the extent of implementation of scientific literacy along activities showed very much extensive implementation on Observation Exercises (5.00), Describing scientific phenomena (4.83), and explaining scientific phenomena (4.83). The last three activities on the other hand were interpreting scientific conclusions and active hands-on/minds-on activities (4.00) and conducting science investigations (3.67).

Observation exercises ranked first among the activities which meant that students are continually encouraged to acquire scientific knowledge and after observing, they describe and explain scientific phenomena. Learning science becomes interesting and meaningful when classroom activities provide first hand experiences that enable the students to witness and understand how and why things happen.

This finding corresponds to the notion of Brewer (2008) that "observation exercises given to students shall promote inquiry and thereby advance scientific literacy".

Table 2B
Extent of Implementation of Scientific Literacy Along Activities

Activity	School A			School B			Overall		
	Mean	**Rank**	**Int**	**Mean**	**Rank**	**Int**	**Mean**	**Rank**	**Int**
Observation exercises	5.00	*3.5*	*VME*	5.00	*1.5*	*VME*	5.00	*1*	*VME*
Describing scientific phenomena	5.00	*3.5*	*VME*	4.67	*3.5*	*VME*	4.83	*2.5*	*VME*
Explaining scientific phenomena	5.00	*3.5*	*VME*	4.67	*3.5*	*VME*	4.83	*2.5*	*VME*
Predicting scientific phenomena	5.00	*3.5*	*VME*	4.33	*6.5*	*VME*	4.67	*5*	*VME*
Conducting Science	4.00	*8*	*VE*	3.33	*10*	*E*	3.67	*10*	*VE*
Investigation/ Research									
Interpreting Scientific Evidences	5.00	*3.5*	*VME*	4.33	*6.5*	*VME*	4.67	*5*	*VME*
Interpreting scientific Conclusions	4.00	*8*	*VE*	4.00	*9*	*VE*	4.00	*8.5*	*VE*
Knowing Science Concepts	5.00	*3.5*	*VME*	4.33	*6.5*	*VME*	4.67	*5*	*VME*
Active Hands-on/minds-on activities	3.00	*10*	*E*	5.00	*1.5*	*VME*	4.00	*8.5*	*VE*
Problem solving	4.00	*8*	*VE*	4.33	*6.5*	*VME*	4.17	*7*	*VE*
Overall	**4.50**		*VME*	**4.40**		*VME*	**4.45**		*VME*

Legend:
4.20 - 5.00 = Very Much Extensive (VME)
3.40 - 4.19 = Very Extensive (VE)
2.60 - 3.39 = Extensive (E)
1.80 – 2.59 = Less Extensive (E)
1.00 – 1.79 = Not Extensive (NE)
Int = Descriptive Interpretation

However, it can be noted from the data that among the scientific literacy activities, the implementation of conducting science investigation, interpreting scientific conclusions, and active hands-on/minds-on activities was only very extensive. This could further mean that classroom activities of science-oriented schools focused more on the acquisition of scientific knowledge and not much beyond or deeper it such as transformation and internalization of scientific knowledge.

The National Science Teachers Association (2010) clearly notes that the process of research is the very essence of scientific enterprise and inquiry. There was very much extensive implementation of the activities which will help develop scientific literacy. This finding is evident in the very much extensive implementation of the aforementioned teaching strategies: Cooperative Learning, Predict-observe-explain, and Practical Work Approach. In addition to the aforementioned theory, the findings conform to Brewer's (2008) assertion that observation exercises given to students advance inquiry and the end result is the promotion of scientific literacy.

Assessment. The data in Table 2C present the extent of implementation of scientific literacy along assessment methods, where there was very extensive implementation in the two schools. Topping the list was paper and pencil test and performance assessment implemented very much extensively (4.50), followed by practical assessment (3.67). Extensive implementation was noted along the last three methods, portfolio assessment with the use of rubrics (3.33), oral and auditory assessment (3.17) and project and field work (3.00). The very much extensive implementation of assessment methods along paper and pencil tests/written tests and performance

Table 2C
Extent of Implementation of Scientific Literacy Along Assessment Methods

Activity	School A			School B			Overall		
	Mean	**Rank**	**Int**	**Mean**	**Rank**	**Int**	**Mean**	**Rank**	**Int**
Paper and pencil/Written tests	5.00	*1*	*VME*	4.00	*3*	*VE*	4.50	*1.5*	*VME*
Practical Assessment	3.00	*4.5*	*E*	4.33	*2*	*VME*	3.67	*3*	*VE*
Project or Field Work	3.00	*4.5*	*E*	3.00	*6*	*E*	3.00	*6*	*E*

Oral and auditory assessment	3.00	*4.5*	*E*	3.33	*5*	*E*	3.17	*5*	*E*
Performance Assessment	4.00	*2*	*VE*	5.00	*1*	*VME*	4.50	*1.5*	*VME*
Portfolio Assessment	3.00	*4.5*	*E*	3.67	*4*	*VE*	3.33	*4*	*E*
Overall	**3.50**		**VE**	**3.89**		**VE**	**3.69**		**VE**

Legend:
4.20 - 5.00 = Very Much Extensive (VME)
3.40 - 4.19 = Very Extensive (VE)
2.60 - 3.39 = Extensive (E)
1.80 – 2.59 = Less Extensive (LE)
1.00 – 1.79 = Not Extensive (NE)
Int = Descriptive Interpretation

assessments could be explained by the trainings given to science teachers on test construction, measurement and evaluation. These assessment methods are customarily used by teachers as they are used to utilizing them in formative and summative evaluations. Paper and pencil/written tests are most preferred by teachers particularly the multiple-choice test type due to their ease of scoring. The teachers even just take multiple-choice questions from the test item banks in Science I. On the other hand, performance assessments are not easy to score, but when rubrics are made, they are objectively scored and measures the actual performance of students based on what the assessment intends to measure.

The findings conform to the assertion of Wenning (2007) that if scientific inquiry is to be taken into consideration, performance tests are more appropriate to assess the procedural knowledge and investigation skills of students. The findings also match the declaration of Coffey (2008) that performance assessment particularly that of extended constructed-response item in assessments assesses the ability of students to communicate or write science as an important goal of science education.

On the other hand, the extent of implementation of project or field work, oral and auditory assessment and portfolio assessment with the use of rubrics was only extensive. This can be explained by the once-every quarter project requirement to science students as well as the "not extensive" implementation of field trips or field works in the two science-oriented schools. Oral and auditory assessments were also extensive only in implementation. This can be explained by the fact that oral assessments include assessment of oral defence of students in their investigatory project defence. Reporting of students of their group work during cooperative activities was also assessed using this method. Moreover, portfolio assessment was also extensive. Creation of portfolios for the students to reflect on their learning was one of the options selected by teachers as one of their project requirements from students.

In conclusion, the very extensive implementation of scientific literacy along assessment methods implied that the methods of assessment were used by teachers to establish when scientific literacy is achieved.

Table 2D summarizes the extent of implementation of scientific literacy in the areas teaching strategies, activities, and assessment. Activities topped the list (4.45), followed by assessment methods (3.69) and teaching strategies (3.40).

The data implied that the very much extensive implementation of activities contributes to enhance learning of science students because they learn by doing. Learning science becomes meaningful when students become actively engaged in activities that promote inquiry, lets them reason out and think critically.

This finding was affirmed by Ricafort (2010) when he said that "designed active learning lessons would enable students to master science process skills."

As shown in the same table, assessment methods were implemented very extensively. This showed that assessment is an integral part of science learning as the activities and that the two science-oriented schools in Camarines Norte were using them to reflect and improve the teaching and learning process. Moreover, teachers of the two science-oriented schools were assessing student learning and adjust instruction when needed. Likewise, the teaching strategies were implemented very extensively which showed that teachers of the two schools used appropriate strategies that will arouse student effort and interest to learn science.

As a whole, the extent of implementation of scientific literacy was very extensive (3.85) which indicated that teaching strategies, activities, and assessment methods needed to promote scientific literacy were mostly implemented by the teachers in the two science-oriented schools.

Table 2D
Summary of the Extent of Implementation of Scientific Literacy

Activity	School A			School B			Overall		
	Mean	Rank	Int	Mean	Rank	Int	Mean	Rank	Int
Teaching Strategies	3.14	*3*	*E*	3.67	*3*	*VE*	3.40	*3*	*VE*
Activities	4.50	*1*	*VME*	4.40	*1*	*VME*	4.45	*1*	*VME*
Assessment Methods	3.50	*2*	*VE*	3.89	*2*	*VE*	3.69	*2*	*VE*
Overall	**3.71**		***VE***	**3.99**		***VE***	**3.85**		***VE***

Legend:
4.20 - 5.00 = Very Much Extensive (VME)
3.40 - 4.19 = Very Extensive (VE)
2.60 - 3.39 = Extensive (E)
1.80 – 2.59 = Less Extensive (LE)
1.00 – 1.79 = Not Extensive (NE)
Int = Descriptive Interpretation

Level of Scientific Literacy

Table 3 showed that the two schools had average level of scientific literacy as supported by the mean of 5.99. Application of scientific knowledge topped the list (7.07), followed by sufficiency of knowledge (6.31). Explanation of natural phenomena (5.60) and understanding scientific knowledge (4.97) were the last two parameters.

The findings showed a remarkable high level of scientific literacy along applying scientific knowledge to daily life which indicated that the students' ability to use scientific knowledge to varied life situations was greatly improved.

Table 3
Level of Scientific Literacy of the Students

Aspect	School A			School B			Overall		
	Mean	Rank	Int	Mean	Rank	Int	Mean	Rank	Int
Sufficiency of Knowledge	6.67	*2*	*High*	5.94	*2*	*Average*	6.31	*2*	*Average*
Understanding	5.46	*4*	*Average*	4.48	*4*	*Average*	4.97	*4*	*Average*
Application	7.67	*1*	*High*	6.46	*1*	*Average*	7.07	*1*	*High*
Explanation	6.40	*3*	*Average*	4.81	*3*	*Average*	5.60	*3*	*Average*
Overall	**6.55**		***Average***	**5.42**		***Average***	**5.99**		***Average***

Legend:
6.66-10.00 = High
3.33-6.65 = Average
0.00-3.32 = Low

Khan (2011) affirmed that a scientifically literate person is able to know answers to questions derived from everyday experiences.

Data also disclosed that the students demonstrated or possess average scientific literacy level along sufficiency of scientific knowledge, explanation of natural phenomena and understanding scientific knowledge. In the new secondary education curriculum, understanding scientific knowledge is a domain of science around which the curriculum is designed and developed. This could mean that the students of the two schools needed to attain higher level of knowledge sufficiency, understanding and explaining scientific phenomena considering the fact that they are provided with special science classes or advance science subjects.

The fact that the need for the level of scientific knowledge sufficiency and understanding was high conforms to the claim of Murcia (2005) that a child needs knowledge of important and enduring science concepts in order to be scientifically literate. The same contention was made by the Systems for State Science Assessment (2005) to be able to think scientifically, students should have a strong foundation of science content knowledge. In the understanding aspect, average level was achieved.

Albarico (2010) affirmed that understanding scientific knowledge can be gained only through processing and making meanings out of acquired scientific knowledge. Duschl (2007) pointed out that understanding how scientific knowledge is produced will enable an individual to be wise end users of scientific claims about public scientific issues like global warming. The average level of scientific literacy along explaining natural phenomena indicated that the students of the two science-oriented schools can explain almost all of the observable events around them using scientific knowledge. Hazen (2002) attested that when an individual is scientifically literate, he can understand science-based social issues around him and realize how the natural laws influence his life.

To sum up, there was average level of scientific literacy of the students in the two science-oriented high schools in Camarines Norte.

This finding conforms to the claim of Shwartz, et al. (2006) that higher levels of chemical literacy such as using their understanding of chemical concepts to explain phenomena (conceptual literacy) are only partly met.

Significant Relationship

Table 4 shows the Pearson's r determination of the significant relationship between the levels of scientific literacy with the school's extent of implementation.

Findings revealed that compared with the critical values of 0.222 at 1% level and 0.170 at 5% level, the computed r-value was 0.475. Data showed that among the aspects of level of scientific literacy, understanding (0.293), application (0.379) and explanation (0.427) had high significant relationship with the extent of implementation. Among aspects, significant relationship was revealed only along sufficiency, with an r value of 0.193.

The high significant relationship of extent of implementation to the level of scientific literacy implied that the high level of scientific literacy of the students along application aspect, the average levels along explanation and understanding were results of the very extensive implementation of scientific literacy. These findings meant that the more extensive the implementation of scientific literacy is, the higher the levels of scientific literacy along application, along application aspect, the average levels along explanation and understanding were results of the very extensive implementation of scientific literacy.

Table 4
Significant Relationship of the Extent of Implementation with the Level of Scientific Literacy on Each Aspect

ASPECTS OF SCIENTIFIC LITERACY	Computed r-Value	Critical r-Value			INT	r^2
		df	$\alpha = 1\%$	$\alpha = 5\%$		
Sufficiency of Knowledge	0.193	132	0.222	0.170	S	**0.037**
Understanding	0.293				**HS**	**0.086**
Application	0.379				**HS**	**0.144**
Explanation	0.427				**HS**	**0.183**
Overall	**0.475**				**HS**	**0.226**

Legend:
NS -Not Significant
HS -Highly Significant
r -Coefficient of Correlation
r^2 -Coefficient of Determination

Interpretation Guide:
Absolute Computed Value ≥ Critical Value – *Significant*
Absolute Computed Value < Critical Value – *Not Significant*

These findings meant that the more extensive the implementation of scientific literacy is, the higher the levels of scientific literacy along application, explanation and understanding will be achieved, that is, when students are more frequently exposed to teaching strategies, activities and assessment methods that promote scientific literacy, they tend to be more competent in applying and explaining scientific knowledge as well as able to understand scientific knowledge. Understanding, application and explanation are classified as higher-order thinking skills.

These findings conform to the notion of Nbina and Obomanu (2010) that intellectual capability or a higher-order thinking skill is an attribute of a scientifically literate person.

The coefficient of determination of 0.144 along application further implied that 14.4% of the variations of scores of students in application aspect can be accounted for from its direct relationship with the extent of implementation. The explanation aspect which had 0.183 coefficient of determination meant that 18.3% of the variations of scores of students was a result of the very extensive implementation of scientific literacy; and for understanding which had 0.086 coefficient of determination meant that 8.6% of the students' scores can be accounted for from its high significant relationship with the extent of implementation.

For the sufficiency level, the coefficient of determination of 0.037 meant that 3.7% of the scores of the students can be accounted for from its significant relationship with the extent of implementation. These measures of coefficient of determination showed that the levels of scientific literacy of the students in the science-oriented schools were greatly influenced by the schools' extent of implementation of scientific literacy.

The significant relationship revealed along sufficiency aspect implied that having sufficient scientific knowledge was directly attributable to the extent of implementation. This meant that the students of the science-oriented schools achieved average level of scientific literacy along sufficiency because of its very extensive implementation.

To sum up, there was high significant relation between the extent of implementation and level of scientific literacy as revealed by the computed r-value of 0.358. This implied that the average level of scientific literacy of the students in the two schools has been the outcome of the very extensive implementation of scientific literacy. Therefore, the practices of teachers in the two science-oriented high schools contributed to gaining scientific literacy.

Significant Differences in the Extent of Implementation

The extent of implementation of scientific literacy in the science-oriented schools was determined among aspects: teaching strategies, activities and assessment methods and between schools: School A and School B. The findings are presented in Table 5A.

Among Aspects. Table 5A presents the two-way ANOVA that determined the significant differences in the extent of implementation of scientific literacy among aspects. For the rows (aspects), the computed F-value of 10.703 was less than the critical values of 99 at 1% and 19 at 5% levels of significance. Data showed a non-significant difference among the aspects, thus it can be inferred that there was the same extent of implementation among the teaching strategies, activities and assessment methods. Furthermore, all of these three have been very extensively implemented.

Between Schools. For the columns (schools), the computed value of 2.045 compared with the critical values of 98.503 at 1% and 18.513 at 5% levels of significance also showed a non significant difference in the extent of implementation of scientific literacy between the schools. Therefore, the data revealed that the two schools have the same extent of implementation of scientific literacy. Data implied that the teaching strategies, activities and assessment methods of the teachers in the two schools have been implemented at the same extent, as very extensively. School A extensively implemented (weighted mean = 3.14) the teaching strategies while School B implemented them very extensively (mean = 3.40). The two schools had very much extensive implementation along activities; and from Table 2C, the two schools had very extensive implementation of scientific literacy along assessment methods. This meant that although the two schools implemented scientific literacy at varying extents along the strategies, activities and assessment, still their implementation of scientific literacy as a whole was the same.

Table 5A
Two-Way ANOVA on the Significant Differences
In the Extent of Implementation Among Aspects and Between Schools

Source of Variation	SS	df	MS	Computed F	Critical F $\alpha = 5\%$	Critical F $\alpha = 1\%$	INT
Rows (Aspects)	1.171	2	0.585	10.703	99.000	19.000	NS
Columns (Schools)	0.112	1	0.112	2.045	98.503	18.513	NS
Error	0.109	2	0.055				
Overall	**1.392**	**5**					

Legend:
NS – Not Significant
Int – Interpretation

Interpretation Guide:
Significant – When computed value ≥ critical value
Not Significant - When computed value < critical value

SUMMARY OF MEANS

Aspects	Mean
Teaching Strategies	3.40
Activities	4.45
Assessment Methods	3.69

Groups	Mean
School A	3.71
School B	3.99

Significant Differences in the Level of Scientific Literacy

Table 5B shows the significant differences between the levels of scientific literacy among aspects and between schools. Further test of difference using the Duncan's Multiple Range test (DMRT) is shown in Table 5B.1.

Among Aspects. For the rows, the computed F-value of 24.230 was less than the critical value of 29.457 at 1% and but greater than the critical value 9.277 at 5% level of significance. Data showed a significant difference in the levels of scientific literacy among aspects. This meant that there was significantly varying levels of literacy among sufficiency of knowledge, understanding, application and explanation as shown in their summary of means. Students of the science-oriented high schools attained high ability to use or apply scientific and technical terms (7.07). Sufficiency of scientific knowledge (6.31) and explaining scientific phenomena (5.60) and understanding (4.97) had average levels of scientific literacy.

This implied that these parameters ranged from low level to high level questions in the hierarchy of learning and thus an expected difference in the levels achieved by the students.

Table 5B
Two-Way ANOVA on the Significant Differences
In the Level of Scientific Literacy Among Aspects and Between Schools

Source of Variation	SS	df	MS	Computed F	Critical F 1%	Critical F 5%	INT
Rows (Aspects)	4.898	3	1.633	24.230	29.457	9.277	S
Columns (Schools)	2.556	1	2.556	37.943	34.116	10.128	HS
Error	0.202	3	0.067				
Overall	7.656	7					

Legend:
S – Significant (Significant at 5%)
HS – Highly Significant (Significant at 1%)
Int – Interpretation

Interpretation Guide:
Significant – When computed value ≥ critical value
Not Significant - When computed value < critical value

SUMMARY OF MEANS

Aspects	Mean
Sufficiency of Knowledge	6.31
Understanding	4.97
Application	7.07
Explanation	5.60

Groups	Mean
School A	6.55
School B	5.42

Table 5B-1
DMRT of Significant Difference Among the Variables

Variable	Mean	Interpretation
Understanding	4.97	
Explanation	5.60	
Sufficiency of Knowledge	6.31	a
Application	7.07	b

*Note: Means with different letters are significantly different from each other

The findings match the assertion of Benjamin Bloom (Atherton, 2011) that the categories of the cognitive domain can be regarded as degrees of difficulties and that the aspects differ in their complexity.

Further, the levels of scientific literacy on application of scientific knowledge to daily life and sufficiency of scientific knowledge were significantly different from each other. This implied that sufficiency is the simplest aspect and application is more intricate than sufficiency in terms of the level of difficulty.

Between Schools. For the columns, the computed value of 37.943 was greater than the critical values of 34.116 at 1% and 10.128 at 5% levels of significance. Data showed that the two schools had high significant differences in their levels of scientific literacy. This indicated that the two schools had significantly different levels of scientific literacy particularly on the application characteristic. The summary of means showed that school A had a mean of 6.55 while school B had 5.42 only. School A had high level of scientific literacy in application and sufficiency aspects and average on the explanation and understanding aspects while school B had an average level of scientific literacy on the all parameters. This signified that the students of school A performed or achieved higher than school and that the students of the two schools differed in their intellectual abilities. This finding can be due to the fact that school A applies higher selection standards in terms of qualification requirements such as higher cut-off score in their entrance test for new or first year students.

E. CONCLUSIONS

This study determined the extent of implementation and level of scientific literacy of students in the two science-oriented high schools in Camarines Norte. Hereunder are the conclusions for each problem based on the previously mentioned findings:

1. Scientific literacy along teaching strategies was very extensively implemented most particularly through cooperative learning, although strategies outside the classroom such as field trips were done only rarely. Along activities, there was very much extensive implementation, with observation exercises as very much extensive and conducting science investigation as very extensive. Scientific literacy along assessment methods was very extensive in implementation mainly with paper and pencil tests/written assessment and performance assessment but only extensive on project or field work. The extent of implementation of scientific literacy in the three areas was very extensive; very much extensive on activities and very extensive on assessment methods and teaching strategies.
2. The students of science-oriented schools achieved average level of scientific literacy along sufficiency and understanding of scientific knowledge as well as in explaining natural phenomena and high level along application of scientific knowledge. The overall level of scientific literacy of the two science-oriented high schools was average.
3. The extensive application of teaching strategies, activities and assessment methods enhances the level of scientific literacy of students in science-oriented schools.
4. The conclusions for problem number 4 are as follows: a) Among aspects, the teaching strategies, activities and assessment methods have the same extent of implementation. Between schools, there was no significant difference in the extent of implementation of the scientific literacy program; and b) Among aspects, the level of scientific literacy along sufficiency and understanding of scientific knowledge, application of concepts to daily life, and explaining natural phenomena varied significantly. Between schools, there was high significant difference in the level of scientific literacy.

F. RECOMMENDATIONS

Based on the findings and conclusions of the study, the researcher recommends the following:

- For problem number 1: More teaching strategies appropriate outside of the classroom setting may be done so as to enhance the student's scientific knowledge based on actual or real-life situations. The conduct of science investigation or research should be reinforced and implemented very much extensively since it is believed to be the nature of scientific inquiry. Teachers should also use the project or field work in assessing student performance in their projects or field work and participate in trainings on assessment in order to be skilled in making rubrics or scoring guides and hence do objective assessments. The department should regularly conduct teacher education and training/workshops for both science-oriented and non science-oriented school teachers in order to sustain or refresh teachers' science teaching skills along assessment methods and teaching strategies. School Heads should use a standards-based monitoring form so as to effectively supervise the implementation of scientific literacy among science teachers and classes.
- For problem number 2, implement all the lesson targets found in the teaching guide within the allotted time. Engage the students actively in authentic, meaningful, and developmentally appropriate scientific activities that will build their in-depth understanding of scientific knowledge. Sustain the conduct of meaningful activities that encourage life-long learning, always connecting the science concepts to the daily experiences of the students. Carry on the execution of teaching strategies, activities and assessment methods that promote scientific literacy found to have direct influence on the level of scientific literacy.
- For problem number 3, Science I teachers and school heads should strengthen the determined implementation of scientific literacy found to have highly significantly affected the level of scientific literacy of the students. Reinforcement to be done may be through regular

classroom monitoring of utilization of teaching strategies, activities and assessment methods in science classrooms; determining the mean proficiency level of students quarterly and applying some interventions based on the results.

- For problem number 4: Strengthen the use of appropriate teaching strategies, student activities and assessment methods relevant to increasing the level of scientific literacy of the students in order to fully achieve the same extent of implementation along the four aspects. Intensify school level monitoring of the implementation of scientific literacy in the science-oriented high schools.

G. ACKNOWLEDGMENT

To the following persons whose assistance and support have made this study possible, my warmest gratitude:

Dr. Armin A. Fullante, my adviser, for her unselfish and consistent support; Dr. Emelita O. Menes, Atty. Clarita A. Padilla, Ed. D., Dr. Nora Elizabeth F. Maniquiz and Dr. Nelia R. Dante, for their valuable inputs and encouragement; Mr. Salvador C. Arcilla Jr. and Dr. Cesar B. Bermundo for their statistical assistance;

My parents, brothers and sisters, and especially to my husband and children who gave me strength, inspiration and never-ending support; and

Above all, to God Almighty, for the strength, wisdom and grace.

H. REFERENCES

Albarico, Joni M. et al. Teaching Guide in Integrated Science. United Eferza

Publications, 2010, n. p.

Aquino, Gaudencio V. Effective Teaching. Manila: National Bookstore, 2003, n. p.

Dahms, et al. Teaching Strategies and Educational Alternatives. Vol. 1 Mandaluyong City: Academic Publishing Corporation, 2002, n. p.

Oronce, Orlando A. et al. E-Math 4 Advanced Algebra, Trigonometry and Statistics. Manila, Rex Bookstore, 2003, n. p.

Department of Education. “Science Curriculum Framework of Refined Secondary Education Curriculum 2009.” DepEd Manila (2009), n. p.

Tan, Merle C. “Science and Mathematics Education in the Philippines: Basic Education Level.” COMSTE Conference. (2008), n. p.

Abrigo, Juliana E. “Factor Correlates and Science Education Literacy.” Unpublished Masters’ Thesis, University of Nueva Caceres, 2002.

Buera, Fely B. “Guided Inquiry laboratory in Physics: Conceptual Understanding, High Thinking Skills, Science Process Skills and Attitudes of Students.” Unpublished Masters’ Thesis, Bicol University, Legazpi City 2008.

Mendevil, Darwin B. “Development of Students’ Conbceptual Understanding and Problem Solving Skills in Physics.” Unpublished Masters’ Thesis, Bicol University, Legazpi City 2004.

Monreal, Catherine R. “Students Performance in Science and Technology in the City Schools Division of Legazpi SY 2004-2005.” Unpublished Masters’ Thesis, Bicol University, Legazpi City 2004.

Saulon, Butch O. “Factor Correlates, Science Literacy and Career Preference of Senior Students under the Science-oriented Program.” Unpublished Masters’ Thesis, University of Nueva Caceres, Naga City 2008.

Siguenza, Marilyn A. “Competencies and Scientific Attitudes in Integrated Science and Biology in Selected Secondary Schools.” Unpublished Masters’ Thesis, University of Nueva Caceres, Naga City 2010.

Brewer, Carol. “Scientific Literacy in the Classroom.” March 2008. www.actionbioscience.org/.../brwer.html

Coffey, Janet et al. “Assessing Science Learning: Perspectives from Research and Practice.” NSTA Press July, 2008. www.nsta.org.

Cowie, Bronwen et al. “Re-Engaging Students in Science: Issues of Assessment, Funds of Knowledge and Sites for Learning.” International Journal of Science and Mathematics Education 2011. www.springer.com.

Cullata, Richard. “Learning Theories.” 2011. http://instructionaldesign.org and http://tip.Psychology.org

Deboer, George E. “A Historical Look at Scientific Literacy.” Journal of Research in Science Teaching 2002. onlinelibrary.wiley.com.

Decierdo, Pecier “Typhoon Sendong and the Necessity of Scientific literacy in the Philippines.” December 23, 2011. http://filipinofreethinkers.org.

Duschl, Richard A. et al. “Taking Science to School: learning and Teaching Science in Grades k-8.” The National Academies Press Washington, D.C. 2007. www.nap.educ.

Feinstein, Noah. “Salvaging Scientific Literacy.” Science Education Journal 2011. www.csun.edu.

Glynn, Shawn M. et al. “Reading and Writing to Learn Science: Achieving Scientific Literacy.” Journal of Research in Science Teaching 2006. onlinelibrary. wiley.com.

Hazen, Robert M. “Why Should You be Scientifically Literate.” 2002. www.actionbioscience.org.

Khan, Hasan Jawaid. “Gauging Scientific Literacy”. Editorial in Science.” November, 2011. blog.niscair.res.in.

Liu, Xiufeng. “Beyond Science Literacy: Science and the Public.” International Journal of Environmental and Science Education 2009. www.ijese.com.

Miller, Roxanne G. “Thinking Like a Scientist: Exploring Transference of Science Inquiry Skills to Literacy Applications with Kindergarten Students” Electronic Journal of Literacy through Science 2007. www.unr.edu.

Mitman, Alexis L. et al. “Instruction Addressing the Components of Scientific Literacy and Its Relation to Student Outcomes.” American Educational Research Journal vol. 24, no. 4 Winter 1987. http://www.jstor.org/discover/10.2307/1163182?uid=3738824&uid=2129&uid=2&uid=70&uid=4&sid=55839628693

Murcia, K. “Science for the 21st Century: Teaching for Scientific literacy.” 2005. K.murcia@mwdoch.educ.au.

National Science Teachers Association, Board of Directors “The Role of Research on Science Teaching.” September 2010. http://www.nsta.org/pdfs/PositionStatementRese arch.pdf

Nbina, Jacobson Barineka et al. “The Meaning of Scientific Literacy: A Model of Relevance in Science Education.” Journal of Educational Research 2010. www.sciencedirect.com.

Norris, Stephen et al., “How Literacy in Its Fundamental Sense is Centered to Scientific Literacy.” Journal of Educational Research 2003. www.tandf.co.uk.

Nwagbo, Chinwe “Effects of Two Teaching Methods on the Achievement in and Attitude to Biology of Students of Different levels of Scientific Literacy.” International Journal of Educational Research 2006. www.nsta.org.

Oloruntegbe, Kunle Oke et al. “Ecocultural Factors in Students’ Ability to Relate Science Concepts Learned at School and Experienced at Home: Implications for Chemistry Education.” Journal of Chemical Education 2011. www.jce.dvched.org.

Programme for Students International Student Assessment (PISA) 2003 “Assessment Framework- Mathematics, Reading, Science, Problem Solving and Knowledge Skills.” 2003. http://www.educationcounts.govt.nz/ topics/research / pisa_research

Reveles, John M. et al., “Scientific Literacy and Academic identity Formulation.” Journal of Research in Science Teaching 2004. www.agpa.uakron.edu.

Shwartz, Yael. et al. “The Use of Scientific Literacy Taxonomy for Assessing the Development of Chemical Literacy Among High School Students.” The Royal Society of Chemistry Journal 2006. www.rsg.org.

Smith, Mark K. and Howard Gardner. “Multiple Intelligences', and T*he Encyclopedia of Informal Education*.” 2002, 2008. http://www.infed.org/ thinkers/gardner.htm.

Systems for State Science Assessment. “The National Academies Press.” 2005. www.nap.edu.

Turpin, Tammye. et al. “The Effects of an Integrated, Activity-Based Science Curriculum on Student Achievement, Science Process and Scientific Attitudes.” Educational Journal of Literacy Through Science 2004. ejlts.ucdavis.edu

West, Jeff. et al. “Science Literacy: Is Classroom Instruction Enough?.” National Forum of Teacher Education Journal, Volume 20 Number 3, 2010. www.nationalforum.com.

Villanueva, Mary Grace Flores. “Integrated Teaching Strategies Model for Improved Scientific Literacy in Second- Language Learners.” Doctoral Dissertation Nelson Mandela University, South Africa, January 2010. http://www.nmmu.ac.za/documents/theses/MARY%20GRACE%20FLORES %20VILLANUEVA.pdf

Wenning, Carl J. “Assessing Inquiry Skills as a Component of Scientific Literacy.” Journal of Physics Teacher Education Online 2007. www.phy.ilstu.edu.

KABISAAN NG MGA PILING GAWAIN NG GRADE 7 SA ASIGNATURANG FILIPINO SA PAGKATUTO AT PAGLINANG NG KAKAYAHAN SA ILALIM NG K-12 CURRICULUM

DAYSON C. LATA
ISABELA STATE UNIVERSITY
College of Teacher Education
Echague, Isabela
daysonlata@yahoo.com

Abstrak

Ang pag-aaral na ito ay tumatalakay sa kabisaan ng mga piling gawain ng Grade 7 sa asignaturang Filipino sa pagkatuto at paglinang ng kakayahan sa ilalim ng K-12 Curriculum. Sinagot ang mga katanungang, ano-ano ang unang sampung mga gawain na kinagigiliwan at huling sampung mga gawaing kinagigiliwan ng mga mag-aaral? at ano ang performans ng mga mag-aaral sa unang sampung mga gawain na kinagigiliwan at sa huling sampung mga gawaing kinagigiliwan ng mga mag-aaral? Isinagawa ito sa mga mag-aaral ng Grade 7-A ng Jones Rural School, Jones Isabela. Gumamit ng talatanungan sa pangangalap ng datos at weighted mean upang tukuyin ang unang sampung mga gawain na kinagigiliwan at huling sampung mga gawaing kinagigiliwan ng mga mag-aaral. Tinaya ang performans ng mga mag-aaral sa mga gawaing natukoy sa pamamagitan ng pagtatayang formativ na ginamitan ng mga rubriks.

Makikita sa mga nakalap na datos na ang unang sampung gawain na pinakgusto ng mga mag-aaral mula sa itinakdang gawain ng DepEd ay dula-dulaan, pagsulat ng reaksyon o opinyon, pagsulat ng tula, paggawa ng talambuhay pansarili at pang-iba, pagtatala ng mahahalagang pangyayari, character profile, pagbabalita, Venn diagram, talk show, paggawa ng slogan at pagsulat ng talatang naglalarawan. Lubhang may kahusayan ang performans ng mga mag-aaral sa mga gawaing ito.

Sa kabilang dako, hindi gaanong nagpakita ng kahusayan ang mga mag-aaral sa huling sampung kinagigiliwan tulad ng paggamit at paglalapat ng mga napapanahong pangyayari sa pagbuo ng pahayag na may simbolismo, paggawa ng timeline, concept webbing, pagsasagwa ng tableau "frozen pictures, pagsusuri sa nilalaman ng akda, story mountain, paggawa ng suring-papel, paggawa ng buod at pagbuo ng awitin mula sa akdang pampanitikan.

Malaki ang kinalaman ng interes, kahandaan at karanasan ng mga mag-aaral sa kanilang performans sa loob ng klase kaya lubos na iminumungkahi ng awtor na isaalang-alang ang mga ito sa pagpili ng gawaing gagamitin sa pagtuturo.

Keywords – gawain, kabisaan, pagkatuto, paglinang, kakayahan, K-12 Curriculum,

Introduksyon

Napakaraming mga nagaganap na pagbabago sa isang mag-aaral sa panahon ng kanyang pagtuntong sa ikapitong baitang ng sekondarya. Nararamdaman nito ang napakaraming pagbabago sa sarili, sa pangangatawan, damdamin at sa pakikitungo sa kapwa. Kinakailangang harapin ng isang mag-aaral ang mga pagbabagong ito. Dahil sa mga pagbabagong ito, nagbabago rin ang kakayahan at kagustuhan ng mga mag-aaral. Kaya naman nakasalalay sa kanyang kakayahan at kagustuhan ang pagharap sa mataas na pangangailangan ng pagkatuto sa yugtong ito.

Napakabisang pamamaraan upang malinang ang kakayahan gayundin ang talento ng mga mag-aaral ang iba't ibang uri ng gawaing ibinibigay ng isang guro mula sa mga itinakdang gawain ng mga gumawa ng disenyo ng asignaturang Filipino sa ilalim ng K-12 Kurikulum. Tumutugon ito sa layunin ng kurikulum na makapagprodyus ng "globally competitive learners". Subalit, hindi pare-pareho ang pagtanggap at pagtugon ng mga mag-aaral sa mga itinakdang gawaing ito sa loob ng klase. May mga gawaing higit na kinagigiliwan at may mga gawaing kinababagutan at pinagsasawahan ng mga mag-aaral.

Ang mga hilig ay preperensya sa mga partikular na uri ng gawain. Ang mga ito ang gumaganyak sa iyo na kumilos at gumawa. Nagsisikap ka kung may motibasyon ka dahil gusto mo ang iyong ginagawa, hilig mo ito at nagagabayan ka ng mga pagpapahalaga na makatutulong sa iyong pag-unlad. (Santamaria, 2006)

Pangkalahatang layunin ng K-12 Kurikulum na makalinang ng isang buo at ganap na Pilipinong may kahusayan sa literasi. Kaugnay nito, layunin ng pagtuturo ng Filipino na malinang ang kakayahang komunikatibo, replektibong mapanuring pag-iisip, pagpapahalagang pampanitikan ng mga mag-aaral sa pamamagitan ng mga babasahin at teknolohiya tungo sa pagkakaroon ng pambansang pagkakakilanlan, kultural literasi at patuloy na pagkatuto upang makaagapay sa mabilis na pagbabagong nagaganap sa daigdig. Sa ikatatamo ng mithiing ito, kailangan ng mabisang pamamaraan at kagamitang panturo ng mga guro na angkop sa kakayahan ng kanyang mga mag-aaral.

Isinaalang-alang sa pagbuo ng kurikulum ang pangangailangang panlipunan, lokal at global na pamayanan, maging ang kalikasan at pangangailangan ng mga mag-aaral. Pinagbatayan din ang legal na batas pang-edukasyon, at mga teoryang pilosopikal ng edukasyon tulad ng kay Piaget (Developmental Stages of Learning), Vygotsky (Cooperative Learning), Bruner (Discovery Learning), Gagne (Hierarchical Learning), Ausubel (Interactive/ Integrated Learning) at ng ating pambansang bayaning si Dr. Jose P. Rizal na nagsabing “nasa kabataan ang pag-asa ng bayan”. Dahil ang Filipino ay nasa disiplina ng wika, pinagbatayan ang mga teorya sa kalikasan at pagkatuto ng wika, mga teorya/simulain sa pagsusuring panlitersi at mga pagdulog sa pagtuturo ng wika (W1, W2, W3) at pagtuturo ng mga akdang pampanitikan at tekstong palahad. (K to 12 Filipino Gabay Pangkurikulum, 2013)

Ang pokus ng pag-aaral na ito ay tukuyin ang mga gawain na kinagigiliwan at di gaanong kinagigiliwan ng mga mag-aaral upang maging gabay ng mga guro sa pagbibigay ng mga gawain. Sa kadahilanang ang preperensya sa isang gawain ay napakahalaga sa paglinang ng kanilang kakayahan sa pamamagitan ng pag-eebalweyt ng kanilang performans bago, habang at pagkatapos maisagawa ang mga gawain. Kailangan ang pag-aaral na ito sapagkat sa pagtataglay ng mga kakayahan sa mga gawaing ito ay mahalaga upang mapaunlad ang sariling pagkatao. Kritikal ang panahon na nasa sekondarya ang isang estudyante. Ito ay maaaring bumuo o sumira ng kanyang kinabukasan. Ang tamang pagpili ng pamamaraang gagamitin ng guro sa pagtuturo ay makatutulong upang pahalagahan ng mga mag-aaral ang mga karanasang nakatutulong sa kanyang pagkatuto.

Paglalahad ng Suliranin

Sinagot ng pag-aaral na ito ang sumusunod na katanungan:

1. Ano-ano ang sampung mga gawaing higit na kinagigiliwan ng mga mag-aaral mula sa mga gawaing itinakda ng DepEd?
2. Ano ang performans ng mga mag-aaral sa sampung mga gawaing higit na kinagigiliwan ng mga mag-aaral mula sa mga gawaing itinakda ng DepEd?
3. Ano-ano ang sampung mga gawaing huling kinagigiliwan ng mga mag-aaral mula sa mga gawaing itinakda ng DepEd?
4. Ano ang performans ng mga mag-aaral sa huling sampung mga gawaing kinagigiliwan ng mga mag-aaral mula sa mga gawaing itinakda ng DepEd?

Metodo

Disenyo ng Pananaliksik

Deskriptiv-evalwativ ang pamaraang ginamit ng mananaliksik. Tinukoy at inilarawan ang sampung mga gawaing itinakda ng DepEd na kinagigiliwan at hindi kinagigiliwan ng mga mag-aaral. Nagsagawa ng ebalwasyong formativ sa performans ng mga mag-aaral sa mga gawaing kanilang kinagigiliwan at hindi kinagigiliwan.

Tagatugon ng Pag-aaral

Ang mga Grade 7-A ng Jones Rural School, Main Campus, Jones, Isabela ang ginamit na mga tagatugon sa pag-aaral na ito.

Pangangalap ng Datos

Gumamit ang mananaliksik ng talatanungan upang matukoy ang sampung higit na kinagigiliwan at huling kinagigiliwang mga gawain ng mga mag-aaral ng Grade 7-A mula sa mga gawaing itinakda ng DepEd. Pagkatapos tukuyin ang sampung kinagigiliwan at huling kinagigiliwang mga gawain, ginamit ang mga ito bilang gawaing panturo. Tinaya ang performans ng mga mag-aaral sa bawat gawaing ginamit sa pagtuturo sa pamamagitan ng paggamit rubriks at empirikal na obserbasyon.

Istadistikang Paraan at Pag-unawa sa mga Datos

Ang mean at average ang mga instrumentong pang-istadistika na siyang ginamit sa pag-aaral na ito.

Resulta at Talakayan

Unang Sampung Gawaing Kinagigiliwang ng mga Mag-aaral mula sa mga Gawaing Itinakda ng DepEd

Talahanayan 1. Unang Sampung Gawaing Kinagigiliwan ng mga Mag-aaral

Mga Gawain	Mean	Deskripsyon	Ranggo
Dula-dulaan	3.13	Lubos na kinagigiliwan	1
Pagsulat ng reaksyon o opinyon	2.98	Mas kinagigiliwan	2
Pagsulat ng tula	2.84	Mas kinagigiliwan	3
Paggawa ng talambuhay pansarili o pang-iba	2.82	Mas kinagigiliwan	4
Pagguhit ng tagpuan at maikling paglalarawan	2.78	Mas kinagigiliwan	5.5
Pagtatala ng mahahalagang pangyayari	2.78	Mas kinagigiliwan	5.5
Pagbabalita	2.73	Mas kinagigiliwan	7
Venn Diagram	2.71	Mas kinagigiliwan	8.5
Talk Show	2.71	Mas kinagigiliwan	8.5
Paggawa ng Islogan	2.64	Mas kinagigiliwan	10.5
Pagsulat ng talatang naglalarawan	2.64	Mas kinagigiliwan	10.5

Mula sa nakalap na datos, makikita sa Talahanayan 1 ang unang sampung gawain na kinagigiliwan ng mga mag-aaral ng Grade 7-A mula sa itinakdang gawain ng DepEd. Isa sa mga sampung gawaing ito ang lubos na kinagigiliwan ng mga mag-aaral, ang dula-dulaan na may mean na 3.13. Siyam sa mga ito ang may deskripsyon na mas kinagigiliwan. Ang mga gawaing ito ay pagsulat ng reaksyon o opinyon na may mean na 2.98; pagsulat ng tula na may mean na 2.84; paggawa ng talambuhay pansarili o pang-iba na may mean na 2.82; pagguhit ng tagpuan at maikling paglalarawan at pagtatala ng mahahalagang pangyayari na kapwa may mean na 2.78; pagbabalita na may mean na 2.73, Venn Diagram at Talk Show na kapwa may mean na 2.71; at paggawa ng islogan at pagsulat ng talatang naglalarawan na kapwa may mean na 2.64.

Ang sampung mga gawain na higit na kinagigiliwan ng mga mag-aaral ay yaong mga gawaing saykomotor lalong-lalo na ang dula-dulaan, pagguhit, pagbabalita at paggawa ng islogan. Mapapansin na ang mga gawaing ito ay may kinalaman sa kanilang talento, interes at kakayahang taglay.

<u>Performans ng mga Mag-aaral sa Sampung mga Gawaing Higit na Kinagigiliwan ng mga Mag-aaral mula sa mga Gawaing Itinakda ng DepEd</u>

Sa simula ng pagsasagawa ng gawain, makikita ang kasabikan habang ibinibigay ang panuto at rubriks sa pag-eebalweyt. Madaling nauunawaan ang ibinibigay na panuto sa gawaing isasagawa dahil sa kasabikan at pakikinig nang mabuti. Ito ang naging performans ng mga mag-aaral sa sampung gawaing higit nilang kinagigiliwan batay sa obserbasyon. Napansin na habang isinasagawa ang gawain, ang mga mag-aaral ay may kasiyahan at kasiglahan; maraming ideya at kaalamang naibabahagi; nakikilahok at tumutulong sa kagrupo o kaya'y gumagawa kahit na isahan ang gawain; nakatatapos sa tamang oras ng gawain; nakasusunod sa mga pamantayan; malikhaing nakabubuo at nakapag-uulat ng gawain; nakapagbibigay ng malaman at kapaki-pakinabang na impormasyong nakapaloob sa awtput at nakapagpapamalas ng kahanga-hangang kahusayan sa pagsasagawa ng gawain.

Talahanayan 2. Marka ng mga Mag-aaral sa Sampung Gawaing Higit na Kinagigiliwan

Mga Gawain	Average ng Natamong Marka
Dula-dulaan	94.32
Pagsulat ng reaksyon o opinyon	91.46
Pagsulat ng tula	92.18
Paggawa ng talambuhay pansarili o pang-iba	92.06
Pagguhit ng tagpuan at maikling paglalarawan	93.67
Pagtatala ng mahahalagang pangyayari	92.6
Pagbabalita	93.8
Venn Diagram	91.08
Talk Show	92.77
Paggawa ng Islogan	94.21
Pagsulat ng talatang naglalarawan	90.3
Kabuuang Bahagdan	**92.586**

Nagtamo ang mga mag-aaral ng mataas na marka sa kanilang performans na may kabuuang bahagdan na 92.58. Makikita sa Talahanayan 2 na ang dula-dulan na siyang nanguna sa kanilang kinagigiliwang gawain nagtamo ng pinakamataas na marka ang mga mag-aaral na mayroong average na 94.32. Gayundin sa pagsulat ng talatang naglalarawan na siyang panghuli sa sampung gawain na kanilang kinagigiliwan ang may pinakamababang markang natamo ng mga mag-aaral na 90.3. Kung susuriin ang buong talahanayan, walang mahalagang relasyon ang pagkakasunod-sunod ng mga gawain ayon sa kanilang kagustuhan sa antas ng performans ng mga mag-aaral.

<u>Sampung Gawaing Huling Kinagigiliwan ng mga Mag-aaral mula sa mga Gawaing Itinakda ng DepEd</u>

Talahanayan 3. Sampung Gawaing Huling Kinagigiliwan ng mga Mag-aaral

Mga Gawain	Mean	Deskripsyon	Ranggo
Paggawa ng plot profile	1.96	Hindi kinagigiliwan	30
Paggamit at paglalapat ng mga napapanahong pangyayari sa pagbuo ng pahayag na may simbolismo	2.02	Kinagigiliwan	29
Paggawa ng timeline	2.07	Kinagigiliwan	28
Concept webbing	2.13	Kinagigiliwan	27
Pagsasagawa ng tableau "frozen pictures"	2.22	Kinagigiliwan	26
Pagsusuri sa nilalaman ng akda	2.24	Kinagigiliwan	25
Story Mountain	2.31	Kinagigiliwan	23.5
Paggawa ng suring-papel	2.32	Kinagigiliwan	23.5
Paggawa ng buod	2.36	Kinagigiliwan	22
Pagbuo ng awitin mula sa akdang pampanitikan	2.38	Kinagigiliwan	21

Makikita sa Talahanayan 3 ang sampung gawaing huling kinagigiliwan ng mga mag-aaral. Isa sa mga ito ay may deskripsyon na hindi kinagigiliwan, ang paggawa ng plot profile na may mean na 1.96. Samantalang siyam sa mga ito ang may deskripsyon na kinagigiliwan. Ito ang mga gawaing paggamit at paglalapat ng mga napapanahong pangyayari sa pagbuo ng pahayag na may simbolismo na may mean na 2.02; paggawa ng timeline na may mean na 2.07; concept webbing na may mean na 2.13; pagsasagwa ng tableau "frozen pictures na may mean na 2.22; pagsusuri sa nilalaman ng akda na may mean na 2.24; story mountain na may mean na 2.31; paggawa ng suring-papel na may mean na 2.32; paggawa ng buod na may mean na 2.36 at pagbuo ng awitin mula sa akdang pampanitikan na may mean na 2.38.

Ang mga gawaing ito ay huling kinagigiliwan ng mga mag-aaral sapagkat nahihirapan ang mga mag-aaral na isagawa ang mga ito. Hindi ito nakaakma sa kanilang interes, kakayahan at talentong tinataglay. Mapapansin na ang mga gawaing ito ay nangangailangan ng mataas na kahandaan, karanasan at motibasyon sa mag-aaral upang lubos na maisakatuparan ang mga ito.

Performans ng mga Mag-aaral sa Huling Sampung mga Gawaing Kinagigiliwan ng mga Mag-aaral mula sa mga Gawaing Itinakda ng DepEd

Base sa obserbasyon, katulad din sa performans ng mag-aaral sa sampung gawaing higit nilang kinagigiliwan, kakikitaan din sila ng kasabikan habang ibinibigay ang mga panuto at rubriks ng pag-eebalweyt sa isasagawang gawain. Madali rin nilang maunawaan ang ibinibigay na panuto sa gawain dahil sa pakikinig nang mabuti. Ngunit sa kanilang pagsasagawa sa ilang mga gawain napansin ang ilang mga problema tulad ng pakikipagkwentuhan sa kasamang ayaw at hindi familyar sa gawain, pagsasabi at pagrereklamong mahirap gawin, hindi pagsunod sa panuto, kawalan ng pagkamalikhain, at pagkakaroon ng kaunting kaguluhan at ingay sa loob ng klase.

Talahanayan 4. Marka ng mga Mag-aaral sa Sampung Gawaing Huling Kinagigiliwan

Mga Gawain	Average ng Natamong Marka
Paggawa ng plot profile	89.56
Paggamit at paglalapat ng mga napapanahong pangyayari sa pagbuo ng pahayag na may simbolismo	89.44
Paggawa ng timeline	90.90
Concept webbing	91.06
Pagsasagawa ng tableau “frozen pictures”	92.53
Pagsusuri sa nilalaman ng akda	90.6
Story Mountain	90.5
Paggawa ng suring-papel	91.8
Paggawa ng buod	89.45
Pagbuo ng awitin mula sa akdang pampanitikan	92.43
Kabuuang Bahagdan	**90.827**

Makikita sa Talahanayan 4 ang average ng natamong marka ng mga mag-aaral. Tatlo sa mga gawaing ito nakatamo ang mga mag-aaral ng markang mas mababa sa 90% tulad ng paggawa ng buod, paggawa ng plot profile at paggamit at paglalapat ng mga napapanahong pangyayari sa pagbuo ng pahayag na may simbolismo na kung saan dalawa sa mga ito ang pinakahuling kagustuhan ng mga mag-aaral. Nagtataglay pa rin ng pasadong marka ang mga mag-aaral ngunit mas mababa ang mga ito kumpara sa mga gradong natamo sa mga gawaing higit na kinagigiliwan. Pinatutunayan ito ng kabuuang bahagdan natamo na 90.82 kontra sa 92.58.

Konklusyon

Batay sa pagsusuri sa kinalabasan ng pag-aaral, ang mga sumusunod na konklusyon ay nabuo:

1. Malaki ang kinalaman ng interes, kahandaan at karanasan ng mga mag-aaral sa kanilang performans sa loob ng klase.

2. Nagpapakita ng kahusayan ang mga mag-aaral sa gawaing saykomotor kaysa kognitiv.

3. Mataas ang marka at lebel ng performans ng mga mag-aaral sa mga gawaing higit nilang kinagigiliwan. Samantalang hindi malayo ang agwat ng marka at lebel ng performans ng mga mag-aaral sa mga gawaing huling kinagigiliwan ngunit nagkaroon ng bahagyang problema sa pagsasagawa ng mga ito.

4. Lahat ng mga itinakdang gawain ng DepEd sa asignaturang Filipino ay kapwa mahalaga upang madebelop ang apat na makrong kasanayan at kasanayang komunikatibo ng mga mag-aaral.

Walang isang nakahihigit na estratehiyang gagamitin sa pagtuturo, ang angkop na motibasyon sa mga mag-aaral ay nagpapanatili ng kawilihan ng mga mag-aaral sa pakikibahagi sa mga gawain sa loob ng klase.

Rekomendasyon

Bilang pagpapahalaga sa konklusyong nabuo sa pananaliksik na ito, ang mga sumusunod ay inirerekomenda:

1. Sa pagpili ng gawaing gagamitin sa pagtuturo kinakailangang isaalang-alang ang interes, kakayahan at kahandaan ng mga mag-aaral na tuturuan.

2. Sanayin at himukin ang mga mag-aaral na gumawa ng mga gawaing mental upang hindi lang nakapagpapamalas ng mga aktibong gawain bagkus ay magkaroon din ng analitikal at kritikal na pag-iisip.

3. Alamin ang mga gawaing hindi kinagigiliwan ng mga mag-aaral at kung hindi maiiwasan ang paggamit ng mga ito, kinakailangan ng istriktong paggabay, superbisyon at motibasyon ng mga guro upang mapataas ang marka at performans ng mga mag-aaral dito.

4. Magkaroon ng baryasyon sa paggamit ng mga gawain sa pagtuturo, gamitin ang mga itinakdang gawain ng DepEd sa asignaturang Filipino na angkop sa paksa at naaayon sa interes, kakayahan at kahandaan ng mga mag-aaral.

5. Gumawa ng kapareho o kaugnay na pag-aaral at gawing tagatugon ang mga mag-aaral na nasa mababang seksyon.

Pagkilala

Lubos na nagpapasalamat ang mananaliksik kay Norie V. Marquez ng Jones Rural School, Jones, Isabela sa di matatawarang pangangalap ng mga datos at sa kanyang mga Grade 7-A na mag-aaral.

APPLICATION OF HIERARCHICAL PATHFINDING APPROACH FOR MAZE PROBLEM SOLVING

*Marlon R. Perena**
Department Chairman
College of Engineering and Information Technology
Cavite State University
Indang, Cavite Philippines
dit0055mrperena@gmail.com
Julie Ann Lontoc
Ezra Marie Ramos

The study, Application of Hierarchical Pathfinding Approach for Maze Problem Solving was conducted to be able to create a maze game solver called Himagsikan. The concept behind this game is for the user to create a maze for the Artificial Intelligent Agent to analyze and solve. The software was based on the idea of incorporating Philippine History in an entertaining and educational game. Specifically, it aimed to develop Filipino inspired maze game software capable of path finding within a user created maze using Microsoft Visual Basic .Net and to test and evaluate the efficiency of the developed solution.

Iterative Development Process Model was used in the development of the game which include different phases such as: planning, analysis of the system requirements, designing the system, implementation phase, testing and evaluation.

Softwares used in the study were the following: Windows XP SP3 was used as the operating system, Microsoft Visual Basic .Net as the programming language and Microsoft Word for the documentation.

Result of the acceptance testing revealed that software received "excellent" rating in all the indicators such as: User Interaction, Reliability, Consistency, Accuracy, Efficiency and Technical Aspect of the Software and Materials. The Hierarchical Pathfinding A* algorithm also performed well in its application in the developed software.

Keywords-HPA*, pathfinding approach, AI, maze

I. INTRODUCTION

Artificial Intelligence plays an important role in the field of Game Development especially in Strategy Games such as maze solving. Creating robust artificial intelligence is one of the greatest challenges for game developers, yet the commercial success of a game is often dependent upon the quality of the AI (Millington & Funge, 2009). The nature of a maze is to find a path from a source to a certain destination. This has been the conventional way of how the flows of maze games are. So, the concept of a system that let the user control over the maze setup letting the artificial intelligent computer player solve the puzzle at hand came up.

Choosing a path finding technique that performs well is important to the success of Artificial Intelligence in computer games. This is for the reason that path finding is a fundamental building block for the field of Artificial Intelligence and maze solving. Path finding strategies are usually employed as the core of any AI movement system (Graham, et.al, 2003). Pathfinding algorithms are required for many commercial video games, since most games include characters that need to find their way around the world. To make the AI agents' behavior look realistic, the agents must start moving quickly; they do not have unlimited time to plan. In addition, the agents should choose a path that quickly leads to the goal. Extremely long paths will make the agent look unintelligent (Jansen & Buro, 2007).

Path-finding is still a development research in creating games. Several tactics, techniques and strategies are the factors to consider in building this kind of game. Algorithms such as HPA* path-finding combine with essential technologies and artificial intelligence can really gives a perfect view of game creation.

II. STATEMENT OF THE PROBLEM

Many modern games *do* have high-quality path finding, and it often works well in some of the games. But there are still too many games that do path finding the same way that games did in the 1990s providing inefficient plotting of the routes. This problem is very common in computer games such as first-person games and strategy games in which the world dynamically changes (Tozour, 2008). Artificial intelligent opponents in commercial computer-games are almost exclusively controlled by programmed scripts that contain "holes" allowing the human player to take advantages of it by means of the experience. Hence the subject "How can game software using an efficient path finding technique be applied using the chosen Hierarchical Pathfinding A* (HPA*) algorithm?" is raised.

Input/Output Handler module handles the graphical interface of the game for the players. At the Initialization Phase, the user chooses a character to use and a game mode to play. All information given by the user that is handled by this sub-module is passed to the next sub-module, the Game Play. This serves as the handler of the maze states. It converts the information from the Initialization Phase to the needed maze information. This module handles the Main Maze of the game. It generates the maze for each level of the mode. The generated maze will modify by the user to create a maze solution. When the user modifies the generated maze before the execution, the current state of the maze will transmit to Artificial Intelligence module. Therefore, the modified state will transmit to Artificial Intelligence sub-module, the Hierarchical Search. The Final Phase evaluates the result of the ended game. This sub-module shows if the user is completed the level and can move to the next level or failed and can retry the level again.

The Artificial Intelligence module controls the overall game play of the software. It enables the AI to find the shortest path towards the goal state through the implementation of the Hierarchical Pathfinding A* (HPA*) algorithm. This module is the principle "brain" behind the game, enabling the AI to find the best path toward the goal first. The module composed two sub-modules; the Topological Abstraction is the pre-processing phase of a grid and the first step in building the framework for hierarchical search. This sub-module performs two methods, first is the Abstract Maze; this method abstracts the maze into linked local clusters and set entrances between adjacent clusters. The second is the Build Graph where in this method creates an abstract graph of the problem. First, it creates the nodes and the inter-edges, and next builds the intra-edges. In transition points on each entrance, connect the nodes inside the same cluster. It searches for a path between two nodes and returns the path cost. After the methods are done the Final Abstract Graph will be generated and will transmit to Hierarchical Search sub-module. The Hierarchical Search performs the online search or commonly called runtime processing of the algorithm. The first phase connects the start and goal position to the border of the cluster. This step is completed by inserting the start plus goal node into the abstract graph. The method Search For Path performs a search at the highest level to find an abstract path from start to goal. Refine the path to a low-level representation using the method Refine Path. Finally, the method Smooth Path improves the quality of the low-level solution. The result (pre-computed path) will transmit to Game Play sub-module in Input/Output Handler module and serve as the movement of the AI through the maze.

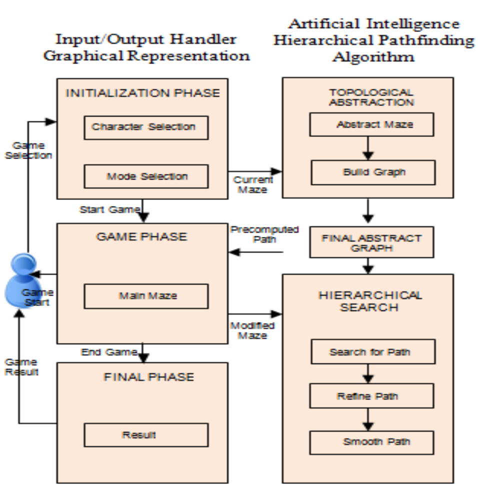


Figure 1. Theoretical Framework of Hierarchical Pathfinding Approach for Maze Problem Solving

In developing the software, the researchers used an iterative lifecycle model. The five facets of a software product are integrated so that business objectives drive the entire process, and the requirements and design are continuously refined while the code evolves. The project plan arranges the development into small releases, and mandates continuing integration of all coded components, incremental builds, and periodic validation of refined requirements and design. It also enables continuing refinement and integration to avoid any unpleasant surprises just before the delivery date.

Software is developed incrementally while using the Iterative software development method. This allows the developer to take advantage of the information that was acquired during the development of the first increment while creating the next deliverable increment of the project. The project starts with the simple implementation of the entire project, which evolves and gets enhanced with each successive increment. This goes on until the full system is implemented and delivered.

Games normally go through a long series of iterations and testing before an end product is delivered. This is the reason why the iterative model is extensively used for game development.

These will include planning, analyzing the system requirements, designing the system, implementation phase, testing and evaluation. (Figure 2).

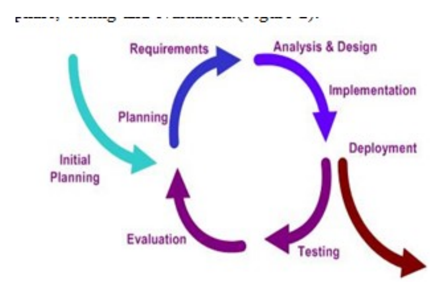


Figure 2. Iterative Development Process Model

For the materials, the researchers used a computer with the following specifications: Pentium 4 CPU 1.70 GHz (Recommended) or higher running in Microsoft XP Operating System Service Pack 3; 512 MB Ram Memory (typical) or 2GB DDR2 memory (recommended); and 80 GB of hard disk space.

For the software, the researchers used Microsoft Visual Studio 2010 Professional Edition, .Net Framework 4.0, and Visual Basic.Net as the programming language, Flash CS5 for animation and MS Word for documentation.

IV. FINDINGS

The figure below shows that before the game starts the user must select one (1) of the four (4) available characters and 1 of the three (3) available game modes. Once the player was able to complete the necessary requirements the user must create a maze according to the objectives of each game mode but they should always bear in mind to leave even a single path for the AI Agent to pass through leading to the goal state. There were also requirements needed for the Artificial Intelligent Agent to work. Such requirements were a clear path towards the goal state and a search function (HPA*).

Fig. 3. Character Selection

After choosing the desired character the software will then load the Main Menu. This includes the Mode Selection, Instruction and Walkthrough as shown in Figure 4. The Mode Selection Window is where the user will decide from three (3) Game Modes available. At the beginning only the first mode is enabled. In order to unlock succeeding modes the player must first complete previous modes. The player can choose from Time Trial Mode (Ang Paglalakbay), Limited Mana Mode (Pakikipagsapalaran) and Last Trial Mode (Huling Pagsubok). Only after that the software will show the Main Maze wherein the user will play and create mazes. In Time Trial Mode the user will design a maze wherein his main objective is to extend the time spent by the AI inside the maze before reaching the goal

Fig. 4. Main Menu Window

Figure 5 illustrates the Time Trial Mode of the game. Same concept goes with the Limited Mana Mode, it only differs because there is a pre-created map and the user has limited number of blocks. Both modes have a certain time to beat for each and every level. If the player exceeds the beating time it will mean greater score. The screen layout of the Limited Mana Mode is shown in Figure 6.

Fig. 5. Time Trial Mode

Fig. 6. Limited Mana Mode

The last mode is quiet tricky, the user has limited number of blocks and should be able to lengthen the time of the AI Agent exactly as the game prescribed. Figure 7 shows the screen layout for mode 3. In the environment of every mode the user can see different buttons like that of "Takbo", "Ulit" and "Suko", also present is the Time to Beat, Score and the Clock

Fig. 7. Last Trial Mode

The Instruction Window contains the basic information needed by a user to guide him in playing the game as shown in Figure 8. The Walkthrough Window provides glimpse of the possible answer for the mazes.

As a reward for completing levels a trivia pop-out after every maze. Figure 9 depicts a sample trivia generated by the software.

When the user ranks as one of the highest score gainers a window will prompt allowing him to enter his name beside his best time record and score achieved. The player can enter his name using the keyboard or by making use of the provided on-screen keyboard. Figure 10 illustrates the High Score Window.

Fig. 8. Instruction Window

Fig. 9. Trivia Window

Fig 10. High Score Window

Software Iterations

Table 1. Software Iterations

Iterations	Capabilities
1	• Preliminary Design • Placing Blocks • Delete Blocks
2	• Allows Character Selection • Allows Mode Selection • Generate Maps for Mode 1, 2 and 3 • Character Designs
3	• Capable of Finding the Shortest Path
4	• Presents Clear Game Sequence • Follows rules for the Game Modes
5	• Complete software

The initial software developed during the first iteration serves very limited purpose, it only allows the user to place blocks on the map and delete them. The game modes weren't established at that time and the only purpose of the software is to give the user bird's eye view of how the software will function.

The second version of the software was capable of allowing character selection, mode selection and generating design of the maps for modes 1, 2 and 3. The designs of the characters to be used were also present in the second iteration of the software.

During the third iteration the software was able to find the shortest path among the created mazes by applying Hierarchical Pathfinding A* algorithm.

With regards to the result of the conducted evaluation and feedback from the respondents' changes in the software was also made. The researchers worked on the design part of the software. The user can now see the flow of the game from the Main Menu up to the game play itself. Instructions were also placed in this part of the software development. Rules were also set up for each game mode. Changes on the terms used, fonts and styles and background designs was made.

Final touches were present during the last iteration. Sounds were incorporated to the game to make it more interesting for players. Additional functions like High Score was also available. A credit of the game was also present giving additional entertainment value for the game.

Table 2. Assessment of the Respondents on the User Interaction of the Software

Indicator	Mean	SD	Interpretation
1. Ability of the software to interact with the user	4.52	.58	Excellent
2. Easy to use and navigate	4.49	.61	Excellent
3.Controls operate according to their function	4.50	.66	Excellent
4. Individual commands are handled constructively.	4.34	.70	Excellent
5. If there are "help" and "hint" messages, they are easy to access	4.24	.88	Excellent
6. Ability to teach or instruct the user	4.37	.71	Excellent

Table 2 presents the average perception of the respondents on the software based on "User Interaction" indicator. The table reveals that an "excellent rating" for all of the indicators such as: indicator # 1 *the ability of the software to interact with the user easily* ($\bar{x}$ = 4.52, SD= .58), indicator # 2 *the software is easy to use and navigate* ($\bar{x}$ = 4.49, SD= .61), indicator # 3 *the controls operate according to their function* ($\bar{x}$ = 4.50, SD= .66),), indicator # 4 inv*alid commands are handled constructively* ($\bar{x}$ = 4.34, SD= .70) and indicator # 5 *if there are "help" and "hint" messages, they are easy to access* ($\bar{x}$ = 4.24, SD= .88). indicator # 8 *the ability of the software to teach or instruct the users* ($\bar{x}$ = 4.37, SD= .71).

Table 3. Assessment of Respondents on the Reliability of the Software

Indicator	Mean	SD	Interpretation
1. The software provides reliable information.	4.37	.68	Excellent
2. The software provides error trapping.	4.23	.70	Excellent
3. The software provides clear rules and mechanics on how to play the game.	4.36	.67	Excellent
4. The software operates whenever needed.	4.46	.68	Excellent

Table 3 presents the average perception of the respondents on the software based on "Reliability" indicator. The table reveals that an "excellent rating" for all of the indicators such as: indicator # 1 *the software provides reliable information* ($\bar{x}$ = 4.37, SD= .68), indicator # 2 *the software provides good error trapping* ($\bar{x}$ = 4.23, SD= .70), indicator # 3 *the software provides clear rules and mechanics on how to play the game* ($\bar{x}$ = 4.36, SD= .67), and indicator # 4 the *software operates whenever needed* ($\bar{x}$ = 4.46, SD= .68).

Table 4. Assessment of the Respondents based on the Consistency of the Software

Indicator	Mean	SD	Interpretation
1. Uniformity of the function is being presented	4.44	.63	Excellent
2. The integrity of data is maintained all throughout its operation	4.43	.63	Excellent

Table 4 presents the average perception of the respondents on the software based on "Consistency" indicator. The table reveals that an "excellent rating" for all of the indicators such as: indicator # 1 *uniformity of the function is being presented* ($\bar{x}$ = 4.44, SD= .63), and indicator # 2 *the integrity of data is maintained all throughout its operation* ($\bar{x}$ = 4.43, SD= .63).

Table 5. Assessment of Respondents on the Accuracy of the Software

Indicator	Mean	SD	Interpretation
1. The software is free from error.	4.30	.74	Excellent
2. The software is contain of exact and true information.	4.31	.70	Excellent
3. The software presents accurate result.	4.48	.65	Excellent

As seen on Table 5, the respondents perceived the software is excellent in all indicators under "Accuracy" such as: 1. *the software is free from errors* ($\bar{x}$ = 4.30, SD= .74), 2. *the software contains exact and true information* ($\bar{x}$ = 4.31, SD= .70), and 3. *the software presents accurate results*($\bar{x}$ = 4.48, SD= .65).

Table 6. Assessment of the Respondents on the Efficiency of the Software

Indicator	Mean	SD	Interpretation
1. The software performs each required function.	4.39	.67	Excellent
2. Each function operates in a reasonable reasonable time.	4.43	.65	Excellent
3. The software functions in its desired manner	4.37	.67	Excellent

As seen on Table 6, the respondents perceived the software is excellent in all indicators under "Efficiency" such as: 1. *the software performs each required function* ($\bar{x}$ = 4.39, SD= .67), 2. *each function operates in a reasonable response time* ($\bar{x}$ = 4.43, SD= .65), and 3. *the software functions in its desired manner* ($\bar{x}$ = 4.37, SD= .67).

Table 7. Assessment of Respondents on the Technical Aspects of the Software and Materials

Indicator	Mean	SD	Interpretation
1. The program is reliable in normal use	4.45	.60	Excellent
2. Uses standard equipment that is reliable, available and applicable to a variety of uses.	4.48	.64	Excellent
3. Graphics and colors are used for appropriate instructional reasons.	4.53	.67	Excellent
4. If the program requires especial equipment, the requirements are minimal and clearly stated by the developer.	4.36	.69	Excellent

As seen on Table 7, the respondents perceived the software is excellent in all indicators under "Technical Aspect of the Software and Materials" such as: 1. *the program is reliable in normal use* ($\bar{x}$ = 4.45, SD= .60), 2. *the software uses standard equipment that is reliable, widely available, and applicable to a variety of uses* ($\bar{x}$ = 4.48, SD= .64), 3. *computer capabilities such as graphics and color are used for appropriate instructional reasons* ($\bar{x}$ = 4.53, SD= .67) and 4. *if the program requires special equipment, the requirements are minimal and clearly stated by the developer* ($\bar{x}$ = 4.36, SD= .69).

V. CONCLUSION

After the completion of the game, the following items were concluded:

1. The study "Hierarchical Path finding Approach for Maze Problem Solving" produced a game software entitled Himagsikan which lets the user create his own maze and enables the Artificial Intelligent Agent solve it by applying the algorithm called Hierarchical Pathfinding A* algorithm.

2. The produced software is very Filipino in nature allowing everyone to appreciate the game experience better while sharping their minds in the process of making mazes and learning new things with the reward history trivia.

3. With regards to the application of Hierarchical Path finding A* algorithm with the software, it is foreseen that bigger map size is needed to implement the chosen algorithm.

4. Through interviews, survey and research work, the study was able to recognize different problems regarding path finding in games and the need to create a game inspired by Filipino history while promoting edutainment (combination of entertainment and educational benefits). Requirements were identified through a Use Case Diagram which serves as basis in developing a game software.

Using the facts and information gathered and the requirements discovered a pathfinding solution was implemented in this study. With the use of Visual Basic .Net a game was produced that relatively answered problems encountered.

The software evaluation was conducted on different levels of education from primary to tertiary including those with professional status. The software also had undergone different testing to verify its performance. The evaluation and testing proved that the generated program satisfactorily achieved its objectives.

VI. RECOMMENDATIONS

The creation of the game Himagsikan produced outcome that serves as platform for beginner Filipino game makers for future development of their own software. The following were the recommendations that could serve for the possible improvements:

1. The game can be created in 3D visual format. Future researchers can apply the latest 3D technologies in designing their software giving the game more realistic feel;
2. Additional game modes can also be included. Like that of AI Player Versus AI Opponent/s Game Mode, wherein two Artificial Intelligent Agents simultaneously solve the created maze, racing to finish the maze before the other;
3. More character to choose from and variety in the setting of the game. Possibly different maze style depending on the character;and
4. Creation of individual user accounts. In this way they can continue playing unfinished mazes and modes. In line with this saving of the game itself is allowed, enabling users to load past games;

ACKNOWLEDGEMENT

I would like to extend my deepest gratitude to the following persons who contributed for the success of the study.

To my family, my brothers and sisters for all their support, encouragement, trust, faith and prayers and for their unstoppable support in understanding and believing me to finish the degree.

To the Cavite State University, for granting a scholarship and steered me to finish the study.

To my superiors, for their collective effort and support in making this project a reality.

To my one and only who endured the long hours I've spent on this study, and for giving me timeless patience, love, encouragement, understanding and inspiration.

To those who, in one way or another, have made significant contributions in the development of the project.

Above all of this, to the ALMIGHTY GOD who blessed and guided me throughout the study.

The above mentioned persons really lend a hand and

inspire the proponents.
Thank you very much and God Bless.

References

BOTEA, A., MULLER, M. and SCHAEFFER, J. 2004. Near Optimal Hierarchical Path-Finding. URL: http://www.google.com.ph/url?sa=t&source=web&cd=1&ved=0CBMQFjAA&url=http%3A%2F%2Fciteseerx.ist.psu.edu%2Fviewdoc%2Fdownload%3Fdoi%3D10.1.1.72.7041%26rep%3Drep1%26type%3Dpdf&ei=TZVsTITVGo7JceauuJkB&usg=AFQjCNE9XcpdWYxOadkQLd8oHpwwkgYMJw. Date Accessed: January 6, 2010

DUC, L.M., SIDHU, A.S. and CHAUDHARI, N.S. 2008. Hierarchical Pathfinding and AI-Based Learning Approach in Strategy Game Design. URL: http://www.hindawi.com/journals/ijcgt/2008/873913.html. Date Accessed: January 14, 2010

ENRIQUEZ, M. 2003. Path Finder 2003. Undergraduate Thesis. AMA Computer University, Project 8, Quezon City.

ERDTMAN, S. and FYLLING, J. 2008. Pathfinding with Hard Constraints: Mobile Systems and

Real Time Strategy Games Combined. URL: http://www.bth.se/fou/cuppsats.nsf/all/5774f7e40c75e086c12573f4006665df/$file/Master_Thesis-Samuel_Erdtman_and_Johan_Fylling.pdf. Date Accessed: June 24, 2010

FELDMAN, A. 2001. Designing Arcade Computer Game Graphics. URL:

http://www.yoyogames.com/extras/user/cv/san1/441/78441/designarcadecompg me-graphics00.pdf .Date Accessed: June 30, 2010

GRAHAM, R., McCABE, H. and SHERIDAN, S. 2003. Path finding in Computer Games. URL: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.86.1126&rep=rep1&type=pdf. Date Accessed: June 24, 2010

JALOTE, P. 2008. A Concise Introduction to Software Engineering. Springer-Verlag London Limited.

JANSEN, M. and BURO, M. HPA* Enhancements. 2007.URL: http://skatgame.net/mburo/ps/hpaenh.pdf. Date Accessed: June 30, 2010

LANCTOT, M. and NG MAN SUN, N. Path-Finding for Large Scale Multiplayer Computer Games. URL: http://gram.cs.mcgill.ca/papers/lanctot-06-path-finding.pdf. Date Accessed: June 24, 2010

LARMAN, C. 2004. Agile and Iterative Development: A Managers Guide. Pearson Education, Inc. Boston.

MILLINGTON, I. 2006. Artificial Intelligence for Games. Morgan Kauffman Publisher. San Francisco.

MILLINGTON, I. and FUNGE, J. 2009. Artificial Intelligence for Games. 2nd Edition. Morgan Kauffman Publisher. San Francisco.

PUOCIAUSKAS, M. 2006. Path Finding in the Maze Version 1.0. URL: http://www.2haveit.com/listdetail~id~44760.html. Date Accessed: June 30, 2010

SCHWAB, B. 2009. AI Game Engine Programming. URL: http://www.gamedev.net/reference/programming/features/aigep1/ Date Accessed: June 30, 2010

STERNBERG, F. Iterative Development using the UML and Visio 2000.Enterprise Edition. URL: http://www.issintl.com/downloads/Iterative_Dev_White_Paper.pdf. Date Accessed: June 30, 2010

YAP, P. 2002. New Ideas in Pathfinding. URL: http://www.aaai.org/Papers/Symposia/Spring/2002/SS-02-01/SS02-01-018.pdf. Date Accessed: June 24, 2010

ENRIQUEZ, M. 2003. Path Finder 2003. Undergraduate Thesis. AMA Computer University, Project 8, Quezon City.

PRIETO, J. and DELOS SANTOS, D. 2003. omputer Maze. Undergraduate Thesis. AMA Computer University, Project 8, Quezon City.

Writing Performance and Narrative Styles of Education Students of ISU Echague Campus

Robin V. Guillermo*
Instructor III, College of Teacher Education,
Isabela State University, Echague, Isabela
rvg.coc@gmail.com; rvg_coc@yahoo.com

Abstract

Writing is one of the most complex skills that need to be acquired in a second language classroom. One has to master the grammar, vocabulary and other elements of the second language in order to write a coherent piece of discourse. It is said that style in writing is the author's way of expressing whatever the cognitive meaning is. Students in English classes write different forms of discourse and one of these is narration. Like other discourse forms, narratives employ styles or how the author tells whatever story he has in mind. This study investigated the performance in writing of forty education students of the Isabela State University Echague Campus, their styles in writing a narrative composition and the relationship between their writing performance and their narrative styles. It was found out that the students performed on the average in their previous writing subjects. Four narrative styles were used by the students in the compositions that they wrote. The styles are as follows: the chronological style, used by the majority of the students; and the flashbacking, logical and stream of consciousness styles used by a fewer number of students. The analysis of the student compositions also revealed the use of various techniques for each style. In the statistical analysis, no relationship was found between the writing performance and the narrative styles of the students. This study concluded that there are no better styles than the others and it recommends that teachers in writing should focus on refining the styles used by their students in writing a story.

Keywords: writing performance; narrative styles

Introduction

In terms of skills, producing a coherent, fluent, extended piece of writing is probably the most difficult thing there is to do in a language. According to Nunan (2009), it "is something most native speakers never master. For second language learners the challenges are enormous, particularly for those who go on a university and study a language that is not their own."

Kroll, in Celce-Murcia (2006) writes that teaching academic writing to both native and non-native speakers of English is an enterprise that unfolds in such a countless variety of settings and classrooms around the world that it is not hard to imagine considerable variation in how writing gets taught. Regardless of this variation, however, certain facts hold true for any classroom where the teaching of writing takes place. Students produce written texts that are expected to exhibit increasingly advanced levels of proficiency as the student writers progress through a curriculum, and teachers must make choices about how various learning experiences will promote this goal.

The basic knowledge that a student of composition writing must begin with is the recognition that there are four forms of discourse or rhetorical modes and that these have similarities and differences: exposition, narration, description and argumentation. There is a fundamental distinction underlying the types of writing and this is in some types of writing the writer's first responsibility is confining himself to facts or to reasoning based on facts like in diaries, journals, biographies, news and history. In others, the writer has the liberty in fabricating any action or picture or idea that may serve his purpose such as in fictionalized or imaginative writings like short stories and novels.

No matter what rhetorical mode is used, the same fundamental elements of effective writing apply. These are the following: substance, structure, correctness and style. The fourth element suggests that the writer is a personality, speaking about a subject that interests him, who has chosen and ordered his words so that they convey the most appropriate meaning possible. According to one writer, it is expressiveness, distinct from cognitive meaning. Another writer pointed out that style is to the writer what color is to the painter. Style is the way that a play, poem, or prose selection is written. It refers not to what is being said but to how it is said.

In writing a story, the narrative style is not the story itself and its contents but how it is told. There are authors that narrate events from beginning to end so that there is a clear movement based on the occurrence of the events in time. Other authors start narrating the middle part of the story and then bring the readers back to a recent or distant past to recount events that preceded the events that are narrated first. Others choose to narrate their stories based on logic which could be from specific story details leading to a conclusive end or from a generalization to deduce details. Still, others deviate from a time or logical basis in writing their stories. The narrators of such stories base their narration on the way their thoughts emanate from their minds, writing about events that come to their mind which do not need to occur chronologically.

Since style is independent from cognitive meaning, this brings into question how students in the tertiary level write their stories. Regardless of what is told, the main question in this study was how the students told whatever the subject of their story was. Another question brought about was that does their performance in writing, whether they are good, average, or poor performers in their previous writing subjects, relate to the styles that they prefer in writing a narrative? These questions posed were the focus of this study.

Statement of the Problem

In general, the study sought to find out the writing performance in English and the narrative styles of the students. Specifically, it sought to answer the following questions:

1. What is the performance of the students in their two writing subjects, namely English 12a (Communication Arts and Skills 2) and English 12b (Writing in the Discipline)?
2. What are the narrative styles of the students as reflected in the narrative compositions that they wrote?
3. Is there a significant relationship between the writing performance of the students and their narrative styles?

Methodology

A. Research Design

This is a quantitative-qualitative type of research that utilized the case study technique conducted for the purpose of making descriptive assertions about some population. According to Fraenkel and Wallen (2006), descriptive research describes the present state without trying to alter its conditions. This study aimed at finding out the writing performance and the narrative styles of the students. Moreover, it sought to investigate if there is a relationship between the writing performance of the campus journalism students of the College of Teacher Education of the Isabela State University, Main Campus, Echague, Isabela and their narrative styles.

B. Respondents of the Study

Forty (40) campus journalism students were the subjects of this study. They were from the two third year classes taking up the Introduction to Campus Journalism subject which is a general education course in the curricula of the Bachelor of Elementary Education and Bachelor of Secondary Education programs. Random-stratified sampling was used in selecting the students to participate in this study. Their grades were given the adjectival remarks good, average and poor. Afterwards, students with grades from the three strata were chosen until there were forty or 48.19% of them chosen to participate in the study. According to Nunan and Bailey (2009), subjects are subdivided into subgroups and sampling is done randomly from subgroups. This sampling technique made it possible to choose learners who are good, average, and poor in terms of their writing performance in English. However, due to the many irregular students who belong to the population, many lacking grades in the English12b subject, the number of students per type of learner was not proportional.

C. Research Instruments

The following were the instruments used in this study:

- Student checklists were utilized in determining the grades of the students in their English writing subjects for the previous semesters. These are documents kept in the office for record purposes.
- In investigating the narrative styles of students, narrative compositions written by the students were used in the analysis. Each of the forty participants wrote one narrative composition on any topic or subject without any specific length.

D. Data Gathering Procedures

The students were given their writing task after permission to conduct had been granted by the Associate Dean of the College. The following were the specific steps undertaken:

1. The previous grades in English of the students were verified from their checklists. Permission was asked first from the dean and program chairpersons. These grades are valid data that yielded how well or how poorly they performed in their English writing subjects in the past semesters.
2. After determining the forty respondents from both courses whose grades in English 12a and English 12b subjects represent good, average and poor performance, the researcher gathered those belonging under the Bachelor of Elementary Education program in a classroom and briefed them on what to do. They were told to write any story that they want to write without any constraints. The same procedure was done with the students belonging to the Bachelor of Secondary Education program. It took almost two hours for the other students to write their narrative compositions.

E. Data Analysis

1. Discourse Analysis

The method of discourse analysis was used to analyze the narrative compositions written by the respondents and also to identify the styles that they used in writing their stories. In this study, the style preference in students' narrative compositions need to be analysed since it is the means how the students wrote their stories. Discourse analysis is used to analyze the data so that language characteristics that extend across clause boundaries can be focused (Biber, et al., 1998).

The compositions, through discourse analysis, were read and analyzed by the researcher. The arrangement of the events of the plot was the primary consideration in analyzing the style used. Lee's (2011) techniques in identifying narrative techniques and styles in literature were also taken into consideration in the analysis of the narrative styles of the students. Also, the discourse analysis employed in this study showed if there were variations and other techniques in the use of narrative styles.

After the analysis, a scheme using numbers was used in coding the compositions with a narrative style. The following numbers were used as the coding scheme: 1 – Chronological; 2 – Flashbacking; 3 – Logical; 4 – Stream of Consciousness. The stories were unedited and were encoded with no changes done. Also, the students were given other names.

2. *Descriptive Statistics*

In analyzing the grades of the students in their two writing subjects, descriptive statistics such as frequencies, percentages, means and standard deviations were utilized. The following table of equivalence was used in interpreting the grades. The numerical ranges are used by the ISU system in quantifying the grade point system. Since there are no adjectival remarks for the grades, the researcher came up with an arbitrary scale to classify the grades from excellent to poor.

Grade	*Range*	*Adjectival Remark*
1.0	*98-100*	*Excellent*
1.25	*95-97*	*Very Good*
1.5	*92-94*	*Very Good*
1.75	*89-91*	*Good*
2.0	*86-88*	*Good*
2.25	*83-85*	*Average*
2.5	*80-82*	*Average*
2.75	*77-79*	*Poor*
3.00	*75-76*	*Poor*

3. Kendall's Tau-c

To find out if there is a relationship between the writing performance and the narrative styles of the students, the Kendall's Tau-c correlation coefficient at 0.05 level of significance was used.

Findings

A. Writing Performance of the Students

English 12a with the descriptive title *Communication Arts and Skills II* is a three-unit course which is a continuation of English 11a (Communication Arts and Skills I). On the whole, it is aimed at developing students' communicative competence through functional grammar in oral as well as in written expression. It includes effective study skills, building vocabulary, knowledge of sentence craft, paragraph development and composition writing as introduction to research preparation. On the other hand, English 12b with the descriptive title *Writing in the Discipline* is also a three-unit course designed to develop basic writing and research skills of students. It provides a review on the principles of effective paragraph construction. Likewise, it provides an exposure for the students to write business correspondence and research paper required by discipline.

Table 1 above shows that seven (7) out of 40 or 17.5% got a grade of 1.75 with a range of 89-91, the highest grade garnered by the respondents, in English 12a. Only one (1) respondent or 2.5% garnered a grade of 2.0 with a range of 86-88. This means that eight (8) or 20% of the students had a good performance in the said subject. Ten (10) or 25% got a grade of 2.25 with a range of 83-85. Twelve (12) or 30%, the biggest number, garnered a grade of 2.5 with a range of 80-82. These twenty (22) students or 55% performed on the average level. Another seven (7) or 17.5% got a grade of 2.75 with a range of 77-79. The remaining three (3) or 7.5% garnered a grade of 3.0 with a range of 75-76, just on the passing mark. Therefore, ten (10) or 25% of the students performed poorly in the English 12a subject. The mean grade is 2.375 which lies somewhere at the middle of the interval 80-85 or on the average level. The standard deviation which is based from the mean grade of 2.375 is 0.371 means that the grades are scattered.

TABLE 1. FREQUENCY AND PERCENTAGE OF THE GRADES IN ENGLISH 12A.

Grade	Frequency	Percentage
1.75	7	17.5
2.0	1	2.5
2.25	10	25.0
2.5	12	30.0
2.75	7	17.5
3.0	3	7.5
Total	40	100.0

Mean=2.375
Standard Deviation=0.371

TABLE 2. FREQUENCY AND PERCENTAGE OF THE GRADES IN ENGLISH 12B.

Grade	Frequency	Percent
1.5	1	2.5
1.75	5	12.5
2.0	14	35.0
2.25	15	37.5
2.5	3	7.5
2.75	1	2.5
3.0	1	2.5
Total	40	100.0

Mean=2.131
Standard Deviation=0.283

Table 2 above shows that only one (1) student out of 40 or 2.5% got a grade of 1.5 with a range of 92-94 making it the highest grade garnered by the respondents in English 12b. Therefore, one (1) student or 2.5% had a very good performance in English 12b. Five (5) or 12.5% garnered a grade of 1.75. Fourteen (14) or 35% got a grade of 2.0. This means that nineteen (19) or 47.5% had a good performance in the said subject. Fifteen (15) or 37.5%, the biggest number, garnered a grade of 2.25. Three (3) or 7.5% got a grade of 2.5. These eighteen (18) students or 45% performed on the average. There is only one (1) respondent or 2.5% who garnered a grade of 2.75 and also one (1) or 2.5% who got a grade of 3.0. These remaining two (2) or 5% had a poor performance. The mean grade is 2.131 which lies at the middle of the interval of 80-85 which means that the general performance in English 12b is average. The standard deviation based from the mean grade of 2.131 is 0.283 means that the grades are less scattered compared to their grades in English 12a. The grades are more consistent with the mean grade.

In both subjects, the students had an average general performance.

This average general performance of the students in writing is supported by the conclusions of the study of Nik, et al. (2010) that English as Second Language students face more problems because they have to acquire or consciously learn the grammar, syntactic structure, vocabulary, rhetorical structure and idioms of a new language. Secondly, composing and writing is already a difficult task for them and the acquisition of grammar and other language structures make it even more difficult. Finally, students who do not read and write well in their first language need to work harder on the new creative activity of forming ideas and thoughts in English for the readers to understand.

The poor performers in terms of writing skills in this study back up the study of Coskun (2009) that there are students who regard the act of writing as the disorderly arrangement of knowledge in the brain and putting it into a written form and they have extremely poor skills of thinking, deciding and planning which are required to compose a text.

Narrative Styles

A total of forty (40) compositions were written, one per respondent. The length of the compositions ranges from 124 words as the shortest to 1, 038 words as the longest, with a difference of 914 words. In terms of divisions, thirty-seven (37) or 92.5% of the compositions are multi-paragraphed and three (3) or 7.5% have only one paragraph. This is an indication that the respondents differ in terms of putting their ideas into words and dividing their thoughts into groups or paragraphs. Thirty seven (37) or 92.5% of the compositions are titled. The three (3) or 7.5% remaining are untitled. Table 3 below presents the names of the students, titles of what they wrote and their narrative style preference.

The students (the names used in the discussion of findings are not their real names) wrote on a variety of subjects or topics for their narrative compositions as the titles suggest. Seventeen or 42.5% of the compositions are stories about love and relationships of some sort like courtship, hidden love, thwarted love and early marriage. Fifteen or 37.5% of the compositions deal with true personal experiences stories of the students or their friends other than love like family struggles, vacations, misfortunes and other unforgettable events that put a mark on them. The remaining eight or 20% are based on fictional or fictitious events which are either retellings of familiar short stories or of fantastic stories like myths and legends.

TABLE 3. FREQUENCY AND PERCENTAGE OF THE NARRATIVE STYLES.

Narrative Style	Frequency	Percentage
Chronological	28	70.0
Flashbacking	5	12.5
Logical	4	10.0
Stream of Consciousness	3	7.5
Total	40	100

In Table 4 above, the styles in which the narrative compositions were written are summarized. A total of twenty-eight (28) compositions or 70.0 % are narrated in a chronological style or the narration of the events as they unfold in time, from the beginning, middle, to the end. Five (5) stories or 12.5% are narrated using flashbacks. In this style, the plot moves backward and forward in time to recount past events. Four (4) stories or 10.0% are narrated logically, meaning they are narrated in a step by step manner starting from the general to the specific or vice versa or in a cause and effect manner. The remaining three (3) stories or 7.5% utilize stream of consciousness. In this style, the unfolding of the plot is not based on time or logic but on the flow of the thoughts of the narrator. The general style preference of the students is the chronological style.

1. Chronological Style

Twenty eight (28) of the compositions were written in a chronological style. In this narrative style, the story's plot unfolds in the order in which the events took place in time (Robles, 1985).

Rommel's story narrates in a chronological manner how Jake, the main character, who was given everything by his parents, reacts to a small gift given to him by his parents on his birthday. It was this gift that made him angry towards them for he expected a car as a gift. Leaving their home, he becomes unaware that his father died of grief. When he comes back home, he realizes that his parents actually gave him the gift that he wanted.

With China as the setting for his story, Gil narrates chronologically the downfall of a Wushu master who is boastful of being unbeaten. He meets another master who is his match and beats him, leaving him in humiliation.

Ester relates in a chronological order the events that transpired in a dream. Sensing the eeriness, of the place, what she expects to happen comes true when she sees a ghost in a mirror. She runs and shouts and then wakes up realizing everything is but a dream.

In a personal experience story, Sheng chronologically relates how she experienced the thrills of love and how she was left in deep pain when her boyfriend left her because of a third party.

Raven retold in a chronological style the myth of *Baucis and Philemon* by Ovid while Ira blended story elements from mythology and Shakespeare and invented a tale related chronologically. Also, Eduardo crafted a legend explaining why penguins cannot fly and why they live in the Antarctic. The local legend of *singkamas* was retold by Roel chronologically with some lacking details.

Using a Cinderella character, Carina wrote a story that started from the abuses that her character suffered from to the death of this character's secret admirer.

Daisy wrote her story in such a way that suspense is built because of the mysterious acts of the main character Rose who was spied by a detective. The two fall for each other and the story ended with them as lovers.

Estela retold in a chronological style a Japanese folktale about a cruel emperor who orders the putting to death of all aged folks. A loving son, however, breaks the law by protecting his mother who in turn teaches him how to do a difficult task set by the emperor. The emperor in the end changes his mind and honors all the old folks for their wisdom.

Angeles' story is about an adopted child who discovers the reality that she is actually the heir of a millionaire while Pablo's story focuses on a character who is rejected by a girl but later finds out that the girl is just being hard to get and is secretly in love with him. Celso's story tells of a man who falls in love with a girl who suddenly is lost in the scene. This man later finds out that the girl has been dead for two years. Criselda's story tells of a woman who falls in love with the wrong guy. She still hopes that he will come back to her but in the end she realizes that she needs to move on and let go. Joshua's story relates how a boy and a girl fall in love but later break up because the girl is involved in a third party. In the end, they decide to become friends. All these stories follow the chronological order of events.

Set in a small span of time, the chronological narration of the events in Lina's story relates how a girl admits that she is in love with a guy who also admits that he is in love with her. However, when the guy goes home the night they become lovers, he meets an accident that causes his death. The girl learns about the news late which leaves her sad over the thought that the person she loves is taken away from her too soon.

Letty relates her experiences during a summer vacation, starting from the travel and emphasizing the most memorable events while Hera wrote her biography centering on her studies from the elementary to the tertiary level. She emphasizes her struggles.

Camila's story is about a poor but ambitious girl whose wants are granted by her mother. The turning point of the story happens when she is advised by her friends not to act in a rude manner toward her mother. It is too late when she realizes her mistake when she gets home finding her mother dead. Another love story is by Joan who tells of a handsome man falling in love with a simple woman. Their relationship is happy for a while but turns unhappy when the girl dies of a heart disease which she kept as a secret. Tanya, on the other hand relates her experience with a friend whose wrongdoings she could not tolerate. They quarrel when she reports the latter to her parents. However, in the end, they reconcile and all is well again. These stories have clear beginning, middle and end parts.

Carrie's story is about a vacation that turns out to be unpleasant while Cecilia tells of a girl who went to the city and finds love there in a wealthy young man. Loi's story is about her encountering a new environment while Ford recalls in his childhood how loving his mother was.

A. Exposition of Setting and Characters

In many stories narrated in a chronological style, narrators provide a background of the setting and the main characters in the early part of the stories. According to Forlini (1990), the opening paragraph of a narrative may simply set the scene and start the action. After these expositions, the events of the plot of the stories are arranged chronologically.

In the first two paragraphs of Rommel's story entitled *Gigantic Gift in a Little Box,* the narrator describes the place and attributes characteristics to the main characters. The setting is a peaceful place where a rich couple lives. In spite of their wealth, this couple remains humble:

In a beautiful remote barangay, people were live happily and peacefully. They don't have to worry about their safety because barangay police are patrolling every night to maintain the security of the place. They inhale fresh air. They don't have to worry about their food because various kinds of vegetable were planted on their vacant lot w/c is still rich in nutrients.

The family of De la Fuentavilla live in this barangay. They are consider as the richest family at that place. But despite of their high economic status, they are still mingling with their neighbors who are below them in terms of socio-economic status.

B. General Truth Statements

Instead of providing an exposition of the characters and setting, there are opening paragraphs of stories that express general truths before the chronological narration of events. One is this opening paragraph from Sheng's personal story with the title *Eugene*:

September 12, 2009, a very memorable day for a lady who experienced true love. For the very first time in her life a guy named "Eugene" changed her perception for what love really means.

According to Forlini (1990), narratives will often have explicitly stated main ideas particularly if the narrative is self-contained. Main ideas appear at the beginning of the narrative to present a general truth that the story will illustrate, or they may appear at the end to offer an interpretation of the story.

C. Events that Introduce Conflicts

Opening paragraphs can also introduce events that produce the conflict in the stories. According to Schaffrath and Stenberg (1989), the plot of a story begins with a basic situation. The writer introduces a conflict, a problem faced by the main character. The conflict leads to the other events and build to the climax, or high point of interest in the story.

Raven's tale is a retelling of *Baucis and Philemon*, a Roman myth from Ovid's *Metamorphoses.* The conflict is made clear in the beginning paragraph:

There was a village in a far flung area w/c the villagers are not that much good in terms of their actuations. The people are acting in a way that is not humane or as if they don't care a lot.

Inhospitable people in a certain place made the gods angry and disguise themselves as humans to find out if there are still people who will open their doors to strangers. They find an old couple who offer them their home and whom they spare from an impending punishment.

D. Mimetic Mode of Narration

To relate events, the writers used modes to tell the stories chronologically. According to Barry (2009), there are parts of a narrative which are presented in a mimetic manner wherein the events are 'dramatized', which is to say that they are represented in a 'scenic' way, with a specified setting and making use of dialogue which contains direct speech. Hence, the narrative mode is *mimetic*. Ester relates what she saw in a dream in a mimetic mode in the following paragraph:

The place is very peaceful but I can't explain why I don't feel it. My mother told me to unpacked my things and afterwards we will having our dinner, she left me alone in my room. While I was unpacking I feel different I just feel that somebody's looking at me, someone is following me my every moves but when I looked around my room I have nothing to seen but a built-in cabinet, a full length mirror & the things that not already unpacked. I feel scary so I ran as fast as I could to parents room I saw a girl tryin' to reach my hands, I freeze at the door, I want to shout but no one came out from my mouth. Until I feel my mother slap my face, ow shit it's only a dream.

E. Diegetic Mode of Narration

There are also parts of a narrative that are presented in a 'rapid', 'panoramic', or 'summarizing' way (Barry, 2009). The aim is to give readers essential or linking information as efficiently as possible, without trying to create the illusion that the events are taking place before the reader's eyes. The narrator just *says* what happens, without trying to *show* it as it happens. , there is a very short paragraph that relates events in a diegetic mode in Criselda's story:

They've been in a relationship for two years and ten months. For many years had past the relationship was said to perfect. Sharing happy moments with each other makes them feel like the first time they met.

The course of the relationship which is over two years is narrated very briefly. Saying that the relationship was happy and perfect is enough without illustrating how.

F. Foreshadowing Elements

A narrative may flash forward to narrate, or refer to, or anticipate an event which happens later (Schaffrath and Stenberg, 1989). This literary element is known as foreshadowing. In Celso's story, this event is related:

Day by day they were texting each other. Until the boy did not receive anything from the girls message. The boy wanted to know the address of the girl so that he know where to find her.

The old woman said Jasmine is my granddaughter but she was left 2 yrs. Ago. She was murdered in her school when she was 18. And now, this is her death anniversary. The boy cried because no one knows that she knew Jasmine for 6 months.

This part of the story can be called 'proleptic' which literally means a fore-take (Barry, 2009). The death of the girl is already fore-taken when the narrator says that she stopped texting.

2. Flashbacking Style

Five (5) of the compositions were found to be using flashbacks of some sort in their narration of events.

Mitch starts setting the present state of events and then moves to a past time recalling the experiences of her best friend. Nely uses a simple flashback when she starts by philosophizing but later moves back in time to recall events about a story that explains that though two people may be separated, if what they feel is true love, it will never fade. In Fren's story, there is a background story that presents the main character in the present time. She later embeds a tale relating what the main character went through in the past and then returns to the background story. In Vincent's story, he recalls through a flashback how he wished something from Santa Claus which was granted. Amer also uses a simple flashback in relating one of his most memorable experiences when he had a near death experience.

Robles (1985) wrote that in literature, events need not always be presented in strict chronological order. The flashback as a type of time order is used for effect.

Gillespie, et. al. (2005) wrote that while many writers continue to follow the chronological model of plot development, some authors also deviate from it. There are authors who use flashbacks, selecting a few episodes to build a plot that moves backward and forward in time.

Nely's story uses a simple flashback. She begins by philosophizing, saying that many things are unforgettable when they happen in an unexpected way. Then afterwards, the narrator starts to recall events that occurred earlier:

One day there's a girl who is very fund of texting until she received a message which is new and not save in her phonebook. After they already knew each other background, the boy invited to met the girl in a fastfood area and they enjoyed the rest of the day. As day passes by, the boy had already decided to serenade the girl. And the girl immediately tells that she also loves the boy. Both of them gave their trust and they also care to each other. Until now, they are still in relation because it is seen that they love each other very much. I know that they are in a long distance but they still communication through texting and they also meet once in a month because they are both studying and busy for all the requirements to pass in school. It seems that they already met their destiny because the boy told to the girl that no one can settled them. The girl also responsed to the boy that she is hoping that the boy can't leave him forevermore. They are also loyal to each other which they had planned and dreaming that they will finish their studies, to find good job and to save money and after that they will also planned to be married.

In a *diegetic* mode, the narrator flashes back from philosophizing to recount events in the relationship of a man and a woman who vow to love each other till the end. They start as text mates then they date and finally they become lovers making a promise to love each other with an unfading love. After the flashback of events, the narrator returns to philosophizing, to the present scene, more convinced that there is really such a thing as unfading love. Narratives like Nely's story which she entitled *Unfaded Love* often contain references back and references forward, so that the order of telling does not correspond to the order of happening. According to Barry (2009), stories may 'flash back' to relate an event which happened in the past , and such parts of the narrative can be called 'analeptic', derived from 'analepsis' which literally means a back-take.

Barry (2009) also wrote that stories are not always presented 'straight'. Often, writers make use of 'frame narratives', also called 'primary narratives', which contain within them 'embedded narratives', also called 'secondary narratives'. For example, Fren starts her story with a frame narrative:

Very happy and excited that's what Sophia feel today because this is the day she's waiting & longing for, their wedding of her only love Anthony. I sit beside her & hug, "is that a tears of joy?" i asked because I saw tears fell from her eyes; "this is the time I've waiting and longing for our wedding of Anthony, but I remember all the trials I encountered especially my parents," she replied. Now I understand what does the tears mean.

The opening scene of this narrative shows Sophia waiting for her wedding ceremony to start. After the opening scene, the narrator flashes back in telling the stories that occurred earlier. Through this, we are provided with information from Sophia's past. They are bereaved by their father when she was still very young. Their mother leaves them. Her siblings are given over to their relatives. She is adopted by a midwife who is rather strict and who forces her to take a course that she does not want to take. Their mother dies causing her again pain. Instead of yielding to her foster parent's will, she finds another benefactor. The turn of the events changes when she falls in love with a guy name Anthony. She gets pregnant and therefore stops schooling. Plans for the marriage are set. After giving birth, they are to be married. She gives birth to a baby girl. This flashback is a story within a story or an embedded narrative as Genette called it. After this embedded story, the narrator moves back to the frame narrative:

"Sophia wake up!" the grandmother of Anthony said, she's now again crying because she thought it is real, it is only a dream, she dream again their wedding of Anthony that is not come true because after 3 days of giving birth of Sophia, Anthony died on a motor accident, almost one year is passed by but still have the pain in her heart especially when they daughter died due to pneumonia, many says that the null in her eyes is unlucky they believe that this is superstitious. All those trials encountered by Sophia is considered as her challenge in life and all of this was she committed to God and she believe God has planned to what everything's happened.

3. Logical Style

Four (4) compositions were logically narrated. Ricardo relates in a step by step manner the unfolding of a gay. Leonor has her teacher as her subject. She deduces the idea that a person can contribute greatly to the growth of others. The teacher's acts were narrated and it is consistent that from beginning to end the teacher never failed to be a person of influence. In Dane's story, he uses cause and effect to relate how they won in a dance. Karl's story proves a principle in life through real-life experiences.

Logical narration is a step and step narration which can start from the general to specific or specific to general. The story's events are arranged in a step by step or procedural manner that leads to a generalization or vice versa. In the story, the events are related in such a way that one event leads to another that consequently in turn will lead to another event. The narrative ends with an outcome. Almario (1986) identified the logical style as one of the three narrative orders. In this sequence, the first incident is the climax of the action and the story moves backward in the process of explaining the climax.

One story narrated logically which arranges the events in a temporal order is by Ricardo. He starts by an exposition:

Once there was a man who named after his father Paulo dreamed to become a woman. He always want to dress up like a girl. Everyday he wakes up early just to see his crush crossing over the road infront of their house. He is also dreaming that one day he will become a beauty title holder.

His father is not against on what Paulo is doing because he is dreaming that one day they will be given a daughter but unfortunately it doesn't happen that's why he supports Paulo very much.

This story relates in a step by step manner the gradual unfolding of a gay, the coming out of a gay from the closet. One factor that encouraged this guy to bring out the gay in him is his father's acceptance. Events are favourable for him. A gay beauty pageant is to be held which he joins. A grand stage is set for him. Ricardo concludes his narrative by:

At the day of the pageant, there are lot and lots of people who watched the show. At the question and answer portion, a judge asked him; "What can you say about the woman of today?". "Thank you for that very wonderful question, The woman of today are the man of yesterday. I thank you." Paulo replied,

Everybody on the audience yelled for Paulo's answer. At the end of the night he was awarded as the Ms. Body Beautiful 2011.

Paulo's winning in the contest is the herald that he really has come out of the closet completely.

According to Belen, et al. (2003), there are writers, with the intention to help their readers' satisfaction on hold until the last sentence of the composition, that use induction with the main idea usually given at the end of the selection.

4. Stream of Consciousness Style

The remaining three (3) stories are narrated, not in a chronological style nor in a flashbacking style nor a logical style but in a style that reveals the thoughts of the narrator.

Gina reveals her thoughts about the times she spent with her best friend and crush in her story. Sonny's story unravels his feelings about a girl he likes. He also relates his feelings when they break up and when he realizes that getting involved in a relationship is not really his priority. Kate's story has a narrator who reveals her unspoken thoughts about her interactions with her suitor.

Gina's whole narrative shares experiences of a character-narrator with a guy whom she calls her crush, her best friend. She recalls their first meeting creating in her a feeling of being so in-love:

When I was at my first year college in Isabela State University Cauayan Campus, there are some things happen to my life. One of this is when I met Mark Juven Dumlao a Comp. Sci second year. He is handsome and generous. When I met him I feel so in love, my heart jump happily and beat fast.

She recalls another time when they are together. The way he looks at her creates in her another feeling of wanting to burst out what she feels for him:

One day when we are happy laughing together with my friends. He is staring at me. I didn't expect that will happen. I can't explain the feelings I've felt. I want to shout louder for the simple thing he have shown me.

Another unforgettable moment is recalled when they are together at a party:

December 7, 2010, Thursday evening. This is my unforgettable experience. Unforgettable experience because at that time he invited me to join the party together with him. I have no choice that's why I decided to go.

They dance which creates in her nervousness although she really wanted it so much:

At that time, I experience a lot of things. Because he is my first dance to that said party we have attended. I felt nervous when he holds my hands and he always smiling at me until the sounds stop.

Events that are presented are based on the flow of thoughts, responses, and sensations of one or more characters. This technique is called the *stream of consciousness*.

Schaffrath and Stenberg (1989) define a stream of consciousness narrative as a story not structured into a coherent, logical presentation of ideas just like the events in Gina's story. The connections between the ideas are associative, with one idea suggesting another. Another unique feature of a stream of consciousness narrative is the focalization. Focalization means 'viewpoint' or 'perspective', which is to say the point of view from which a story is told. The focus is on what the characters *think* and *feel,* these being things which would be inaccessible to readers even though they were present. In the story by Gina, details like *I felt nervous when he holds my hands and he always smiling at me until the sounds stop* reveal her unspoken thoughts and feelings, which would be inaccessible even if you are standing next to her. According to Barry (2009), this is internal

Seven (17.5 %) of the students with a good per-

C. *Relationship between Writing Performance and Narrative Styles*

TABLE 4. RELATIONSHIP BETWEEN ENGLISH 12A PERFORMANCE AND NARRATIVE STYLES.

Nar. Styl.	Writing Performance						f	%	Kendall's Tau-c	Prob.
	G		A		P					
	f	%	f	%	f	%				
Chron	7	17.5	13	32.5	8	20.0	28	70.0		
Flash	0	0.0	5	12.5	0	0.0	5	12.5	0.041ns	0.570
Logic	1	2.5	1	2.5	2	5.0	4	10.0		
Str. of Consc.	0	0.0	3	7.5	0	0.0	3	7.5		
Total	8	20.0	22	55.0	10	25.0	40	100.0		

*ns = not significant

formance in English 12a narrated their stories chronologically. Thirteen (32.5%) of those with average performance used a chronological style of narration. Among the poor performers, there were eight (20%) who used a chronological style in their narrative compositions. The total number of students who used a chronological style is 28 or 70% of the total population of 40. All of the five (12.5%) who used a flashbacking style in their narrative compositions had an average performance in English 12a. There was one (2.5%) good performer who used a logical style, another one (2.5%) from the average performers also used a logical style and two (5%) among the poor performers narrated their stories logically which adds to four or 10% of the total population. All the three (7.5%) students who used a stream of consciousness style performed on the average in the English 12a subject. The correlation coefficient is 0.041 with a probability value of 0.570 which is greater than 0.05. This indicates that the performance of the students in their English 12a subject has no relationship with the styles that they employ in narrative writing. Thus, the null hypothesis is accepted.

Fourteen (35%) of those with good performance in the English 12b used a chronological style in their narration of

TABLE 5. RELATIONSHIP BETWEEN ENGLISH 12B PERFORMANCE AND NARRATIVE STYLES.

Nar. Styl.	Writing Performance						f	%	Kendall's Tau-c	Prob.
	G		A		P					
	f	%	f	%	f	%				
Chron	14	35.0	12	30.0	2	5.0	28	70.0		
Flash	3	7.5	2	5.0	0	0.0	5	12.5	0.047ns	0.655
Logic	1	2.5	3	7.5	0	0.0	4	10.0		
Str. of Consc.	2	5.0	1	2.5	0	0.0	3	7.5		
Total	20	50.0	18	45.0	2	5.0	40	100.0		

*ns = not significant

their stories. Another twelve (30%) among those with average performance also used the chronological style while the two (5%) poor performers in the English 12b subject used a chronological style as well. These add up to 28 or 70% of the total population of 40. Three (7.5%) with a good performance used flashbacks in their narratives and the other two (5%) who also used this style were from the average group making a total of five or 12.5% of the total number. One (2.5%) good performer in English 12b used a logical style and three (7.5%) are from the average group that add up to a total of four or 10% of the total population. The stream of consciousness style was used by two (5%) of the students with good performance. The remaining one (2.5%) who used the stream of consciousness style had an average performance making a total of three or 7.5% of the total population. The correlation coefficient is 0.047 with a probability value of 0.655 which is greater than 0.05. This indicates that the performance of the students in their English 12b subject has no relationship with the styles that they employ in narrative writing. Thus, the null hypothesis is accepted.

This insignificant relationship between writing performance and narrative styles affirms the findings of other studies which found out other variables to be significantly related to writing performance.

Conclusions

Based on the findings, the following conclusions were drawn:

1. The average performance of the students is an indicator why many of them manifested in their compositions unrefined vocabulary, grammatical and spelling errors, and unsophisticated construction of sentences and paragraphs.
2. Many students know only of the chronological arrangement of events in writing a story because the majority of them wrote their compositions utilizing this style.

3. Even though most compositions were chronologically narrated, the use of various techniques shows that there are students who have learned how to compose a more interesting narrative by the use of structures and elements.
4. There are students who are not aware of the specific styles that they are utilizing. Using a style for many students of writing is unconscious knowledge which comes out freely when no constraints are given.
5. There are no better styles than the others. There are many good learners who used a chronological style but it does not mean that the style they prefer is better than the stream of consciousness style used by average performers. Moreover, narrative styles cannot be a predictor of writing performance.

Recommendations

Based on the conclusions above, the following are recommended:

1. To improve their performance in writing, the students are encouraged to read and learn more about the fundamentals of writing, read literary selections and other pieces of discourse, and study the styles of good authors.
2. Teachers of writing are also given the recommendation to identify the possible areas of weakness of their students in their writing subjects. In order to address these weaknesses, instruction should be more meaningful, practical and relevant to achieve the end goal of language teaching – communicative competence. There is also a need on the part of the teachers to expose their students in the other forms of discourse, namely expository, descriptive, and argumentative discourse forms.
3. Continuous feedback should also be given by the teachers to their students to inform them of their progress.
4. Lessons in basic writing subjects as well as advanced ones should always include structures, styles, elements, and techniques. Teachers also need to expose their students to styles other than the ones that they are already utilizing. Moreover, students should be taught the practical uses of these styles.
5. Since there is no relationship that exists between writing performance and narrative styles, other researchers in the future can take into consideration other variables that may have a relationship with the styles that students employ in writing a story. One such variable could be personality types.
6. Researchers in the future may also look into the other problematic areas of student compositions such as the use of a mixture of words and symbols and the use of shortened words that violate correct spelling and the rules of mechanics (the so-called Jejemon language).

Acknowledgment

The researcher wishes to gratefully acknowledge, even though words would not be enough, the following persons whose good deeds will never be lost and whose hands made the work lighter, so that this humble piece of work would come into completion:

Dr. Elena A. Navas, Executive Director of the PNU North Luzon and his adviser, and Dr. Leticia N. Aquino, co-adviser;

Dr. Olive Joy F. Andaya and Dr. Clemente M. Aguinaldo of PNU North Luzon and the late Dr. Conchita R. Cauinian of ISU Echague, his panel members;

The BEE and BSE third year students of the College of Teacher Education of ISU Echague;

Roanne Beth and Joy Beth, his sisters, Rowill his brother, Jefferson, his brother-in-law and Jhossane, his niece, and Jeronne, his nephew, and Ms. Anabel P. Sison;

Mr. Rolando C. Guillermo and Mrs. Beatriz V. Guillermo, his loving parents;

And above all, to the Almighty God. To Him be the glory, great things He has done.

References

Alamis, M. (2010). Evaluating Students' Reactions and Responses to Teachers' Written Feedbacks. *Philippine ESL Journal*. 5, 40-57.

Almario, C. (1986). *Developing Skills in Grammar and Composition 2*. Manila: National Book Store.

Barry, P. (2009). *Beginning Theory: An Introduction to Literary and Cultural Theory (3rd edition)*. UK: Manchester University Press.

Belen, V., et. al. (2003). *Effective Study and Thinking Skills.* Trinitas Publishing: Bulacan.

Biber, D., et. al. (2002). *Longman Students Grammar of Spoken and Written English.* Essex: Pearson Education.

Bitchener, J., et. al. (2005). The Effect of Different Types of Corrective Feedback on ESL Student Writing. *Journal of Second Language Writing*. 14, 191-205.

Coskun, E. (2009). Text Coherence in the Narrative Texts of Turkish Students and Bilingual Uzbek Students in Turkey. *Scientific Research and Essay.* 4(7), 678-684.

Eberhardt, M. (2008). *The teaching of writing and its assessment: case studies of the effect of direct writing strategy instruction integrated with writer's workshop on the development of young writers.* Unpublished master's thesis, California, California State University.

Fajri, F. (2009). *The correlation study between students'reading habit and their writing ability in narrative text.* Undergraduate master's thesis, Indonesia, Universitas Negeri Semarang.

Forlini, G. (Ed.). (1990). *Grammar and Composition 4 (4th edition*). New Jersey: Prentice Hall.

Fraenkel, J. and Wallen, N. (2006). *How to Design and Evaluate Research in Education.*USA: McGraw Hill.

Fromkin, V., et. al. (2010). *Introduction to Linguistics*. Philippines: Cengage Learning.

Gillespie, S., et. al. (2005). *World Literature: Connecting Nations and Cultures (4th edition)*. Singapore: Pearson Education.

Glicker, E. (2010). *The student writer as blogger: a longitudinal case study of a Blogger's critical narrative events*. Unpublished doctoral dissertation, Pennsylvania, Indiana University of Pennsylvania.

Kruskal, W. (1958). Ordinal Measures of Association. *Journal of the American Statistical Association*. 53 (284), 814–861.

Lee, K. (2009). A list of techniques for narrative writing.Available:http://www.ehow.com/info_7864848_list-techniques-narrative writing.html [January 29, 2011]

Lee, K. (2009). How to identify narrative style in literature.Available:http://www.ehow.com/info_7864848_list-techniques-narrative writing.html [January 29, 2011]

Microsoft Encarta (2009). Microsoft Corporation.

Murcia, M. (Ed). (2006). *Teaching English as a Second or Foreign Language (3rd edition)*. Singapore: Heinle and Heinle.

Mills, R., et. al. (1996). *Leaning Standards for the Language Arts.* Albany, New York: The University of the State of New York.

Nik, Y., et. al. (2010). The Writing Performance of Undergraduates in the University of Technology Mara, Terengganu, Malaysia. *Journal of Languages and Culture.* 1(1), 8-14.

Nunan, D. and Bailey, C. (2009). *Exploring Second Language Classroom Research: A Comprehensive Guide.* Pasig City: Cengage Learning Asia.

Nunan, D. (2009). *Second Language Teaching and Learning.* Pasig City: Cengage Learning Asia.

Pishghadam. R. (2011). Learner Creativity and Performance in Written Narrative Tasks. *World Journal of Education.* 1 (2), 115-125.

Robles, F. (1985). *Developing English Proficiency in College 2*. Manila: Goodwill Trading Compan
Tannen, D. (2010). Discourse analysis.Available: http://lsadc.org/info/ling-fields discourse.cfm [January 29, 2011].

Tiberghien, S. (2007). *One Year to a Writing Life: Twelve Lessons to Deepen Every Writer's Art and Craft.* Da Capo Press: Cambridge, Massachusetts.

Schaffrath, S. and Stenberg, L. (Eds.). (1989). *Literature Red Level*. Illinois: McDougal, Littell & Company.

Williams, J. and Takaku, S. (2011). Help Seeking, Self-Efficacy, and Writing Performance among College Students. *Journal of Writing Research*, 3(1), 1-18.

THE BOTTOMLINE OF CAROLINA'S TERRENE: BIRINGAN TALES

Alteena Joyce C. Dato
College of Arts and Communication
University of Eastern Philippines
University Town, Northern Samar

Ana Grace P. Rebucas
College of Arts and Communication
University of Eastern Philippines
University Town, Northern Samar

***Villa C. Carpio,DA**
College of Arts and Communication
University of Eastern Philippines
University Town, Northern Samar
mamvillacarpio@gmail.com

ABSTRACT-

This study was a qualitative research which used oral interviews to gather the data needed to unfold the mysteries behind Biringan City. It focused on the retrieval and translation of the tales. The informants of this study were the residents of the selected barangays of Pagsanghan who qualified the following criteria set by the researchers; must be 60 and above, not senile, not fully exposed to media, those who have not migrated to the city and must not be beyond grade III. However, the researchers extended the criteria in choosing their informants to those who had personal encounters of Biringan City. The objectives of this study wee to: 1) identify Carolina and Biringan City; 2) gather tales of Biringan City, and 3) reflect the worldviews mirrored in these tales.

The researchers used the vernacular in interviewing the respondents so that they would feel comfortable in narrating the tales.

Sixteen (16) tales are herein included. Worldviews were extracted from these tales, and it is concluded that though modernization has affected Western Samar, many unexplainable phenomena still occur. These tales could prove that Biringan City exists because these informants were able to describe it, like how a plain mountain can turn into a magnificent city in their revealed experiences.

Keywords: engkantao, Biringan City, terrene, worldviews, engkanto

I. Introduction

Engkantos or fairies are believed to have existed before the creation of the world, just like God and Satan. The existence of these creatures only proves that there are things in the world that do not need scientific explanations. Their existence also justifies the belief that there is another dimension here on earth like the Biringan City.

During the olden times when everyone's life was in chaos because of war, the only entertainment of the people was to share a story especially to children. Many stories were told, such as the story of Carolina, an *engkanto* living in Biringan City said to be located in Gandara, Tarangnan and Pagsanghan, Western Samar.Many stories were heard about Biringan City throughout Western Samar, described as a city and where only few or chosen people are allowed to go inside, or to see the vast, enormous and unidentified city extending its length from Catarman to Calbayog City, according to the claims of some. The city is said to be unidentified in the sense that nobody really knows what Biringan City is. Many tried to explain but still nobody succeeded in revealing what Biringan City is composed of.

Biringan's quality indicates that it is not of the usual land and water terrain in which people live in. It seems to exist in a different dimension which explains why its boundaries can overlap with known towns and cities of Samar Islands. On moonlight nights, seafarers have reported seeing a dazzling city of lights. In a few minutes, though, the manifestation is no longer visible. Obviously, Biringan is not likely to be shown on map or atlas. But specialized satellite mapping photography has reportedly turned up a shining area in the reported general location of Biringan.

Carolina is believed to be the caretaker of Biringan City. According to stories, she was a little orphan girl during the Japanese war. She was found crying beside a tree believed to be the gateway to Biringan City. After several years, Carolina vanished in their town and no one could trace her. However, after a few decades, a group of American nationalities appeared in a town of Western Samar claiming that they were invited by their friend Carolina to wait near a tree located in a mountain until 6 p.m. so that they could be fetched and brought to Biringan City. They arrived at noon so they built a tent beside the tree. When 6 p.m. came, they all disappeared.

No one can claim whether the stories about these supernatural beings are true or not. However, these information that were gathered prompted the researchers to find out the truth about these folktales; hence, this study was undertaken.

II. Objectives of the Study

This study tried to unfold the mysteries behind Biringan City.

Specific objectives were to: 1) identify Carolina and Biringan City, 2) gather tales of Biringan City, and 3) reflect the worldviews mirrored in these tales.

III. Methodology

This study was a qualitative research which used oral interview to gather the data needed and focused on the retrieval and translation of the tales. These tales were recorded through the use of tape recorder and videocam. The researchers used the vernacular language in interviewing the respondents so that they would feel comfortable in responding.

The informants of this study were the residents of the selected barangays of Pagsanghan, Western Samar. The researchers set criteria in the selection of the informants: they must be sixty (60) years old and above, not senile; not fully exposed to media; those who have not yet migrated to the city and must not be beyond Grade III. However, the researchers extended the criteria in choosing their informants, that is, those who had personal encounters with Biringan City and willing to participate in this study.

In translating the tales into English, varied techniques were used: 1) lexical borrowing, or copying the Samarnon items into the English text when the item has no equivalent term in English, 2) descriptive equivalent amplification, where further description is needed to bring home the meaning in context, 3) free translation, which is the process of interpreting vernacular terms and changing them into English, where the change in the idea or substance of the original text is more than in English (Manuel, 1975).

IV. Findings

Objective 1: Identify Carolina and describe Biringan City

Folks described Carolina as a *manaraay* (enchantress). According to Potenciana Bordallo, one of the informants, Carolina befriended her and brought her to Biringan City.

"...ano pareho hin birhen…halaba kanya buhok, tapos an iya bado patubtob dinhe (ha iya tiil). Wa ak hiton makapanumat tadi hasta hiton gin sangkayan naba ako."

"She looked like Virgin Mary…with floor length hair. I never told anyone about it, I was not able to talk about it either, until I was befriended by her."

Actually, there were variants of tales on where Carolina came from before she became an enchantress. Some said that she was an orphan from a war-wrecked place crying beside a tree and disappeared. After a few years, she appeared to the townsfolks but that time she was already an enchantress. Still there were other people who said that she was a young lady from Tambunan, one of the boat terminal routes to Pagsanghan and Tarangnan. She was a regular passenger because she was a student. The last time she was seen was when she rode a boat going to school in Tarangnan and then she disappeared. No one knew where she went and no one was able to trace her. When she appeared to the people, she was already an enchantress. However, there was one respondent who said that she was really an enchantress.

"kay manaraay man iton hiya. Bagan an nag-aakit ba ha mga tawo ngan iya gindadara ngadto ha Biringan City."

"She is an enchantress. It appears that she would hypnotize the people and bring them to Biringan City."

Biringan City proved its existence based on the tales from the informants. From the interviews and tales gathered, the researchers have come up with answers to reveal the mysteries kept long time ago.

According to the informants, Biringan City is just like any ordinary mountain full of trees where wild animals creep and where farmers feed their families. But looking at it beyond the naked eyes, one will see the invisible creatures living inside.

This city is named Biringan City. No one knows where the name came from as everyone who had lived before them called it by that name. It is a virgin forest, however, a part of it is already inhabited by some Pagsanghan people and some areas claimed to be part of Biringan City is already used in farming.

The entrance of Biringan City is surrounded with trees and a small creek where it is believed that Doña Paz, the ill-fated ship that submerged with so many casualties, would pass through Biringan City. There are coconut trees (*cocos mucifera*), nipa groves *(Nypa fruticana*), balete tree (*ficus stipulosa)* and Rosewood (*Petersianthsu quadrialatus*) as well as some trees believed to be enchanted: The mountain is tall and cannot be climbed easily although there are some parts which can be reached by walking but walking inside the forest is too risky.

Pagsanghan, Western Samar is just a little part of Biringan City although Biringan exists in different dimension. According to Paula Ignacio, one of the informants, whenever there was an occasion in the town, people gathered to attend the party but it was surprising why it was so fast to gather a large crowd; however, it was also fast that the crowd disappeared. They observed that most of them were not residents of the place.

Objective 2. Gather tales of Biringan City

Paper Cut-outs

There were travellers who came to bring pigs to be sold in Gandara. They asked where Gandara is. Then I answered back saying that Gandara is far from Pagsanghan. As they went on, they saw a seaport and when they came back they told us that Gandara is just located at the back of the seaport where there were people who fetched them and dispatched all their pigs for they bought them all. According to them, Gandara is just at the back of Rawis. Actually, they showed us the money used to pay them, however, when we saw the paper bills, all of them were just pieces of play money.

-Genaro Mancanero Bordallo
(Informant)

Midnight Processions

Way back in the year 2000 when I was still the barangay captain of this place, I was able to witness processions at midnight. It happened in successive nights and I was awakened everytime I heard the sound of the people joining the processions in the middle of the night, but I could not understand what they were saying. One time I woke up because everytime I asked my neighbors about the processions, they said they did not hear anything and I said to myself that as barangay captain I should know if there would be any procession. When I tried to figure out who were joining the procession, I was surprised because the children and adults in that procession were obviously not residents of Pagsanghan. I knew they were not by their looks, they were all wearing white and they were floating, their feet were not touching the ground. They were holding candles and their heads were covered with veils. I went out to see where their destination was and to my surprise they moved towards the nipa trees over Biringan City. Suddenly one by one faded together with their candlelights.

-Aurelia Bordallo Tan
(Informant)

The Soldiers

A long time ago, when the Philippines was still in the hands of the colonizers, many of them were aboard in a huge vessel but were not able to enter our place because they saw many soldiers guarding this place from here to the top of Biringan City. Because of this they hurriedly withdrew their troops for they were afraid of these soldiers. But the truth is, during that time there were no soldiers here yet. These soldiers were believed to be the occupants of Biringan City. The residents were scared but they were relieved because their perpetrators failed to attack our place.

-Teresita Zabala
(Informant)

A House Made of Granite Tiles

When I was in my farm in Biringan, I heard footsteps behind me but when I turned around I did not see anybody. It was only me who was in that place. Then, when I was at the top of the coconut tree gathering tuba, I observed that the land was shaking, and I heard sounds of a swift blowing wind and footsteps of people walking. I followed the sound and I was surprised with what I saw. It was a long wide ladder on the top of the hill and a house made of granite tiles. However, I did not see anybody walking; the only thing I heard was a sound of a swift blowing wind and of children laughing and running to and from the ladder.

-Pio Pontojas
(Informant)

Bubbles in the River

When I was near the stream beside the port near our farm, I heard the water splashing as if there was someone washing clothes or someone was passing by the river. I just ignored what I heard, but I was surprised because there were bubbles flowing in the waters as if someone was washing the clothes when in fact I was the only person in that place. I really felt afraid with what I saw but I kept in mind that maybe that was the place where the people in Biringan City washed their clothes.

-Natividad Pontojas
(Informant)

Carolina

When I was only thirteen years old and was still studying in Tarangnan, a lady with long hair and face that resembled Virgin May always appeared to me, specially during moonlight nights. She was Carolina. I never told anyone about her, I did not have the courage to tell anybody. My father brought me here to Pagsanghan. Inside the boat, they cut a rope and tied me to the mast so that I will not jump out of the river. When we settled permanently here in Pagsanghan, Carolina continued visiting me. Early in the morning I always had that eerie feeling in me. In the afternoon, the enchanted beings always showed up to me. They looked like humans but whenever they brought one to their place, I could not see anything. They showed me big ropes and when I hesitated to go with them, they tied me with those big ropes. Even when I was already married, they continued to show up to me until I was provided with an amulet which I could use against them. When I was in Manila, they showed me a big vessel with the signage SAMAR but I never told anyone about what really happened.

-Potenciana Bordallo
(Informant)

Carpenters from Leyte

There were carpenters who came to this place aside from those who came all the way from Masbate. The police officers knew about this because they were the ones who asked the carpenters when they were about to climb the mountain in Biringan City. They said that they saw big houses at the top. The police officers asked them where they were going and the carpenters told them that they were going to Biringan City because someone asked them to fix the houses there. When the police officers proceeded to that direction, they saw nothing but scattered leaves and garbage. The carpenters decided to go then.

-Potenciana Bordallo
(Informant)

The Lighthouse

The huge tree in the hilltop at Biringan City is believed to be the lighthouse of Biringan City. Whenever visitors happened to visit our place they were often astounded and asked if there was someone residing at the top of the hill because a huge house was visible. They asked this because they could see different kinds of flags at the top and that they were amazed because that was the first time that they saw those kinds of flags.

-Alfredo Bordallo
(Informant)

Balikbayan Boxes

My grandfather was a bus driver in San Jorge before. One night, two passengers took a special trip with him. He thought that his two passengers were foreigners because the man was wearing a necktie and the woman was wearing a long dress. They were both tall with aquiline nose so my grandfather thought that they were not really from San Jorge. His passengers told him to drop them by the waiting shed in Tambungan. They had to cross the river to reach Pagsanghan. Since it was midnight, nobody ferries the boat to cross the river, so he told the foreigners that no one crosses the river at midnight. They said that they can wait and requested him to get the *balikbayan* boxes from the bus. When he was already inside the bus, he found the boxes gone. He was scared and when he looked at the waiting shed, the two strangers were also gone

-Alfredo Bordallo
(Informant)

The Flower of the Rosewood

The rosewood tree blooms rarely but whenever it blooms, something bad would occur. The predicament is determined by the number of flowers that the rosewood blooms. One time the rosewood tree bloomed good many flowers and after several days passed, the Doña Paz ship submerged. Many passengers of the ship came from Pagsanghan. Another time that the rosewood tree bloomed flowers, a number of residents in Pagsanghan also died.

-Nati Ignacio
(Informant)

A White Lady Floating on the River

We were crossing near Tambungan when a woman in white dress rode in the motorboat. She said that she would get off on the first port. We were all surprised because that first port was the way to Biringan City and there was no house because it was the location of the farmlands. Before we reached the port she said that she would step down but the ferryman said that she should wait until the boat is docked off near the port, but she insisted and said that she wanted to step down. She paid the ferryman and to everyone's surprise, she walked on top of the river.

-Paula Ignacio
(Informant)

Delfin

I saw a man in our farm that exactly looked like Delfin's face and features. I hid behind a coconut tree trying to figure out if it was really Delfin that I saw. He started walking farther and so I waited for his return because I did not see what direction he went but he never returned. When it was dark, I decided to go home to look for Delfin.but I found him home. When I asked him if he went to our farm, he said no.

-Paula Ignacio
(Informant)

Randy's Wife

When Sheila, my daughter-in-law was new here in our place, Randy went to our farm to make nipa shingles, and Sheila followed him. When ,she reached the farm, she saw *Ilang-ilang* flowers and told Randy to get her some but Randy saw nothing but cogon grass. Sheila continued to smell the fragrance of flowers, and eventually lost her consciousness. She also felt numb and fell. We asked help from a quack doctor who gave her an amulet. After that she was not allowed to go back to our farm again.

-Paula Ignacio
(Informant)

Big Waves in the Middle of the Night

There were times when big waves disturbed us in the middle of the night. The waves were really big but there were no indications that a ship was passing by. No sound of a big vessel or ship could be heard, only big waves appeared. But we already heard the story about Biringan City and so for us it was just a usual thing that we witnessed. They often said that when big waves appear, there's a big ship passing by. The dogs even bark continuously. It is a horrifying bark that will only stop when the waves disappear.

-Randy Ignacio
(Informant)

The Dream

I dreamed about people wearing white dress and had neckties. There was music that was being played. They danced while singing in the accompaniment of the band. It went that way. When I felt asleep, I heard music. By the way the big trees in the farm were owned by my husband. There was also a very big *Dao* tree. When I felt asleep I saw that these trees were transformed into where the people danced. They were all dancing. After a while, I started praying because I could hardly breathe. I gasped for breath and wanted to wake up. Suddenly I heard the barking of the dogs, then everything changed as they were before. I saw the big trees again. I never saw the people but I could still imagine the music and how they sang and danced. I really felt weak that time as if I was not feeling well. When it was already getting dark, I decided to go home.

-Paula Ignacio
(Informant)

Budyong

Budyong went to the farm to make nipa singles. When he was already there he was caught by a vine. He cut down the vine with the use of his scythe. He lost his consciousness and was immediately brought to the hospital but was not cured by the doctors. Instead a quack doctor was sought to find out the electric wire connected to Biringan City. After three days, Budyong died.

-Paula Ignacio
(Informant)

Objective 3. Reflect the worldviews mirrored in these tales

The worldview mirrored in the "Paper Cut-outs" is the characteristic of being a trader. People usually travel far just to trade something. This is usually the attitudes of the Mongolians, Chinese and the Muslims that were imbibed by the Filipinos.

The tale “Midnight Procession” mirrors a man’s curiosity to investigate incidents to the point of risking his own life.

“The Soldiers” mirrors valour and the strength of every individual to defend people in distress.

Hygiene is mirrored in the tale “Bubbles in the River.” People are very particular on their appearance and how they dress up.

“The Dream” mirrors the attitude in believing the interpretation of a dream. When somebody dreams his/her tendency is to let someone interpret it.

”Budyong” mirrors the beliefs of folks that once humans destroy the things of the unseen creatures, something bad will happen to them.

“Balikbayan Boxes” mirrors the attitude of Filipinos to give “pasalubong” to their relatives back.

Plate 1. Way to the rumoured mysterious land in Biringan City

Plate 2. The Rosewood tree, which is believed to be the light-house of Biringan City

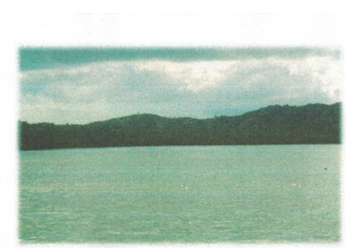


Plate 3. Part of the vast area of Biringan City

V. Conclusions and Implications

Based on the collected tales it is concluded that:

- Though modernization affected the lives of the residents living in Pagsanghan, Western Samar, many unexplainable phenomena still occur.
- These tales could prove that Biringan City exists because the informants were able to describe it, like how a plain mountain can turn into a magnificent city in their revealed experiences.
- This implies that people nowadays still believe in the mysteries hidden in some places believed to exist in another dimension.

VI. Recommendations

The researchers recommend the following:

1. This research be replicated in other places of Samar believed to be enchanted;
2. Further investigation about the same subject in different rural areas if such belief still exists; and
3. This study be interfaced in the teaching of Philippines Literature.

Acknowledgment

The researchers are grateful to the informants of this study and to the folks of Western Pagsanghan, Western Samar .

References

[1] Acebron, G. “Aswang tales told in Batag Island.” Undergraduate Thesis, University of Eastern Philippines, University Town, Northern Samar.

[2] Baduel, C.M. (1985). *Proceedings of the second national symposium on the Philippines folklore.* UP Diliman: UP Folklore, Inc.

[3] Delajaban, J. and Castillo, R. “Tales of Araw City: the mysteries within.” Undergraduate Thesis, University of Eastern Philippines, University Town, Northern Samar.

[4] Eugenio, D.L. (2007).*Philippine folk literature. an anthology, 2nd edition* Vol. I. Diliman, Quezon City, UP Press.

[5] http://www.libraryireland.com/AncientLegendsSuperstitions/Fairies-Fallen-Angels.php

[6] Manuel, A.E. (1975). *Guide for study of Philippine Folklore,* Manila.

APPLICATION OF ERGONOMICS IN THE REDESIGNING OF TRICYCLE SIDECAR

Willie C. Buclatin*,
Matthew Ian D. Añonuevo and Aldous Gabriel A. Gagasa

*Chairperson, Department of Industrial Engineering and Technology
Cavite State University – Indang, Cavite willie_buclatin@yahoo.com

Abstract

The study was primarily conducted to redesign the tricycle sidecar through the application of ergonomics and anthropometry. It also aimed to determine the individual attributes of the participants, identify the anthropometric discomforts that were experienced by the passengers in riding the tricycle sidecar and compare the dimensions of the present with the proposed tricycle sidecar designs to show the deficiency of the required dimensions of the present design that might be the cause of the discomforts associated in using the tricycle sidecar. The mismatch between the dimensions of the tricycle sidecar and its passengers causes discomforts.

The study required data such as the anthropometric dimensions of the passengers, the common discomforts they experienced in riding a tricycle sidecar and the dimensions of the tricycle sidecar. The data gathering for the anthropometric dimensions of the passengers and identification of discomforts was conducted in the form of survey from the passengers of tricycle sidecar while the dimensions of the tricycle sidecar were obtained through measuring the actual sidecars.

Industrial Engineering tools such as principles of ergonomics, anthropometry as well as statistics were applied in gathering and analyzing the data. The use of percentiles was helpful in determining the appropriate dimensions of the proposed sidecar design.

The results of the study clearly showed the mismatch in dimensions between the tricycle sidecar and its passengers. The measured dimensions of the sidecars were insufficient or smaller than the corresponding dimensions of the passengers making it unfit for use. The results also showed that most passengers experienced discomforts on the different parts of their bodies while riding on it.

With the required measurements from the participants, the researchers were able to propose an ergonomically designed tricycle sidecar that would possibly help in reducing and eliminating the discomforts that are being experienced by the passengers in using the common tricycle sidecar.

Key Words: Anthropometry, Discomforts, Ergonomics, Percentiles, Tricycle sidecar

INTRODUCTION

Tricycles are used primarily for commercial transportation, either of passengers in pedicabs and freights and deliveries. It is considered as one of the major means of transportation in various countries in south-east Asia especially in the Philippines due to its flexibility in transportation. The fact that this country's most inhabited areas cannot be reached by larger vehicles made the use of tricycles more convenient and practical for most of the people thus, making it a daily necessity for many. The tricycle's small and compact size are its most advantageous attributes which makes it fit for travelling narrow streets and roads but it also poses problems that are often encountered but not recognized by its passengers. Due to its size, most of the typical tricycles do not comply with the appropriate seating space for the passengers and therefore limiting their movements and comfortability. This may cause various discomfort and additional stress for the passenger after going to work or other places. With these figures, the importance of providing a well-designed tricycle side car should not be ignored. This problem gave the researchers enough interest in providing possible solutions by redesigning the tricycle side car through application of proper knowledge about ergonomics and engineering anthropometry.

Objectives of the Study

This study generally aimed to apply ergonomics in redesigning and improving a tricycle sidecar.

Specifically, this study also aimed to:

1. determine the demographic profile of the participants in terms of:
2. gender; and
3. body mass index;
4. identify the common discomforts experienced by the passengers in riding a tricycle;
5. recommend possible suggestions that could help eliminate these discomforts;
6. propose an ergonomic tricycle sidecar design; and
7. determine the tricycle passengers' possible benefits in the proposed ergonomic tricycle sidecar design.

METHODOLOGY

Research Design

This study utilized the use of engineering tools in applying ergonomics in redesigning a tricycle sidecar. The tricycle sidecar's dimensions as well as the participants' were both considered in the application of principles in ergonomics and other approaches that may help the study.

Sample Size Determination

The resulting sample sizes were 378 tricycle passengers.

Sources of Data

The required anthropometric data were gathered from the tricycle passengers. These data include the demographic profiles of the passengers who utilize the tricycle as a mode of transportation. The anthropometric problems were also identified by the participants. The required tricycle dimensions were also collected and these were necessary in assuming the standard dimensions of the sidecar.

Data Gathering Procedure

Gathering of the necessary dimensions were obtained by means of measuring both the tricycle and the physical characteristics of the participants. Physical attributes of the participants include weight, sitting height, sitting shoulder height (acromion), sitting eye height, sitting elbow height, sitting thigh height (clearance), sitting knee height, sitting popliteal height, shoulder elbow length, elbow fingertip length, forward grip reach, buttock knee depth (sitting), buttock popliteal depth (sitting), shoulder breadth biacromial, shoulder breadth bideltold, and hip breadth (sitting), while sidecar dimensions primarily included its interior including the length of seats, height of sidecar, width of sidecar, etc.

Data gathering tools such as surveys and questionnaires were used in identifying anthropometric problems inside the tricycle sidecar. Questionnaires were given to the selected participants and they were given enough time to accomplish it. After finishing the questionnaires, the researchers asked for the participants' consent to have their body dimensions measured.

Data Analysis

The data obtained from the measurements, surveys and questionnaires were thoroughly analyzed by the researchers. The data gathered were treated under the principles of ergonomics and engineering anthropometry to evaluate and propose an ergonomically designed tricycle sidecar to deal with the problems associated in riding a tricycle. The researchers used descriptive statistics and Gaussian distribution.

- **Descriptive Statistics**

Descriptive statistics describes the main features of a collection of data quantitatively. It comprises those methods concerned with collecting and describing a set of data so as to yield meaningful information. The researchers used this to interpret the result of testing.

This analysis was used to describe the main characteristics and features of the collected data i.e. frequency, percentage, mean standard deviation and range.

- **Percentile**

A percentile (or a centile) is a measure used in statistics indicating the value below which a given percentage of observations in a group of observations fall. Percentiles represent the area under the normal curve, increasing from left to right. This study used the 95th percentile to determine the standard measurement for tricycle sidecar with regards to the anthropometric dimensions of the respondents that were gathered. Values that did not fall under the standard measurement were considered the extremes.

FINDINGS

A. Gender of the Participants

Table 1 shows that 168 (56%) of the participants were female while 210 (56%) of the participants were male.

Table 1. Gender of the tricycle sidecar passengers

GENDER	FREQUENCY	PERCENT	RANK
Male	168	44%	2
Female	210	56%	1
TOTAL	378	100%	

Mean = 189 Standard Deviation = 29.7

B. Body Mass Index of the Respondents

Table 2 shows that 47 percent of tricycle sidecar passengers had a body mass index ranging from 19.43 to 24.43, 41 percent had a body mass index ranging from 14.42 -19.42, 36 percent had 24.44-29.44, while the remaining 2 percent had a body mass index ranging from 29.45 to 34.45.

Table 2. Body mass index of the tricycle sidecar passengers

BODY MASS INDEX	FREQUENCY	PERCENT	RANK
14.42-19.42	157	41	2
19.43-24.43	176	47	1
24.44-29.44	36	10	3
29.45-34.45	9	2	4
TOTAL	378	100	

Mean = 20.51 Standard Deviation = 3.41

Associated Discomforts in Using a Tricycle Sidecar

Table 3 shows that the large number of participants that answered "often" proves that the design of the tricycle sidecar generate adverse effect in the head of the passengers because of the insufficient head space allotted for the present design which was 86.2 cm compared to the obtained 95th percentile sitting height value from the passengers which was 91.85 cm.

Table 3. Frequency of occurrence of head discomfort in riding a tricycle sidecar

HEAD DISCOMFORT	FREQUENCY	PERCENT	RANK
Always	85	23	2.5
Often	200	53	1
Sometimes	87	23	2.5
Never	6	2	3
TOTAL	378	100	

Mean = 94.5 Standard Deviation = 79.81

Table 4 shows that majority of the participants (50%) responded that they "often" experienced visual discomfort. The visual discomfort may be attributed to the inadequate space allotted for the front window of the tricycle sidecar.

Table 4. Frequency of occurrence of visual discomfort in riding a tricycle sidecar

VISUAL DISCOMFORT	FREQUENCY	PERCENT	RANK
Always	28	7	4
Often	188	50	1
Sometimes	116	31	2
Never	46	12	3
TOTAL	378	100	

Mean = 94.5 Standard Deviation = 73.41

Table 5 implies that the design of the tricycle sidecar produces discomfort to the neck of the passengers due its lack of required dimension to properly accommodate the upper body of the passengers which greatly affects the neck comfortability of the passengers. It was caused by the difference in the sitting height of passengers which was 91.85 cm. and the tricycle sidecar's sitting height which was 86.2 cm.

Table 5. Frequency of occurrence of neck discomfort in riding a tricycle sidecar

NECK DISCOMFORT	FREQUENCY	PERCENT	RANK
Always	82	7	3
Often	192	50	1
Sometimes	95	31	2
Never	9	12	4
TOTAL	378	100	

Mean = 94.5 Standard Deviation = 75.65

Table 6 shows that a large fraction of the passengers suffer from discomforts in shoulder associated with tricycle sidecar usage due to its width's which was 77.1 centimeters (38.55 for each passenger) to the shoulder breadth of the passengers which was 50.25 centimeters.

Table 6. Frequency of occurrence of shoulder discomfort in riding a tricycle sidecar

SHOULDER DISCOMFORT	FREQUENCY	PERCENT	RANK
Always	91	24	2
Often	197	52	1
Sometimes	79	21	3
Never	11	3	4
TOTAL	378	100	

Mean = 94.5 Standard Deviation = 77.32

Table 7 implies the deficiency of space for the tricycle sidecar's width which was 77.1 compared to the required width of two passengers which is 105.5.

Table 7. Frequency of occurrence of body discomfort in riding a tricycle sidecar

BODY DISCOMFORT	FREQUENCY	PERCENT	RANK
Always	75	20	3
Often	204	54	1
Sometimes	91	24	2
Never	8	2	4
TOTAL	378	100	

Mean = 94.5 Standard Deviation = 81.82

Table 8 illustrates the large portion of the passengers that are being affected by back discomfort. The back dimension of a passenger was 62.14 centimeters while the back dimension of the tricycle was 57.10 centimeters. This shows that the tricycle lacked the required seat length.

Table 8. Frequency of occurrence of back discomfort in riding a tricycle sidecar

BACK DISCOMFORT	FREQUENCY	PERCENT	RANK
Always	53	14	3
Often	197	52	1
Sometimes	118	31	2
Never	10	3	4
TOTAL	378	100	

Mean = 94.5 Standard Deviation = 81.91

Table 9 shows how many passengers suffered from discomforts caused by the tricycle sidecars' low seat. Almost half of the participants experienced discomforts regarding its low seat design. This means that the tricycle's low sitting design produced discomfort for the passenger because the obtained anthropometric dimensions for the passengers outsized the dimensions of the tricycle sidecar's small seat. The tricycle sidecar's sitting knee height was 20.75 centimeters compared to the passengers' sitting popliteal height with the gathered measurement of 35.79 centimeters.

Table 9. Frequency of occurrence of discomfort associated with the tricycle's low seat design

LOW SITTING POSITION DISCOMFORT	FREQUENCY	PERCENT	RANK
Always	65	17	3
Often	185	49	1
Sometimes	120	32	2
Never	8	2	4
TOTAL	378	100	

Mean = 94.5 Standard Deviation = 76.1

Table 10 implies that the anthropometric dimensions from the passengers were larger than that of the tricycle sidecar's that causes discomfort in legs and thighs.

Table 10. Frequency of occurrence of leg and thigh discomfort in riding a tricycle sidecar

LEGS AND THIGHS DISCOMFORT	FREQUENCY	PERCENT	RANK
Always	49	13	3
Often	154	41	2
Sometimes	156	41	1
Never	19	5	4
TOTAL	378	100	

Mean = 94.5 Standard Deviation = 71.21

Table 11 shows that the tricycle sidecar's small internal dimension such as its width which was 77 cm limited the movement of the passenger's feet. This may be caused by the small leg room allocated for the lower limb of the passengers including the feet.

Table 11. Frequency of occurrence of feet discomfort in riding a tricycle sidecar

FEET DISCOMFORT	FREQUENCY	PERCENT	RANK
Always	24	6	4
Often	104	28	3
Sometimes	138	36	1
Never	111	29	2
TOTAL	378	100	

Mean = 94.5 Standard Deviation = 49.44

Table 12 reveals that the tricycle sidecar's entrances and exit's length and width were not fit for the height and shoulder width of the passengers. The 95th percentile shoulder breadth of the passengers was 50.25 centimeters while the length and width of the tricycle sidecar were 91.75 and 77 centimeters respectively. The discomfort may be attributed to the small allotted space for the tricycle sidecar's body and its low seat design.

Table 12. Frequency of occurrence of discomfort associated in entering and exiting a tricycle sidecar

DISCOMFORT FROM ENTERING/EXITING	FREQUENCY	PERCENT	RANK
Always	47	12	3
Often	190	50	1
Sometimes	122	32	2
Never	19	5	4
TOTAL	378	100	

Mean = 94.5 Standard Deviation = 77.51

Table 13 implies how unfit the third seat is for passenger usage since majority of the passengers experienced problems using it. It was caused by the large discrepancy on the dimensions of the tricycle sidecar's sitting height, sitting knee height, sitting popliteal height, and hip breadth of the tricycle sidecar to that of the passengers. The sitting height, sitting knee height, buttock popliteal depth and hip breadth of the tricycle sidecar were 86.2, 20.75, and 33.02 and 78.53 centimeters respectively, while the passenger's sitting height, sitting knee height, buttock popliteal depth and hip breadth of the tricycle sidecar were 91.85, 35.79, 38.72 and 38.75 centimeters respectively. All of the tricycle's dimensions were not fit for the anthropometric data of the passengers.

Table 13. Frequency of occurrence of discomfort associated in using the small seat of a tricycle sidecar

DISCOMFORT FROM USING SMALL SEAT	FREQUENCY	PERCENT	RANK
Always	211	56	1
Often	83	22	2
Sometimes	74	20	3
Never	10	3	4
TOTAL	378	100	

Mean = 94.5 Standard Deviation = 84.15

Table 14 shows that only a small number of passengers "always" experienced it while those who "never" encountered it was higher but it did not mean that it was ergonomically designed because the majority still experienced it "often". The forward grip reach of the passenger was 67.16 centimeters.

Table 14. Frequency of occurrence of arm discomfort in riding a tricycle sidecar

ARM DISCOMFORT	FREQUENCY	PERCENT	RANK
Always	18	5	4
Often	182	48	1
Sometimes	99	26	2
Never	79	21	3
TOTAL	378	100	

Mean = 94.5 Standard Deviation = 68.18

Comparison of Tricycle Sidecar's Main Seat and Passengers' Anthropometric Dimensions

Table 15 shows the difference between the average dimensions of a tricycle sidecar and the fifth (5th) or ninety-fifth (95th) percentile dimensions of its passenger. By comparing the dimensions of the passenger to the tricycle sidecar, the researchers were able to identify the deficiency in dimension of the tricycle sidecar. The existing tricycle sidecars' sitting popliteal height was insufficient by 15.04 cm, their sitting height by 5.65 cm, shoulder breadth by 3.32 cm and buttock popliteal depth by 5.71 cm, while the only dimension of the sidecars to provide sufficient or more space for the passengers was their hip breadth which was 0.52 cm wider than the ninety five percent (95%) of the passengers' hip breadth. These findings imply that the tricycle sidecars were not fit for its users ergonomically and these may also be the cause of discomforts that were experienced by the passengers, thus proposal for a better design was a necessity.

Comparison of Tricycle Sidecars' Small Seat and Passengers' Anthropometric Dimensions

Table 15. Comparison of passengers' and tricycle sidecars' dimensions (main seat)

ANTHROPOMETRIC DIMENSION	PASSENGERS' DIMENSION	TRICYCLE SIDECARS' DIMENSION	DIMENSION DEFICIENCY
Sitting Popliteal Height	35.79 cm	20.75 cm	15.04 cm
Sitting Height	91.85 cm	86.20 cm	5.65 cm
Hip Breadth	38.74 cm	39.27 cm	-0.52 cm
Shoulder Breadth	50.25 cm	36.93 cm	3.32 cm
Buttock Popliteal Depth	38.73 cm	33.02m	5.71 cm

Table 16 shows the deficiency of the small seat in the tricycle sidecar compared to the fifth (5th) or ninety-fifth (95th) percentile of the anthropometric dimensions of its passengers. The results present that the passengers outsize the small seat of the tricycle sidecar and may be the cause of discomforts the passengers were encountering. The tricycles' small seat lacked 16.56 cm sitting popliteal height, 9.80 cm sitting height, 2.90 cm hip breadth and 21.93 cm buttock popliteal depth. These huge deficiencies in sidecar dimensions suggest that the small seat was not ergonomically designed and should be eliminated from the proposed tricycle sidecar design.

Determination of Appropriate Tricycle Sidecar Dimensions

Table 16. Comparison of passengers' and tricycle sidecars' dimensions (Small Seat)

ANTHROPOMETRIC DIMENSION	PASSENGERS' DIMENSION	TRICYCLE SIDECARS' DIMENSION	DIMENSION DEFICIENCY
Sitting Popliteal Height	35.79 cm	19.23 cm	16.56 cm
Sitting Height	91.85 cm	82.05 cm	9.80 cm
Hip Breadth	38.74 cm	35.85 cm	2.90 cm
Buttock Popliteal Depth	38.73 cm	16.80cm	21.93 cm

Table 17 shows the formulation of the recommended dimension for the proposed tricycle sidecars' sitting height. The proposed tricycle sidecar dimensions were obtained by adding the mean of each dimension to the product of the specified passengers' anthropometric dimension's standard deviation and 95th percentile factor which was 1.64. This resulted to sitting height being adjusted to 91.85 cm, sitting popliteal height to 35.79 cm, hip breadth to 38.75 cm, shoulder breadth to 50.25 and buttock popliteal height to 38.73 cm. It means that, for every one hundred passengers, ninety-five of their sitting height, hip breadth and shoulder breadth would be smaller in the tricycle sidecars' height.

Table 17. Formulation of the proposed tricycle sidecar's dimensions

PASSENGERS' DIMENSIONS	MEAN	STANDARD DEVIATION	PERCENTILE FACTOR	REQUIRED DIMENSION
Sitting Height	82.08 cm	5.96 cm	1.64	91.85 cm
Sitting Popliteal Height	41.30 cm	3.44 cm	-1.64	35.79 cm
Hip Breadth	34.82 cm	2.39 cm	1.64	38.74 cm
Shoulder Breadth	43.14 cm	4.33 cm	1.64	50.25 cm
Buttock Popliteal Depth	45.36 cm	3.73 cm	-1.64	38.73 cm

Comparison between the Present and Proposed Tricycle Sidecar Dimensions

Table 18 shows the difference between the present and the proposed tricycle sidecar dimensions. Below are the means of the dimensions gathered from ten tricycle sidecars and the proposed tricycle sidecar dimensions based from the passengers' anthropometric dimensions including their allowances. The proposed tricycle sidecar height is 142 cm, it is the combined length of the proposed sitting height and sitting popliteal height which are 97 cm and 36 cm respectively. The proposed sitting height was derived from the passengers' 95th percentile with 5 cm added allowance while the seating popliteal height was derived from the passengers' 5th percentile and serves as the height of the sidecar's main seat. The proposed sidecar length is 115 cm, it is the combined length of the passengers' 95th percentile buttock knee depth and shoulder breadth bideltold which are 60.75 cm and 50.25 cm respectively with 4 cm allowance. The proposed tricycle sidecar width which is 101 cm is the product of the 95th percentile of the passengers' shoulder breadth bideltold and the maximum seating capacity of the sidecar which are 50.25 cm and 2 passengers respectively rounded up to its nearest tenths. This serves as width of the seat for the proposed sidecar. The length of the seat for

Comparison between the Present and Proposed Tricycle Sidecar Dimensions

Table 18 shows the difference between the present and the proposed tricycle sidecar dimensions. Below are the means of the dimensions gathered from ten tricycle sidecars and the proposed tricycle sidecar dimensions based from the passengers' anthropometric dimensions including their allowances. The proposed tricycle sidecar height is 142 cm, it is the combined length of the proposed sitting height and sitting popliteal height which are 97 cm and 36 cm respectively. The proposed sitting height was derived from the passengers' 95th percentile with 5 cm added allowance while the seating popliteal height was derived from the passengers' 5th percentile and serves as the height of the sidecar's main seat. The proposed sidecar length is 115 cm, it is the combined length of the passengers' 95th percentile buttock knee depth and shoulder breadth bideltold which are 60.75 cm and 50.25 cm respectively with 4 cm allowance. The proposed tricycle sidecar width which is 101 cm is the product of the 95th percentile of the passengers' shoulder breadth bideltold and the maximum seating capacity of the sidecar which are 50.25 cm and 2 passengers respectively rounded up to its nearest tenths. This serves as width of the seat for the proposed sidecar. The length of the seat for the tricycle sidecar is based from the 5th percentile of the passengers' buttock popliteal depth which is 39 cm (rounded to the nearest tenths).

Table 18. Comparison between the present and proposed tricycle sidecar dimensions

PRESENT TRICYCLE SIDECAR DIMENSIONS	MEASUREMENT	PROPOSED TRICYCLE SIDECAR DIMENSIONS	MEASUREMENT
Sidecar Height	107 cm	Sidecar Height	142 cm
Sitting Height	86 cm	Sitting Height	97 cm
Buttock Popliteal Depth	33 cm	Buttock Popliteal Depth	39 cm
Sitting Popliteal Height	21 cm	Sitting Popliteal Height	36 cm
Sidecar Length	125 cm	Sidecar Length	115 cm
Sidecar Width	77 cm	Sidecar Width	101 cm

CONCLUSION

Based on the findings of this study, it is concluded that the dimensions of the tricycle sidecar are not ergonomically designed.

The current design does not conform to the proper anthropometric measurements of the students. This results to several discomforts that are being experienced by the passengers. The researchers also conclude that the most of the tricycle sidecars' dimensions are insufficient therefore; most of the proposed dimensions are made larger. These mismatches were identified and measured by tallying the answers of the passengers in the survey form that determines how frequent they experience discomfort in the part of their bodies and through determining the 5th and 95th percentile of the passengers' anthropometric dimensions and their difference with the tricycle sidecar's dimensions.

The researchers concluded that the following tricycle sidecar's dimensions are not compatible with the collected anthropometric dimensions of the passengers:

- Sitting height;
- Sitting knee height;
- Shoulder breadth;
- Buttock knee depth;
- Tricycle sidecar's height; and
- Tricycle sidecar's width.

RECOMMENDATION

The following recommendations were formulated by the researchers through the application of ergonomic principles for the improvement of tricycle sidecar to eliminate the discomforts associated in using it.

1. Improve the height of the tricycle sidecar base from the necessary percentiles obtained from the participants which were the 95th and 5th. This improves the height of its seats and ceiling that were proven to be unergonomically designed.
2. Improve the width of the tricycle sidecar based from the data gathered from the passengers. These data served as the basis for the proposed dimensions such as shoulder breadth and hip breadth.
3. Discourage the use of the third seat that was proven to produce the highest frequency of discomfort among its passengers. Its dimensions also showed large discrepancy with the anthropometric dimensions of its passengers making it unfit for adult usage.

ACKNOWLEDGMENT

The researchers wish to express their deepest gratitude and appreciation to those individuals who helped and supported them in the completion of the study. Also, to our Almighty God, for the strength and blessings He continuously provided.

REFERENCES

BOFF, C. (2006). *Industrial Engineering and Ergonomics: Visions, Concepts, Methods and Tools,* Third Edition: ISBN Publishing.

DEPARTMENT OF ENERGY (2009). *Right Now! Do Right. Be Bright. Go E-Trike!.* http://adc.bmj.com/content/95/1/1.extract. Date Accessed: September 20, 2013

GYI ET AL. (2003). *An Introduction to Modern Vehicle Design.* Reed Elsevier Publishing.

HEDLEY, J. (2004). *How to Design for Ease and Efficiency. Prentice Hall, Inc.*

HEILANDER M. (2012). *Human factors and Ergonomics,* Fourth Edition: Wiley Publishing.

HENDRICK, H. (1984). *Macroergonomics: Theory, Methods, and Applications* .Springer Publishing House.

NEUMANN, V. (2007). *Human Anatomy and Physiology:* Third Edition: CRC Press.

PEACOCK, S. (1993). *Bodyspace: Anthropometry, Ergonomics and the Design of the Work*, Second Edition: CRC Press.

SLAVENDY, G. (2012). *A Guide to Human Factors and Engineering*. Kluwer Academic Publishing Group.

ULAJASZEK, S. (1994). *Principles of Ergonomics. John Wiley and Sons Inc.*

SELF-EFFICACY AND BEHAVIOR OF STUDENT TEACHERS IN RELATION TO THEIR TEACHING PERFORMANCE

*ANTONIETA OLAVIDES OCAÑA
09462511734, tonetocana @gmail.com
Bohol Island State University Main Campus

ABSTRACT

The main purpose of this study was to determine the self-efficacy, behavior and teaching performance of student teachers of Bohol Island State University Main Campus during second semester of school year 2013-2014. The researcher used the descriptive survey on self efficacy using the standardized questionnaire by Albert Bandura in a purposive convenient sampling. A documentary analysis on the student teaching performance was utilized both the on and off campus student teaching exposure. The Pearson Product Moment Correlation was used to determine the degree of correlation between the following; self-efficacy and teaching performance, self-efficacy and behavior, behavior and teaching performance. The t-test for correlated mean was used to find out the degree of difference between the perception of the student teaching mentors and supervisor on the following: student teachers' behavior and teaching performance. Two-Way Analysis of Variance (ANOVA) and the Scheffe test were used to determine the degree of variance on student teachers' perception on the seven dimensions of self-efficacy and three dimensions of behavior. Self-efficacy has no significant relationship with the student teachers' teaching performance. As to the difference of self-efficacy and teaching performance, self-efficacy does not significantly affect teaching performance of the student teachers. Furthermore, there is high significant difference of student teachers' teaching performance as perceived by the student mentors and supervisor. The finding revealed that the teaching performance of the student teachers of both teaching exposure does not differ significantly. Lastly, there is significant variance among the seven dimensions of self-efficacy. Hence, the researcher recommends to review the curriculum in education for the integration of values and teaching skills.

Key Words:
Self-efficacy, Behavior, Student Teachers, Teaching Performance and Dimensions

INTRODUCTION

Student teaching is the most crucial episode in the life of a graduating teacher education student. Pre-service training is a period of guide professional development and preparation for them to become professional teachers.

Self-efficacy theory of Albert Bandura summarizes as the belief in one's capabilities to organize and execute the courses of action required to manage prospective situations or is a person's belief in his or her ability to succeed in a particular situation which is considered as the most important precondition for behaviour change. Likewise, he stressed that there are four major sources of self-efficacy as follows: 1.) Mastery experiences, 2.) Social modeling, 3.) Social persuasion and 4.)Psychological responses. Moreover, Bandura's Social Cognitive Model says that there are three (3) factors that influence self-efficacy: a.) behaviors b.) environment and c.)personal or cognitive factors. This implies that children learn new behaviors from observing other people and that external reinforcement was not the only way that people learned new things. Instead, intrinsic reinforcements such as a sense of pride, satisfaction and accomplishment could also lead to learning. By observing the actions of others, including parents and peers, children develop new skills and acquire new information. (Bandura, 1994)

Furthermore, Lev Vygotsky's zone of proximal development proposes "that an essential feature of learning is that it creates the zone of proximal development; that is, learning awakens a variety of internal developmental processes that are able to operate when a child is interacting with people in his environment and in cooperation with his peers. Once these processes are internalized, they become part of the child's independent developmental achievement". This is unlike the traditional model for instruction where a teacher transmit information to students. This theory promotes learning contexts where students play an active role in learning. (Vygotsky, 1981). So, it is an important concept that elaborates of school of learning. It explores the idea that what children can achieve with the assistance of others (social interaction) may be more indicative of their mental development than what they can do alone. Likewise, it means that mental functions are acquired through social relationship and that learning takes place when the child interacts with peers and adults in a social setting as they act upon the environment. Thus, children learn by internalizing activities conducted in the world around them as they emulate behaviors and incorporate them into their existing structures of knowledge when they are exposed to new situations in which they can actually interact with others.

In addition, Erikson believed that a sense of competence motivates behaviors and actions. Each stage is concerned with becoming competent in area of life. If the stage is handled well, the person will feel a sense of mastery, which is sometimes referred to an *ego strength or ego quality*. However, if the stage is managed poorly, the person will emerge with a sense of inadequacy.

On a study conducted by Felisan on Student Teaching Program Teacher Education Institutions within Bohol province in 2005, she found out that there were significant correlation of responses on off-campus practices and on evaluation of student teachers based from the responses of the student teachers and the student teaching supervisors.

Likewise, Amoguis (2004), in his study status and performance of the elementary student teachers of the University of Bohol found out that on professional aspect, the student-teachers felt the foremost problem they met was teaching subjects which are not in their specialization thus, they lack knowledge of the subject; they claimed that they lack the classroom management skill and the skill to manage the untoward behavior of the pupils so, they concluded that there is a lack of motivation from the student teaching mentors and the elementary heads.

The study of Tirol (2006) picture out the old curriculum in teacher education especially on student teaching revealed that the teachers handling Community Immersion course are using the traditional lecture method with a variation of small group discussion method in which most of the topics discussed were community-related and the least discussed lessons were on the types and importance of communication.

In addition, the study of Ganzon (2014) on the students' attitude and motivational level in learning mathematics in relation to academic performance found out that students' attitude in learning is directly related to motivation and motivation of the students affects their performance.

Additionally, Roberts, et.al (2007) on his study about relationship between personality type and teaching efficacy of student teachers found out that student teachers were more extroverted, sensing, feeling and judging. So, it is recommended that strategies be developed and implemented to help increase teaching efficacy of student teachers during their period of their field experience.

Furthermore, the study of Ade Een Kheruniah in 2013 about a teacher personality competence contribution to a student study motivation and discipline found out that teacher's personality competence has the contribution to student's study motivation and discipline. There is a significant correlation of a student's study and discipline.

With this notion, as the researcher is the assigned Student Teaching Supervisor (STS) and the designated Chairperson of the BEEd Program in BISU Main Campus, it is her mission to hone the Student Teachers not only as the institution that produce Topnotchers and recognized as four year consecutive consistent Top Performing School in the country for the BEEd Program during the Licensure Examination for Teachers (LET) given by the Philippine Regulatory Board (PRC) but also forming graduates into Christian future teachers . Guided by the university's Vision-Mission-Goals and Objectives with the Core Values and to respond with the Goals and Objectives of the Student Teaching Program (STP) thru the development of their Knowledge, Skills, Attitudes and Habits(K-S-A-H), the researcher has a greater hope that the student teachers will become aware of their self-efficacy and behavior in order to improve their teaching performance.

PURPOSE OF THE STUDY

The main purpose of the study is to determine the Self-Efficacy and Behavior of Student Teachers of Bohol Island State University Main Campus, Tagbilaran City in relation to their Teaching Performance during second semester of school year 2013-2014. Specifically, it sought to answer the following problems; What is the profile of the student teachers in terms of sex and age? What is the self-efficacy of the respondents in the following contexts on Efficacy to Influence Decision Making, Efficacy to Influence School Resources, Instructional Self-Efficacy, Disciplinary Self-Efficacy, Efficacy to Enlist Parental Involvement, Efficacy to Enlist Community Involvement and Efficacy to Create a Positive School Climate? What are the behavior of the student teachers in the classroom during the on-campus and off-campus student teaching exposure as to social, emotional and moral? What is the teaching performance of the respondents during their On and Off-campus exposure as rated by the student teaching mentors in the dimensions on teaching skills, participation, personality and reports and term papers and professional growth? What is the teaching performance of the student teachers as rated by the student teaching mentors and supervisor? Is there a significant degree of correlation between self-efficacy and teaching performance, self-efficacy and behavior and behavior and teaching performance? Is there a significant degree of difference between the perception of the Student Teaching Mentors and Supervisor on the behavior and teaching performance? Is there a significant degree of variance on the student teachers' perception of the seven dimensions?

Null Hypotheses

There is no significant degree of correlation between the profile on self-efficacy and teaching performance, self-efficacy and behavior and behavior and teaching performance.

There is no significant degree of difference between the behavior of the student teachers during their the on-campus and off-campus in the contexts of social, emotional and moral skills.

There is no significant degree of difference between the perception of the Student Teaching Mentors and Student Teaching Supervisor on behavior and teaching performance.

There is no significant degree of variance on the student teachers' perception of the seven dimensions of self-efficacy.

MATERIALS AND METHODS

The researcher made use of the descriptive survey with the aid of the standardized questionnaire for self-efficacy by Albert Bandura in a purposive convenient sampling of the respondents. Likewise, a survey questionnaire for the behavior and documentary analysis for student teaching performance rating were utilized both on their On - campus and Off-campus student teaching exposure. An in-depth interview (IDI) was conducted to some representative of the student teaching mentors among the six (6) BISU Main Campus link cooperating elementary schools in the Department of Education, Division of Bohol in order to validate the result of the survey questionnaire.

Environment

The locale of the study was at Bohol Island State University (BISU) - Main Campus in Tagbilaran City, Bohol. It belongs to the BISU System which has six (6) different campuses located in the different parts of Bohol. The College of Teacher Education (CTE) offers three (3) programs as follows: Bachelor of Technology Education (BTE), Bachelor of Secondary Education (BSEd) with five (5) major subjects and Bachelor of Elementary Education (BEEd) with seventy- five (75) as of second semester in school year 2013-2014.

Respondents

This study used the three sets of tool as the source of data for the study. For the self-efficacy scale, only sixty-five (65) out of the total seventy- five (75) total number of students who enrolled during the second semester as S.Y. 2013-2014. A purposive sampling was used for the self-efficacy questionnaire to the student teachers.

Moreover, one hundred thirty (130) Student Teaching Mentors from the six (6) link BISU Main Campus cooperating elementary schools in the Department of Education, Bohol Division were the respondents on the survey questionnaire for behavior both On and Off-campus exposure. An In-depth interview (IDI) was conducted by the researcher to Student Teaching Mentors' representative to validate the result of the investigation. A documentary analysis was adopted for the student teachers' teaching performance as rated by the student teaching mentors and student teaching supervisor.

Instruments

A standardized questionnaire of Albert Bandura was utilized as data gathering tool for the student teachers' self-efficacy wherein the respondents were to specify their answer according to the seven (7) areas on self-efficacy using the corresponding weight equivalent from 5 as 'Great deal" and 1 as "Nothing" and distributed to the assigned student teaching mentors in the DepEd, Division of Bohol to answer the questions of the problems on personality using 5 as "Great deal" and 1 as "Nothing". Meanwhile, the inquiries of the problems on personality under emotional and moral aspects used scale "5 as Very high" and "1 as Very low."

On the other hand, the performance rating of the student teachers on both On- campus and Off-campus exposure were used for the student teachers' teaching performance using the five dimensions with the rating of 1.0 as the highest and 5.0 for the lowest rating was followed.

Procedure

The researcher asked permission from the University President, Campus Director and the Dean of the CTE in BISU Main Campus where the study was conducted. Then, she personally distributed the standardized questionnaire to the respondents who were taking their review classes in BISU Main Campus for Licensure Examination for Teachers (LET) and immediately retrieved the answered tool.

Meanwhile, she personally gave the request letter to the Schools Division Superintendent in the Division of Bohol to gather the needed for the study. Next, personally distributed the survey questionnaire to the teachers of the six (6) BISU Main Campus link cooperating elementary schools located in the First District of Bohol. Moreover, conducted an in-depth interview (IDI) to some student teaching mentors to validate the result of the survey questionnaire and she used the school files on the student teachers' performance rating during their On and Off-campus exposures as rated by their respective student teaching mentors and supervisor during second semester in school year 2013-2014.Finally, she collated, tabulated , analyzed and interpreted the gathered data for statistical treatment to test the given hypotheses.

The researcher used the given formula to treat the gathered data; the percentage formula for the two variables; the frequency, mean and weighted mean for the respondents' profile and self-efficacy; the Pearson Product Moment Correlation formula for the correlation between the respondents' self-efficacy and teaching performance; the T-test for correlated means for the significant degree of difference between the perception of the student teaching mentors and supervisor on the behavior and student teaching performance of the student teachers ; the Analysis of Variance to determine the significant degree of variance in the responses of the seven dimensions of self-efficacy among the student teachers and the Scheffe's Test to test the significant variance in the responses on the student teachers' perception on the seven dimensions of self-efficacy and three dimensions of behavior.

Figure 1.1- Location of the College of Teachers Education (CTE) Flordelis Building at Bohol Island State University Main Campus, Tagbilaran City with enough and standard classrooms before the 7.2 Magnitude Earthquake struck in the entire Bohol Province

Figure 1.2- The College of Teacher Education (CTE) Building of BISU MC being rehabilitated in the Shop Rooms under the Philippine- Australia Technical Vocational Educational Project (PATVEP) with minimal non -standard classrooms (Shop Rooms converted to Classrooms) after the doom of the 7.2 sMagnitude Earthquake last October 15, 2013.

RESULTS AND DISCUSSION

Table 1
Profile of the Respondents
N=65

Items	F	%	R
Sex			
Male	2	3.08	2
Female	63	96.92	1
Age(in years)			
19	2	3.08	4
20	49	75.38	1
21	9	13.85	2
22	3	4.62	3
23	0	0.00	7
24	1	1.54	5.5
25	1	1.54	5.5
Mean	**20.34 yrs. old**		

As to sex, table 1 presents 63 or 96.92 % female respondents while the male respondents have only 2 or 3.08 %. The data shows that there are more female students who prefer to take education course than male. In contrast, it also shows the age of the respondents that majority of them belong to twenty years old with forty-nine(49) or 75.38 % where in two respondents are in 24 and 25 years old as the least number with 1.54 %. This means that the student teachers belong to the appropriate age bracket of their educational ladder.

Table 2

Summary Table of the Student Teachers' Self-Efficacy of BISU Main Campus

Dimensions	WM	DV	Interpretation	R
A. Efficacy to Influence Decision Making	3.71	QB	H	5
B. Efficacy to Influence School Resources	4.06	QB	H	2
C. Instructional Self-Efficacy	3.96	QB	H	4
D. Disciplinary Self-Efficacy	4.06	QB	H	3
E. Efficacy to Enlist Parental Involvement	3.66	QB	H	6
F. Efficacy to Enlist Community Involvement	3.57	QB	H	7
G. Efficacy to Create a Positive School Climate	4.13	QB	H	1
Overall Composite Mean	**3.88**	**QB**	**H**	

Parameters		**Interpretation**			
4.20- 5.00	GD	Great Deal	4.20- 5.00	VH	Very High
3.40 – 4.19	QB	Quite a Bit	3.40 – 4.19	H	High
2.60 -3.39	SI	Some Influence	2.60- 3.39	A	Average
1.80 -2.59	VL	Very Little	1.80- 2.59	L	Low
1.00 – 1.79	NO	Nothing	1.00 – 1.79	VL	Very Low

The findings reveal in table 2 on the student teachers' self-efficacy in the seven dimensions with the highest in rank on efficacy to create a positive school climate with 4.13 % interpreted as "High" while the least in rank on efficacy to enlist community involvement with 3.57 % as " Quite a Bit" parameter. This implies that most of the student teachers are the source of pupils' enjoyment, trust and making school a conducive place for learning however they must improve their linkages to the different social institutions to increase their community involvement. As a whole, the overall composite mean has 3.88% interpreted as "High".

Table 3 summarizes the behavior of the student teachers in

Table 3

Summary of Student Teachers' Behavior in the Classroom in their Social, Emotional and Moral Aspects during their On and Off Campus Exposure

TERM	ON-CAMPUS		OFF-CAMPUS	
ITEMS	WM	Interpretation	WM	Interpretation
I.SOCIAL				
Overall Composite mean	**3.66**	**H**	**3.68**	**H**
II. EMOTIONAL				
Overall Composite mean	**3.76**	**H**	**3.84**	**H**
III. MORAL				
Overall Composite mean	**4.06**	**H**	**4.08**	**H**
Final Rating	**3.83**	**H**	**3.87**	**H**

Parameters		**Interpretation**						
4.20 – 5.00	VH	Very High	2.60-3.39	A	Average	1.00-1.79	VL	Very Low
3.40 – 4.19	H	High	1.80 -2.59	L	Low			

the classroom as of their social, emotional and moral aspects during the on and off-campus exposure gained the final rating of 3.83 and 3.87 respectively interpreted as "High". It implies that student teachers improved in their social, emotional and moral aspects during their off-campus exposure.

Table 4
Teaching Performance of the Student Teachers (STs) during their On-campus and Off-campus as rated by the Student Teaching Mentors (STMs)

Items	On-Campus			Off-Campus			F-Ave.
	First Shift	Second Shift	Ave.	First Shift	Second Shift	Ave.	
A. Teaching Skills							
Ave.	1.32	1.30	**1.31**	1.27	1.26	**1.26**	**1.29**
0.3	0.40	0.39	**0.39**	0.38	0.38	**0.38**	**0.39**
B. Participation							
Ave.	1.27	1.29	**1.28**	1.23	1.24	**1.23**	**1.26**
0.3	0.38	0.39	**0.39**	0.37	0.37	**0.37**	**0.38**
C. Personality							
Ave.	1.25	1.24	**1.25**	1.23	1.23	**1.23**	**1.24**
0.2	0.25	0.25	**0.25**	0.25	0.25	**0.25**	**0.25**
D. Reports and Project	1.28	1.27	**1.27**	1.24	1.24	**1.24**	**1.26**
0.1	0.13	0.13	**0.13**	0.12	0.12	**0.12**	**0.13**
E. Professional Growth	1.29	1.27	**1.28**	1.24	1.25	**1.24**	**1.26**
0.1	0.13	0.13	**0.13**	0.12	0.12	**0.12**	**0.13**
Final Rating	**1.28**	**1.28**	**1.28**	**1.24**	**1.24**	**1.24**	**1.26**

Rating Scale:
1 – Highest and 5-lowest

Table 4 depicts the summary of the students teachers' teaching performance as rated by the student teaching mentors. Between the two exposure, the On-campus gained a final rating of 1.28 while the rating of 1.26 reaped for the Off-campus. It tells the improvement of the student teachers' teaching performance during their Off-campus teaching exposure as seen by their student teaching mentors.

Table 5
Teaching Performance of the Student Teachers (STs) as rated by the Student Teaching Mentors (STMs) and Student Teaching Supervisor (STS)

Items	STM	STS	Average
A. Teaching Skills			
Ave.	1.29	1.53	**1.41**
0.3	0.39	0.46	**0.42**
B. Participation			
Ave.	1.26	1.55	**1.21**
0.3	0.37	0.46	**0.36**
C. Personality			
Ave.	1.24	1.56	**1.40**
0.2	0.25	0.31	**0.42**
D. Reports and Project	1.26	1.82	**1.24**
0.1	0.13	0.18	**0.37**
E. Prof. Growth	1.26	1.78	**1.05**
0.1	0.13	**0.18**	**0.32**
Final Rating	**1.26**	**1.60**	**1.89**

Rating Scale:
1-highest and 5- lowest

Table 5 illustrates the teaching performance of the student teachers as rated by the student teaching mentors and supervisor reveals that the student teaching mentors gave a final rating of 1.26 while 1.60 from the student teaching supervisor. It describes that the student teaching mentors have high final rating than the student teaching supervisor for both on and off- campus exposure teaching performance of the student teachers.

Table 6-A
Correlation Between Self-efficacy and Teaching Performance

ST No.	Self- efficacy		Teaching Performance		XY
65	**X**	**X²**	**Y**	**Y²**	
Sum	**251.97**	**988.2807**	**92.94**	**133.4471**	**360.1300**
Mean	**3.88**		**1.43**		

r= -0.055401
Critical Value of r at 63 df (0.05) = 0.2446
Result: Insignificant
H_O : Accepted

Table 6-A describes the data computation yielded an r value of -0.055401 which was lower than the critical value of of 0.2446 at 63 df and at 0.05 level of confidence. This showed an insignificant result. Thus, the null hypothesis was accepted. It means that self-efficacy is not significantly related with the teaching performance of the student teachers. Therefore, self-efficacy of the student teachers considered in this study is not a factor that influence their teaching performance as stressed by Albert Bandura in his theory of self- efficacy as psychological responses is one of the four major sources of self-efficacy.

Table 6-B
Correlation Between Self-efficacy and Social Behavior

ST No.	Self Efficacy		Social Behavior		XY
65	X	X^2	Y	Y^2	
Sum	251.97	988.2807	239.87	900.4334	931.7128
Mean	3.88		3.69		

r = 0.142087
Critical value of r at 63 df (0.05) = 0.2446
Result: Insignificant
Ho : Accepted

Based on table 6-B, the result of the computation was 0.142087 which was lower than the critical value of 0.2446 at 63 df and at of 0.05 level of confidence. This findings revealed an insignificant result which means that the null hypothesis was accepted. Thus, self-efficacy does not significantly related with the social behavior of the respondents. It implied that the social behavior of the respondents was not affected by the self-efficacy.

Table 6-C
Correlation Between Social Behavior and Teaching Performance

ST No.	Social Behavior		Teaching Performance		XY
65	X	X^2	Y	Y^2	
Sum	239.87	900.4334	92.94	133.4471	342.5951
Mean	3.69		1.43		

r = -0.129338
Critical Value of r at 63 df (0.05) = 0.2446
Result : Insignificant
Ho : Accepted

From the data of table 6-C, the resultant t of 4.73912 was much higher than the critical value of 2.093 at 19 df and at 0.05 level of confidence. In this manner, the significant difference was established. Thus, the null hypothesis was rejected. Therefore, the data had shown that there was an increase of the emotional behavior during the student teaching exposure of the student teachers during their On- campus and Off-campus student practice teaching. Thus, they will still be exposed or provided with several activities that will enhance their emotional skills to reach the optimum rating.

Table 7-A reflects on the computed t of 0.73595 was lower

Table 7-A
Difference Between the Social Behavior of the Student Teachers (STs) During the On-campus and Off-campus Student Teaching Exposure

ST No.	On Campus	Off Campus	D	D^2
65				
Sum			4.46	37.94123
Mean	3.66	3.72	0.07	

t = 0.73595
Critical Value of t at 64 df (0.05) = 1.9987
Result: Insignificant

H_0 : Accepted

than the critical value t of 1.9987 at 64 df and at 0.05 level of confidence. This means it is insignificant; thus the null hypothesis was accepted. The data revealed that the social behavior of the student teachers during their On and Off-campus exposure does not differ significantly. It reflected that there was no improvement of the student teachers' behavior between the two shifts of their student teaching exposure thus an intervention must be made to improve the student teachers' behavior.

According to the data in table 7-C the computation yielded the value of t at 3.9709 was higher than the

Table 7-B
Difference Between the Emotional Behavior of the Student Teachers (STs) During the On-campus and Off-campus Student Teaching Exposure

Item	On Campus	Off Campus	D	D^2
Sum			1.62	0.022935
Mean	3.76	3.84	0.08	

Table 7-C
Difference Between the Moral Behavior of the Student Teachers (STs) During the On-campus and Off-campus Student Teaching Exposure

Items	On Campus	Off Campus	D	D^2
Sum			0.26	0.003355
Mean	4.08	4.10	0.02	

t = 3.9709
Critical Value of t at 9 df (0.05) = 2.262
Result: Significant
H_0 : Rejected

critical value of 2.262 at 9 df and at 0.05 level of confidence. This means that it is significant; hence, the null hypothesis was rejected. Therefore, the data revealed that there was a difference between the moral behavior of the student teachers during their On – campus and Off- campus student teaching exposure. So, student teachers must experienced spiritual enhancement activities that will help them imbibe and practice the values towards other persons especially to the people with whom they always in contact with in their day to day teaching experience.

Table 8 reflects on the computation yielded a t value of 13.28095 which was much higher than the critical value of

Table 8
Difference Between the Perceptions of the Student Teaching Mentors (STMs) and Student Teaching Supervisor (STS) on the Student Teachers (STs) Teaching Performance

ST No.	STMs	STS	D	D^2
Sum			21.66	9.78618
Mean	1.26	1.60	0.33	

t = 13.28095
Critical Value of t at 64 df (0.05) = 1.9987
Result: Significant
H_0 : Rejected

1.9987 at 64 df and at 0.05 level of confidence. Thus, the null hypothesis was rejected. There was a leap or big difference on the student teachers' teaching performance as perceived by the two raters. Such being the case, the significant level of difference was established. The student teaching mentors rated significantly higher than the student teaching supervisor in the student teachers' teaching performance.

Table 9
Difference Between the Teaching Performance of the Student Teachers (STs) During the On-campus and Off - campus Student Teaching Exposure

ST No.	On Campus	Off Campus	D	D^2
Sum			4.46	37.94123
Mean	3.66	3.72	0.07	

t = 0.73595
Critical Value of t at 64 df (0.05) = 1.9987
Result: Insignificant
H_0 : Accepted

Based from the given data in table 9, the resultant t of 1.44153 was lower than the critical value of 1.9987 at 64 df and at 0.05 level of significance. This means it is insignificant; thus the null hypothesis was accepted. The findings revealed that the teaching performance of the student teachers during their On-campus and Off-campus exposure does not differ significantly. Although the result is insignificant, the student teachers still need to be exposed to different activities that will enhance their teaching performance in order to reach the optimum rating in their student teaching performance more on questioning skills, time management and classroom management especially on pupils' discipline.

The data in table 10 reveals about the significant difference on the seven dimensions of self- efficacy among the student teachers. Thus, the null hypothesis was rejected and its significance was validated. On the contrary, the rest of the other dimensions were rated insignificantly thus the null hypothesis was accepted. This tells that the student teachers must still more practice the belief doing things successfully by themselves in order to reach their rating on self-efficacy to the optimum.

CONCLUSION

Table 10
Variance on the Seven Dimensions of Self-efficacy of the Student Teachers Using One-way ANOVA and Scheffe Test
Analysis on Variance of the Seven Dimensions of Student Teachers' Self-efficacy

ST	A		B		C		D		E		F		G	
	X_1	$(X_1)^2$	X_2	$(X_2)^2$	X_3	$(X_3)^2$	X_4	$(X_4)^2$	X_5	$(X_5)^2$	X_6	$(X_6)^2$	X_7	$(X_7)^2$
n	65	65	65	65	65	65	65	65	65	65	65	65	65	65
Sum	241.00	922.0000	246.00	1102.0000	257.22	1032.8519	263.67	1087.2222	238.00	902.4444	231.75	859.6878	268.13	1123.3906
Mean	3.71		4.06		3.96		4.06		3.66		3.57		4.13	
SS	893.5538		1072.2462		1017.8965		1069.5402		871.4462		826.2779		1106.0156	

CF = 6837.0617 TSS= 192.53498 BSS = 19.91466 WSS= 172.62

After careful analysis and interpretation of the data results, the researcher concluded that self-efficacy and behavior on social, emotional and moral skills of the student teachers is high for both On and Off-campus exposure. Teaching performance of the student teachers received an insignificant result as there is slight higher final average rate during the Off-campus than the On-campus internship as rated by their student teaching mentors. Student teachers' teaching performance got higher final average rate from the student teaching mentors than their student teaching supervisor. In the correlation with self-efficacy, behavior and teaching performance, self-efficacy does not significantly affect teaching performance and social behavior. However, social behavior significantly affect teaching performance. Student Teaching Mentors' perception on Student Teachers' behavior revealed that social behavior does not differ while emotional and moral behavior significantly differ. There is a high significant difference of the student teachers' teaching performance as perceived by the Student Teaching Mentors (STMs) and Student Teaching Supervisor (STS). In the presence of slight difference between the On-campus and Off-campus student teachers' teaching performance, the finding revealed that the teaching performance of the student teachers during the On-campus and Off-campus exposure does not differ significantly. There is significant variance among the seven dimensions of self-efficacy.

RECOMMENDATION

Based upon the findings and conclusions of the study, the researchers recommended that there will be long-term preparatory activities for student teaching exposure that include students' positive attitude of accepting criticisms and suggestions. Likewise, imbibe them the importance to cooperate with the school personnel in any co-curricular activities. Moreover, they should be reminded of the continuing practice of respect, punctuality and other values expected of a future student teacher and mostly they must learn to follow school policies and regulations. In addition,
there will be provision of the enhance short-term preparatory activities for student teaching internship. Furthermore, it is urged that the curriculum will be revised for the introduction of new subjects which contain values or integrate teaching skills in the professional education subjects especially on innovative teaching methods and strategies, time management and classroom management. Finally, institutionalized the proposed revised student rating sheet and the corresponding transmutation table thru immediate dissemination of the result in this study to the BISU Main Campus administrators for the earnest implementation to obtain the realization of this study.

REFERENCES

Amoguis, Jacinto. (2004) *Status and Performance of Off-Campus Student- and Disciplinary Problems and Measures,* University of Bohol Grade

Bilbao, Purita. (1994).*The Teaching Profession*. Loremar Publishing House Bookstore, Inc.
1977 C.M. Recto Avenue,Manila

Borabo, Milagros and Borabo, Heidi Grace. (2010). *My Practice Teaching Handbook and Portfolio9NCBTS-Based).* Loremar Publishing House Inc., Quezon City, Metro Manila

Casinto, Carlo Domingo. (2009). *Handbook on Principles of Teaching* 1.Rex Bookstore, Inc.
1977 C.M. Recto Avenue,Manila

CHED Memo Order No.11, series of 1999-"*Policies and Standards of Teacher*"

CHED Memo Order No.30, series of 2004 "*Revised Policies and Standards for Community Immersion*". Katha Publishing Co.,Inc., Quezon City, Corpuz, Brenda and Salandanan, Gloria. (2007). *Principles of Teaching* 1. Lorimar Publishing, Inc. Quezon City, Metro Manila.

Corpuz, Brenda and Salandanan, Gloria. (2013). *Principles of Teaching 1*. 3rd Edition, Lorimar Publishing, Inc. Quezon City, Metro Manila.

Corpuz, Brenda, et.al.(1997). *Manual for Observation, Participation and Community Immersion*. Katha Publishing Co.,Inc., Quezon City, Metro Manila.

Experiential Learning Courses Handbook, A Project of the Teacher Education

Felisan, Dorris.(2005). *Student Teaching Program Teacher Education Institutions, Province of Bohol: Proposed Revision of Student Teaching Guidebook.*

Ganzon, Brazille. (2014). *Students' Attitude and Motivational Level in Learning Relation to Academic Performance.*

Handbook and Portfolio (NCBTS-Based). Loremar Publishing House Higher Education (CHED), 2009.

Kheruniah, Ade Een. (2013). *A teacher Personality Competence Contribution to a Student Study Motivation and Discipline to Fiqh Lesson*

Lee, Keum Ra.. (2014). *Effects of Transformative Approach on Learners' Academic Performance and Behavior Status: Proposed Enhancement Measures*

Levin, J., and Nolan, J.F., (2007). *Principles of Classroom Management: A Professional Decision- Making Model*, Pearson, Boston, MA. Lorimar Publishing, Inc. Quezon City, Metro Manila.

Marquez, Servillano et.al. (2009). *Developmental Reading* 2. Loremar Publishing House Inc., Quezon City, Metro Manila.

Ninal, Melvin. (2014). *Work-Related Stress and Commitment as Predictors of Performance Among Faculty Members at University of Cebu Main Campus*

Roberts, Grady, et, al. (2007). *Relationship Between Personality Type and Teaching-efficacy of Student Teachers in Texas A and M University*

Tabasa, Milagros et.al. (2000). *Student Teaching Guidebook for Teacher Education Institutions. PROBE VII Pedagogy Fellows. Cebu City.*

Tirol, Janice. (2006). *Community Immersion Course, Teacher Education Department, Higher Education Institutions; Province of Bohol: Proposed Curricular and Course Enrichment*

Vizcarra, Florante. (2003) . *Introduction to Educational Research*. Great BooksTrading.Sikatuna Village, Quezon City

JOB SKILLS PROFILE OF THE COASTAL RESIDENTS OF OLD SAGAY

Richel P. Alob, MBA, PhD (cand.)
Assistant Professor, Business Administration Department
Northern Negros State College of Science and Technology

Sheila Rose M. Manlapao, MBA*
Instructor, Hotel and Restaurant Management Department
Northern Negros State College of Science and Technology

Arlette L. Melgar, MBA, DM
Instructor, Business Administration Department
Northern Negros State College of Science and Technology

ABSTRACT

Old Sagay is a major barangay of Sagay City, Negros Occidental. The coastal areas of Old Sagay are Bombills, Crotons A and Manzanilla B. Residents of these areas had been traditional fishermen whose livelihood had been adversely affected when the Sagay Sea was declared a marine reserve in 2005. The purpose of the study was to determine the current job skills profile of the coastal residents so that appropriate training programs can be provided them. The study also aimed to determine if there is a match between the training programs offered by the government-run Technological Education Skills Development Authority with the training needs of the respondents. Descriptive method was employed, through a self-made questionnaire. Sampling technique was based on Slovin's formula; final respondents from each area numbered eighty (80) each. The study found that majority are of high school level only. Fishing remains to be their main source of livelihood, 11 years after the Sagay Sea was declared a marine reserve. They venture further out to sea for their livelihood. Meantime, TESDA offers automotive and welding courses in Sagay. The study concludes there is no match between government training offered in Sagay and the skills of the male residents of the coastal areas in Old Sagay. The study also concludes that the residents prefer to remain as fishermen despite the welding and automotive skills training being promoted by the government. Recommendation of the study is the NONESCOST formulation of a direct skills-training-to-job-placement program for the male residents of the Old Sagay coastal areas for them to be assured of livelihood outside of fishing.

Introduction

Republic Act 7722, otherwise known as The Commission on Higher Education mandates institutions of higher learning like State Universities and Colleges (SUCs) to respond to the call for societal transformation. The aim is to serve the poorest of the poor, the less privileged, the deprived and the oppressed. (Elman 1998)

Among SUCs, most extension programs are demand-driven and accreditation-driven. Demand driven is community-based that encompass basic functional needs and demands designed to establish and promote the general well-being of the rural and urban populace. Usually this is requested by the Local Government Unit concerned upon identification of the specific needs of their constituents. On the other hand, the accreditation driven extension programs are implemented in response to the requirements by an accrediting body. Both kinds of programs provide opportunities for the target clienteles to improve their standard of living. In order to serve and improve community life, SUCs offer a wide variety of extension programs and services. These are designed primarily to increase the security of livelihood, alleviate poverty, reduce illiteracy, improve health and nutrition, creates a system of governance that promotes supports and sustains hum development and protecting and preserving the environment. For the poor to benefit, they must be empowered in mind, body and resources. To augment their voice and make government responsive to their needs and aspiration, good governance demands for their greater participation. Hence, good governance increases their opportunity to participate in decision making, institution building and social life.

Barangay Old Sagay was known for its fishing industry because it is located by the Negros Sea. Three (3) out thirteen (13) puroks (areas) were populated by residents who had no other source of living but fishing. These puroks are Bombills, Crotons A, and Manzanilla B. The rest of the puroks was almost completely dedicated to fishing either as business or job. When the village was declared a marine sanctuary in 2005, therefore, hundreds of men were displaced and lost their source of livelihood. Ten years had passed since the closure of fishing in Old Sagay, yet no intervention has been done by any government or private entity to determine the present skills set of the displace coastal residents. There is no information on what job skills, apart from fishing, the male coastal residents in Old Sagay actually possess.

In the meantime, the government established TESDA to integrate, coordinate and monitor skills development programs; Restructure efforts to promote and develop middle-level manpower; Approve skills standards and tests;

Develop an accreditation system for institutions involved in middle-level manpower development; Fund programs and projects for technical education and skills development; and Assist trainers training programs. At the same time, TESDA is expected to devolve training functions to local governments; Reform the apprenticeship program; Involve industry/employers in skills training; Formulate a skills development plan; Develop and administer training incentives; Organize skills competitions; and Manage skills development funds. Overall, TESDA formulates manpower and skills plans, sets appropriate skills standards and tests, coordinates and monitors manpower policies and programs, and provides policy directions and guidelines for resource allocation for the TVET institutions in both the private and public sectors. http://www.tesda.gov.ph/About/TESDA/10

This study sought to establish a database of available job skills among coastal residents of Old Sagay, and the training programs being offered by TESDA in the city. The end-goal is to check if there is a match between the two. Match or no match – either way, a community program can be designed by NONESCOST using the results of this study.

Statement of the Problem

The study answered the question "What are the job skills of the coastal residents of Old Sagay?" Sub-problems were as follows:

1. What are the vocational training programs offered by the government in Sagay City?
2. What interventions can NONESCOST design in terms of skills training for the coastal residents of Old Sagay?

Methodology

Research design used was qualitative. It employed post-test only or also known as one shot survey since the data are collected only once (Campbell and Stanley, 1968, Parel, et al., 1985, Fisher, et al., 1994).

The descriptive survey method was used wherein skills of the coastal residents will be determined and documented.

A simple review of current TESDA programs offered in Sagay City was undertaken and this involves the descriptive method.

Locale of the Study

The locale of the study was specific to the coastal puroks (villages) of Barangay Old Sagay. These villages are Purok Bombills, Purok Crotons A, and Purok Manzanilla.

Respondents

Respondents for the study are limited to male residents of the coastal villages.

Male population in Purok Bombills is 184; Purok Crotons A is 115; and Purok Manzanilla is 112.

Using the Slovin's formula at 5% margin of error, sampling sizes are:

- Bombills – 126
- Crotons A – 89
- Manzanilla - 87

Sampling Technique

The study employed random sampling wherein the population was composed of all male residents in the coastal residents of Purok Bombils, Purok Crotons A and Purok Manzanilla. Random sampling was done by drawing lots with unrestricted type. From the list of male residents, corresponding numbers were assigned from 01 to 299.

Assuming that the names of men are the alphabets, we listed down the names of male residents and gave them corresponding numbers. We then wrote a number on a small piece of paper and rolled it. After writing all 299 numbers, we placed the rolled pieces of paper in a container, shook it, and picked one piece of paper at a time until we have picked all.

Sampling method used was Slovin's Formula with margin of error of 0.05%.

Instrument

A self-made structured questionnaire was designed. Part I included personal information with variables such as marital status, educational attainment, source of income and current skills of the male residents. The questionnaire was in the Ilongo dialect, and consisted of 10 questions only for easy comprehension of respondents. The questionnaire is attached in this report.

Validity and reliability were checked by the mathematics professor of the NONESCOST Business Administration Department. Reliability was further tested by conducting survey for one month among 30 male residents passing by the Old Sagay pier. After pre-testing, and necessary revisions, the questionnaire was reproduced to the desired number and prepared for the survey.

Procedure

The study started by making a courtesy call to the Barangay Captain asking permission to conduct a survey, then getting the male population list of the Old Sagay coastal residents. After the survey which took four months, data processing began. Only 81 questionnaires were accomplished for Purok Bombills; 85 for Purok Crotons A; and 80 for Purok Manzanilla. Thus, random samples were gathered at only 80 each for each purok, for a total sample size of 240.

Findings

Below are the findings of the study:

1. Civil status of the male residents

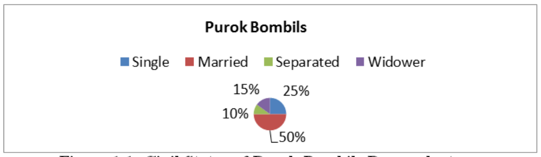


Figure 1.1: Civil Status of Purok Bombils Respondents

In Figure 1.1, we can see that most of the respondents in Purok Bombils are married at 50%, followed by single at 25%.

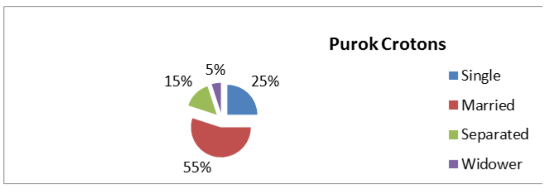


Figure 2.2: Civil Status of Purok Crotons Respondents

Purok Crotons respondents are mostly married (55%) while single men is at 25%.

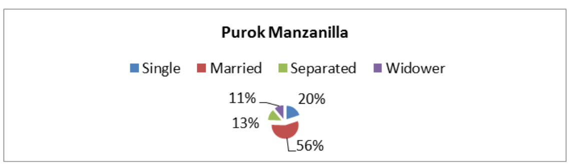


Figure 1.3 Civil Status of Purok Manzanilla Respondents

In Purok Manzanilla, majority are married at 56%, seconded by single respondents at 15%.

Over-all, majority of the respondents in the three villages are married. We can infer from such finding that these respondents have wives and children, thus making them heads of families. Further, we can infer that respondents have families to financially support.

2. Educational attainment

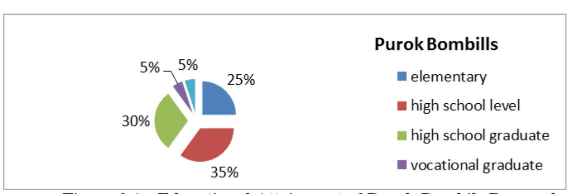


Figure 3.1: Educational Attainment of Purok Bombils Respondents

Figure 2.1 shows that the highest educational attainment of respondents are high school level (35%), while 30% of respondents are high school graduates. ¼ of respondents finished elementary studies only.

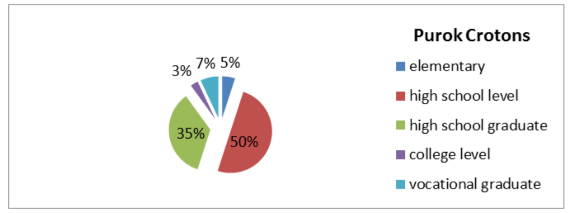


Figure 4.2: Educational Attainment of Purok Crotons Respondents

This figure shows that half of the respondents in Purok Crotons finished high school level and a high 35% completed elementary grades only.

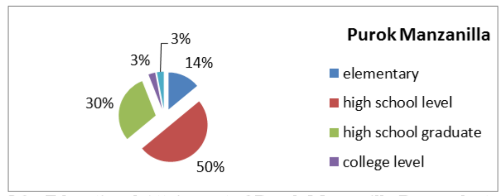


Figure 5.3: Educational Attainment of Purok Manzanilla Respondents

Half of Purok Manzanilla respondents reached but not completed high school though 1/3 are high school graduates.

Over-all, respondents' profile that emerged is that male residents of the three puroks went to school up to high school level only. Majority did not finish high school.

3. On source of income

A whopping 65% of respondents derive their livelihood

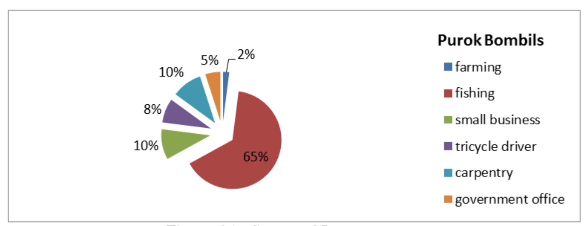


Figure 6.1 : Source of Income

from fishing.

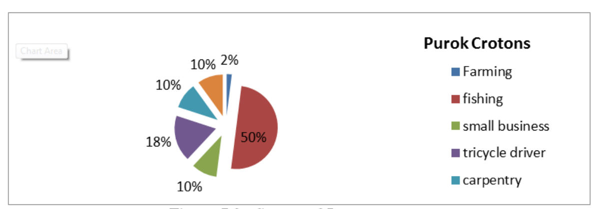


Figure 7.2 : Source of Income

Livelihood of most respondents in Purok Crotons is fishing, with half of them professing it as their source of livelihood. A significant number (18%) works as tricycle drivers. It is to be noted that tricycle is the form of transportation from Old Sagay to Sagay City center.

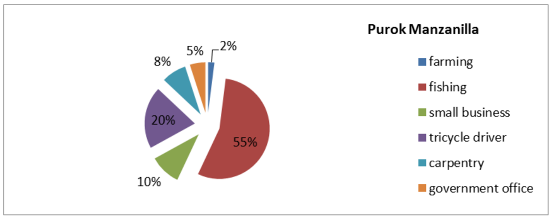


Figure 8.3 : Source of Income

Source of income in Purok Manzanilla is fishing at a high 55%. 20% work as tricycle drivers. Again, it is to be noted here that tricycle is the only form of transportation from Old Sagay to Sagay City proper.

In general, livelihood of respondents in the three areas covered is overwhelmingly from fishing. This is despite the fact that more than a decade (11 years) has passed after fishing was banned in the coast of Old Sagay. Respondents continue to work as crew for fishing boats that travel farther out to sea, the same livelihood as their fathers and grandfathers before them.

4. Skills Other than Fishing

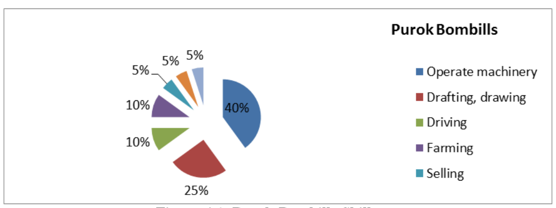


Figure 4.1 Purok Bombills Skills

We can see that operating machinery is the major skill of Purok Bombills respondents, followed by drafting or drawing. 10% have skills in driving and farming.

Outside of fishing, the skills of Purok Crotons

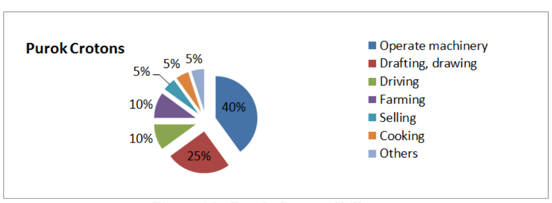


Figure 4.2 Purok Crotons Skills

reposndents are operating machinery and drafting and drawing.

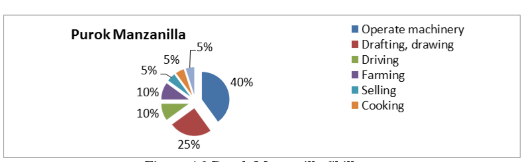


Figure 4.3 Purok Manzanilla Skills

Purok Manzanilla respondents have skills in operating machinery and drafting and drawing. Some can drive and do farming.

Over-all, the skills that respondents have in the three villages covered are largely in operating machinery and drafting/drawing. Some can drive and indeed work as tricycle drivers. These skills all fall among the Realistic Personality of the Holland's Theory.

6. Job preferences

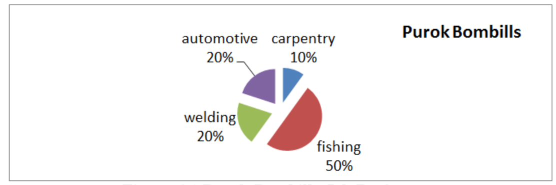


Figure 6.1 Purok Bombills Job Preference

Respondents from Purok Bombills prefer jobs in fishing, with half of them expressing this preference. Welding and automotive, the common livelihood programs being promoted by the government, are a far preference at only 20% each.

Figure 6.2 shows that respondents from Purok

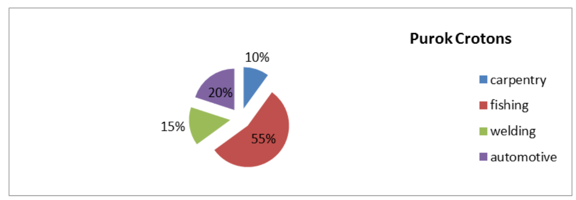


Figure 6.2 Purok Crotons Job Preference

Crotons prefer to remain in the fishing industry, with more than half expressing this preference. A far 20% expressed preference for automotive jobs.

Half of the respondents prefer jobs in the fishing

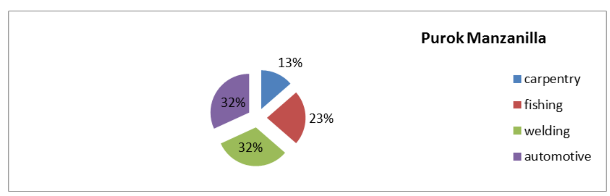


Figure 6.3 Purok Manzanilla Job Preferences

industry. While there are those who would want jobs in automotive and welding, they are far superseded by the number that expressed preference for fishing.

In sum, the male residents of the coastal areas of Barangay Old Sagay prefer to remain as fishermen, or have their source of income be maintained from fishing.

7. TESDA training offered in Sagay City

TESDA-Sagay offers training on welding for 4 months and automotive for 6 months.

Conclusions and Recommendations

In view of the above findings, the study made the following conclusions:

Fishing is the skill that male coastal residents of Old Sagay possess. They might be small-scale fishermen, wage laborer for transnational fishing corporations (trawlers). At present, fishermen take risks fishing a more distance out to sea. Because of this, they have more operating expenses in terms of fuel, cost of engines, machinery and repairs. Add to this the real threat of climate change. Fishermen have to increase the volume they catch in order to augment the expenses and to gain extra money for the family expenses. They gamble every day to the uncertainty of their income. But for some, they would not take risk that is the reason they have alternative job such as carpentry, driving and etc. but majority of them embraced fishing because that is the only skills they have.

Automotive and welding are the vocational trainings offered by the Government of Sagay City. Residents are willing to undergo training on these skills; however, if they participate in such trainings, there will no income for the family during the duration of the training.

The study recommends that the Business Administration Department of Northern Negros of State College of Science and Technology design/formulate of a direct skills-training-to-job-placement program for the male residents of the Old Sagay coastal areas for them to be assured of livelihood outside of fishing.

References

Human Resource Management: Gaining a Competitive Advantage, 8th Edition; Ramond Noe, John R. Hollenbeck, Barry Gerhart, Patrick Wright; McGraw Hill Education (Asia); 2012

Human Resource Management: Practicioner's Point of View; Ranulfo P. Rayos; Rex Publishing, 2010

Human Resource Development; Perla L. Legaspi; University of the Philippines Open University Press; 2002

Workforce Management; "Hidden Hierarchies"; 27 February 20

PHYSICAL PROPERTIES AND SHELF LIFE OF SHOE POLISH CREAM FROM COCONUT AND BEE PRODUCTS

Shella B. Cacatian
Cagayan State University
Sanchez Mira, 3518
Cagayan Valley, Philippines
allehsbc@yahoo.com

Abstract*— Commercial shoe polishes contain substances using a straightforward chemical engineering process that is hazardous to the environment and to human health if used recklessly. This study utiilized coconut and bee products to replace the potentially dangerous chemical shoe polishes available commercially. Ten independent raters evaluated the control and four other treatments with ten samples per treatment for quality along these parameters: odor, gloss, absorbency, consistency, color intensity, quick-dry ability, ease of application, effectivity with respect to time, life span, and product cost. The experiment was laid out in a completely randomized design. Multiple comparisons among treatment means reveal that no significant difference exists on the products' absorbency and effectivity with respect to time. Treatment 4, with 10 parts Virgin Coconut Oil (VCO), produced the most intense color and the easiest to work with on the shoe uppers. Generally, the shoe polish cream with a blend of coconut and bee products (T_2 to T_5) produces light odor, provides black finish and gloss, easy to apply, spread easily and dries quickly. It retains its consistency and can still be used for more than three years even after subsequent openings. It can be used as an alternative to more expensive commercial shoe polishes.

***Keywords* – beeswax, coconut, propolis, shell powder, shoe polish cream, VCO**

INTRODUCTION

Shoes are a key part of one's outfit, and as such they are subjected to more abuse than any other items in the wardrobe. They are literally slapped against the ground into water, dirt, grease, and grime thousands upon thousands of times. To ensure the shoes last, they require maintenance polishes to preserve, clean and waterproof them (Centeno, 2015) and to help prevent them from drying out and forming unsightly cracks in the creases of the shoe uppers. Besides, shoe polishes are used to impart a high-gloss, maintain the supple hand (surface), and increase the resistance of shoes to weathering, scuffing and scratching.

The use of organic materials as shoe polish has been practiced centuries ago, starting with substances such as wax and tallow to soften, waterproof, and restore the appearance of a footwear or boots, thereby extending its life and look. They were just within reach and were less polluting than the other shoe polishes made today (Sagala, 2013). However, this has been ridiculously avoided because of modern technology. Consumers have practiced more on purchasing along grocery stores, and they tend to be more brand-loyal towards shoe polishes. As product quality is directly associated with the finishing touch of the shoes that are polished, consumers usually want to choose the products that bring the best result. They are unlikely to change the brand after finding one that they are already satisfied with.

Commercial shoe polishes contain several ingredients that are harmful to the environment and to human health if used carelessly. It is usually made from a mix of natural and synthetic materials, including naphtha and turpentine using straightforward chemical engineering process. These are highly volatile and flammable toxic liquids. Commercial shoe polishes should therefore be used in an open, well-ventilated areas away from open flames (Engelund and Sorensen, 2005) and must not be ingested or inhaled due to the poisonous gases they release (Lou, 2009). The vapors can also have adverse effects on the eyes and the chemicals can be absorbed through the skin during use (Stimpert, 2006)). These chemicals can cause irritation and are linked to a host of health risks (Dorm, 2014). Many waste facilities list shoe polishes as "hazardous material" that require special disposal which means that they are likely not a substance that is wanted in the home.

Chhetri, et al. (2006) likewise held that commercial shoe polishes contain ingredients including, lanolin, wax, various types of coloring pigments, carbonates and bicarbonates of sodium and potassium. The burning of it will result in the yielding of carbon dioxide and/or carbon monoxide and traces of oxides of nitrogen and various toxic materials depending upon the chemicals, and solvents used.

Because the majority of the commercial shoe polishes contain high amount of volatile substances, they will easily desiccate or dry out and harden after application, thus, forming unsightly cracks in the creases of the shoe uppers. Besides, the protective effect they produce is only temporary. Consequently, they must be applied frequently in order to properly protect the footwear leather.

Another hitch of commercial shoe polishes is that the finish tends to deluster on exposure to moisture from rain, water splashing or puddles. Additionally, layers of wax can build up on the leather surface. This resulting build-up resists subsequent reapplications of polish; thus, extensive buffing is required in order for a new layer of polish to properly "take" on the leather to produce a high natural shine.

It is within this premise that this study is conducted to replace the potentially dangerous chemical shoe polishes available commercially and overcome their drawbacks.

By utilizing readily available raw materials like coconut products and primary bee products, the researcher attempted to formulate a safe, gentle, chemical-free, environmental-friendly, cost-effective, and all-natural shoe polish cream. Specifically, it described the quality of the shoe polish cream in terms of odor, gloss, absorbency, consistency, color intensity, quick-dry ability, ease of application, effectivity with respect to time. It likewise determined the life span of the product and the product cost to assess economic feasibility.

It is assumed that the organic shoe polish cream produced will provide a flexible surface, a protective and a durable finish which is lustrous and water-resistant, maintain the supple hand of the leather, and increase the leather's resistance to scuffing and scratching with a minimum of buffing required.

METHODOLOGY

A single factor experiment in a completely randomized design (CRD) was employed. Data were subjected to analysis of variance (ANOVA) to test the significant difference of the results. Least significant differences (LSD) between means were used to further determine which of the treatment means vary. The researcher chose 10 independent raters (students, chemistry teachers and office workers) each using a pair of black leather shoes to test the effectiveness of the product. Parameters such as odor, gloss, absorbency, consistency, color intensity, quick-dry ability, ease of application and effectivity with respect to time were the basis of the student and office worker-respondents to rate its effectiveness. The life span and the cost of the products were likewise determined. A control and four other treatments with ten samples per treatment were investigated. The control variable was a commercial shoe polish cream. For the experimental variables, different levels of VCO were prepared; other materials like beeswax, propolis, and coconut shell charcoal powder were of the same amount.

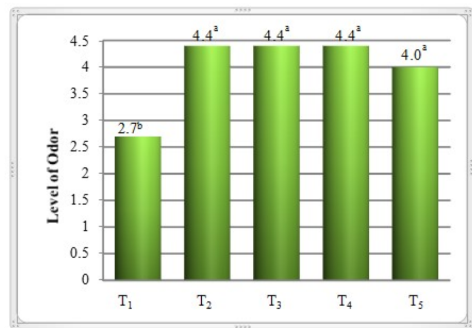
The study underwent three phases of the data-gathering procedure: (a) preparation of the variables; (b) production of the organic shoe polish cream; and (c) application of the product

RESULTS AND DISCUSSION

COMPARISON OF THE QUALITY OF THE COMMERCIAL SHOE POLISH CREAM AND THE ORGANIC SHOE POLISH CREAM

Odor

As shown in the Fig. 1, T_1 (commercial shoe polish cream) had a lower odor rate compared to that of the organic shoe polish cream. Statistical analysis proved a highly significant difference in the treatment means as indicated by the F value of 5. 6328 which is greater than the F critical values of 2.5787 and 3.7674 at 0.05 and 0.01 levels of significance, respectively. Least significant difference (LSD) was used to further determine which of the treatment means vary. Based on the results obtained, the treatments did not give comparable odor. The commercial shoe polish cream produced an odor which is unpleasant to the raters' sense of smell; however, the organic shoe polish cream (T_2, T_3, T_4 and T_5, with their corresponding levels of VCO of 5, 7.5, 10 and 12.5 parts), all exhibited a more or less equally very pleasant smell. The finding is in agreement with the report of Di Justo (2009) that the Stoddard solvent (white spirit/mineral spirit) which is the most widely used solvent in the commercial shoe polish generates a very strong odor that inhaling them makes roughly the same effects (dizziness, giddiness) as huffing gasoline. ATSDR (1995) likewise confirmed that the Stoddard solvent smells and tastes like kerosene. On the other hand, the beeswax and VCO blend could generate a sweet smell (Kissi, 2011).



Treatment means carrying the same letter/s are not significantly different.

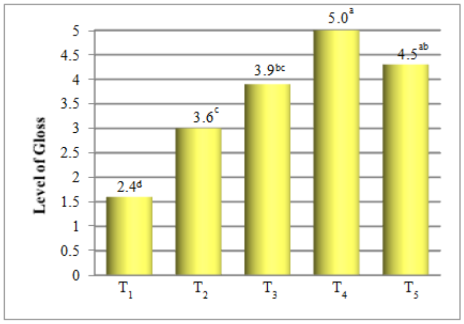
Fig. 1. Odor of the products.

Gloss

The formulation of 10 parts VCO (T_4) obtained the highest gloss rate as opposed to the commercial shoe polish cream and to the other formulations with VCO less or greater than the aforesaid formulation. A test on the equality of the treatment means points to the fact that a highly significant difference exists. This is proven by the F value of 18.1674 which exceeds the level of significance value at 0.05. Both treatments with 10 parts (T_4) and 12.5 parts VCO (T_5) likely revealed the highest glossy finish, although the treatments having 12.5 parts (T_5) and 7.5 parts VCO (T_3) were equally comparable. When, however, the treatment with 7.5 parts VCO (T_3) was matched with the treatment consisting of 5 parts VCO (T_2), they created very similar surface shine. The commercial shoe polish cream (T_1) produced the least glossy finish among the treatments.

Generally, the organic shoe polish cream created a higher surface shine than the commercial shoe polish cream. It ensured a long-lasting shine that kept the footwear look great for a long time. As Ameh (2011) stated, most polishes depend on wax and oil for their polishing properties. Due to surface tension forces, a glossy surface is created after polishing. This will dry to give the object the required luster.

The commercial shoe polish created a petty shine, but as reported by Engelund and Sorensen (2005), it contains silicone to help create that shine. They likewise affirmed that silicone shortens the life of leather.

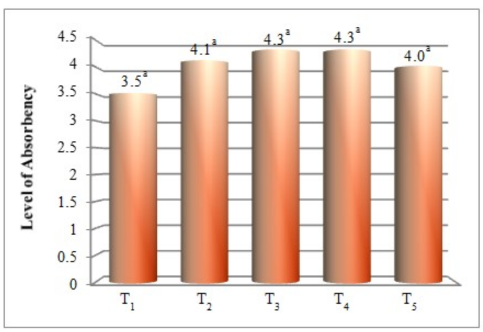


Treatment means carrying the same letter/s are not significantly different.

Fig. 2. Gloss of the products.

Absorbency

Fig. 3 shows that the organic shoe polish cream having 7.5 and 10 parts VCO (T_3 and T_4, respectively) were both rated "very absorbent." This was followed by the shoe polish with 5 parts (T2) and 12.5 parts VCO (T_5); the least was T_1 (commercial shoe polish cream), all of which were assessed as "absorbent." Upon carrying out multiple comparisons among the treatment means, results disclose that there is no significant difference in the rates given. The evaluation does not vary and can be inferred that there is no chance for any discrepancies. This means that the absorption rate of all the products is comparable and the products are all capable of permeating leather shoes.



Treatment means carrying the same letter/s are not significantly different.

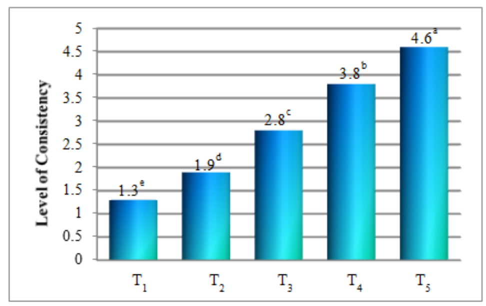
Fig. 3. Absorbency of the products.

Consistency

It can be gleaned from Fig. 4 that the treatments gained different rates in terms of consistency. T_1 (commercial shoe polish cream) was "not runny," T_2, with 5 parts VCO, was "slightly runny," T_3, having 7.5 parts VCO, was "moderately runny," T_4, consisting of 10 parts VCO, was "runny," and T_5, with 12.5 parts VCO, was "too runny." Results likewise show that the treatments are highly significant different from each other as proven by the computed F value (64.89286) which is higher than the F crit at 0.05 and 0.01 probabilities.

In general, the organic shoe polish cream had a texture and consistency thinner than the commercial shoe polish cream. It was observed, however, that the treatment with the least amount of VCO was notably thicker than the other three treatments. The lesser the oil content, the thicker the shoe polish cream becomes. Treatment 4, containing 10 parts VCO, possessed the best ratio of beeswax and oil. It was not too thick nor too thin to use as a shoe moisturizer or conditioner because it could be spread easily on the shoe uppers as it was gradually absorbed.

It was noted that the consistency of the commercial shoe polish, after its first opening, was soft because the solvents were still there to keep the wax soft in the tin can, but after subsequent openings, the polish became hard and cracked. Engelund and Sorensen (2005) confirmed that majority of the solvents, which accounts for 60 percent of the ingredients of commercial shoe polish, evaporate during the application process. Conversely, the organic shoe polish cream retains its consistency since the wax and the oil are non-volatile and can still be used even after several openings.



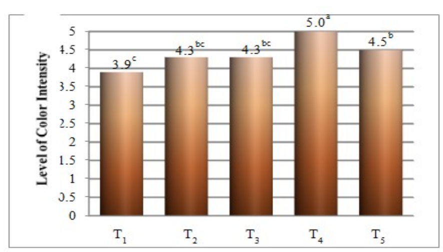
Treatment means carrying the same letter/s are not significantly different.

Fig. 4. Consistency of the products.

Color Intensity

Treatment means of the organic shoe polish cream prove to be extremely black as compared to the control which is completely black. Analysis of variance showed that the color intensity of the shoe polish cream varies. It can be inferred from the evaluation that quality wise, T_4 (10 parts VCO) had the most intense color; hence, the best to match the shade of the shoes. Treatments 2 (with 5 parts VCO) and 3 (with 7.5 parts VCO) produced the same hue, and together, they were as deep as T_5 (with 12.5 parts VCO) and T_1 (commercial shoe polish cream), yet the former created a better tint than the control.

The coconut shell charcoal powder which served as the organic colorant promised remarkable color intensity in organic shoe polish cream and it sustained the color and could even camouflage faults and rough patches for a week.



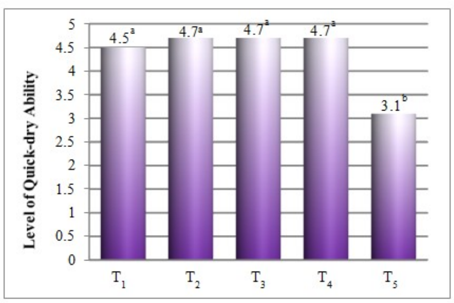
Treatment means carrying the same lette/s are not significantly different.

Fig. 5. Color intensity of the products.

Quick-dry Ability

Fig. 6 shows the rates given as regards the ability of the shoe polish cream to dry rapidly. Treatments 5 which contained excessive amount of oil dried more slowly than the other treatments. Analysis of variance reveals a highly significant difference between the treatment means; hence, the rejection of the null hypothesis. Treatment 1 (commercial shoe polish cream) dried as quickly as the treatments with not more than 10 parts of VCO; nonetheless, altogether, they desiccated more rapidly than the treatment having more than 10 parts of VCO.

Consideration is due to the fact that the volatile solvents present in the commercial shoe polish cream gave it a quick drying effect (Taiwo and Ameh, 2013). Likewise, proper ratios of the mixture in treatments with not more than 10 parts of VCO were quickly absorbed and remained fixed in the outer layer of the shoes, hence the treatments were absorbed into the shoes leaving little evidence that the shoe polish cream was ever there. Unlike T_1 however, the mixtures left a thin and dry layer of shine without any harsh drying solvents or distillates.



Treatment means carrying the same letter/s are not significantly different.

Fig. 6. Quick-dry ability of the products.

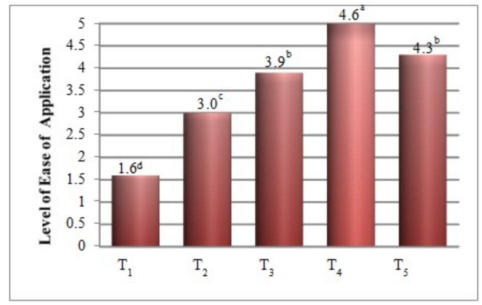
Ease of Application

The rates given to all the treatments vary. Treatment 4 (with 10 parts of oil) obtained the highest mean having a descriptive value of "very easy to apply" while T_1 (commercial shoe polish cream) gained the least mean with a descriptive value of "not easy to apply."

The treatments were statistically analyzed to determine the significant difference of the results. It is evident in Fig. 7 that the treatments are highly significantly different from each other.

Results prove that T_4 was the easiest to apply and to get in the cracks and crevices of the shoes well. The proportion worked together to make it easier to apply. The formulations having less than 10 parts of oil (T_2 and T_3) were thicker and were harder to work with when spread over the surface of the shoes. On the contrary, the formulation with more than 10 parts of oil (T_5) was too runny that it was slowly absorbed.

The consistency of the commercial shoe polish cream was only temporary. Due to its high amount of volatile substances, it easily desiccated after application (Taiwo and Ameh, 2013). Thus, it was too dry to apply. Consequently, a shoe polish should have the proper ratios of solvent, wax and oil so as not to be too runny or too dry to polish.



Treatment means carrying the same letter/s are not significantly different.

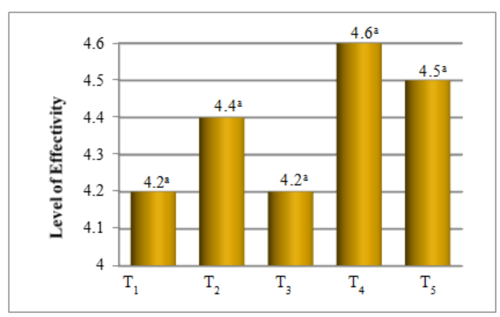
Fig. 7. Ease of application of the products.

Effectivity

It can be gleaned from the data that T_4 (with 10 parts of VCO) got the highest mean of 4.6 with a descriptive value of "very effective." Compared to the other treatments, the composition produced a highly glossy film on air drying and buffing was not necessary. It was quickly absorbed and moisturized, leaving the shoes soft and supple. The protective effect lasted for more than 5 days. Consequently, it was applied once a week. This is followed by Treatments 5, 3, 2 and 1, with the corresponding VCO levels of 12.5, 7.5 and 5 parts with T_2 having the same mean as T_1.

However, when the data was analyzed for the differences using LSD, result showed that the treatments do not differ significantly which suggests the acceptance of the hypothesis. There was no apparent distinction among the treatments in terms of effectivity with respect to time.

Life Span



Treatment means carrying the same letter/s are not significantly different.

Fig. 8. Effectivity of the products.

The life span of both the commercial and the organic shoe polish cream was observed for three years. For the organic shoe polish cream, they can be stocked up within the period without any change in terms of odor, gloss, absorbency, consistency, color intensity, quick-dry ability, ease of application, and effectivity with respect to time. Possibly because beeswax, which is one of the main ingredients in the organic shoe polish cream, is a very stable substance (Singh, 2012). Its properties change little over time. It is resistant to hydrolysis and natural oxidation (Bradbear, 2009). Coconut oil, which is another main component of the polish, has a high content of saturated fatty acids. Because of its high content of saturated fatty acids, it is highly resistant to oxidative rancidity. Coconut oil has a long shelf life and is used in baking industries, processed foods, infant formulas, pharmaceuticals and cosmetics (Gopala, et. al., 2010).

For the commercial shoe polish cream, its shelf life is more than three years also. They can be stored for more than three years and can still be effective as long as its container remains closed. However, if exposed to air, Taiwo and Ameh. (2013) reported that it dries out and crumble while retaining its shine.

Relative Cost Estimation of the Organic Shoe Polish Cream

The cost of the organic shoe polish cream per treatment was computed to find out the reduction in cost of per treatment when compared with the commercial shoe polish cream.

One preparation of T_2 (with 10 parts VCO) worked out to be Php 31.025. The preparation generated 58.725 grams of shoe polish cream. Amending the preparation with 7.5 parts VCO (T_3), 10 parts VCO (T_4), and 12.5 parts VCO (T_5) increased the cost to Php 43.525, Php 56.025 and Php 68.525, respectively. However, successively modifying the preparation to 50% more of VCO to each treatment would correspondingly increase the amount of shoe polish cream produced to 80.475 grams, 102.225 grams and 123.975 grams.

The cost of 14 grams of commercial shoe polish (T_1) is Php 50.00. In comparison with the other treatments, the cost of 14 grams each of T_2, T_3, T_4 and T_5, is around Php 30.00. This includes the 25 percent labor cost and the price of the tin can.

Based from the cost analysis, the cost difference between the commercial and the organic shoe polish cream is about 40 percent. The success therefore in producing a low-cost shoe polish cream is achieved using VCO and the primary bee products like beeswax and propolis.

	T_2	T_3	T_4	T_5
Ingredients				
VCO	Php 25.00	Php 37.50	Php 50.00	Php 62.50
Beeswax	4.00	4.00	4.00	4.00
Propolis	2.00	2.00	2.00	2.00
Coconut Shell Charcoal Powder	0.025	0.025	0.025	0.025
Total	**Php31.025**	**Php43.525**	**Php56.025**	**Php 68.525**
Grams produced/ preparation	58.725 g	80.475 g	102.225 g	123.975 g
Cans produced/ preparation @ 14 g nt. wt.	4.195pcs	5.748 pcs	7.302 pcs	8.855 pcs
Cost of 14 g shoe polish	Php 7.40	Php 7.57	Php 7.67	Php 7.74
Tin can	20.00	20.00	20.00	20.00
Labor(25% of product cost)	1.85	1.89	1.92	1.94
Cost of organic shoe polish cream/can	**Php 29.25**	**Php 29.46**	**Php 29.59**	**Php 29.68**

Conclusion

The organic shoe polish cream could be used as a substitute for commercial shoe polish. Its quality is comparable to the commercial shoe polish in terms of absorbency and effectivity. Additionally, it provides a black (durable) finish and gloss that, in most cases, does not require buffing to obtain a high shine. It was easy to apply for leather articles, spread easily, dries quickly, smells better than the commercial one, and retains its consistency and can still be used for more than three years even after several and prolonged openings. The results of the present study offer new possibilities of using readily available low-cost and all-natural materials which are safe, gentle and chemical-free.

Recommendation

Production of organic shoe polish cream from VCO and primary bee products yielded positive results. With this basis, the researcher recommends the adoption of this technology.

To further improve the study, the researcher also recommends the following:

The organic shoe polish is packed in tin cans for storage. Applying the polish using a shoe shining brush or a soft, lint-free cloth is a messy job. If desired, the composition can be packed in tubes, in plastic bottles fitted with appropriate sponge or cloth applicators, and in pressurized aerosol cans charged with appropriate compatible propellants and fitted with an appropriate dispenser valve to prevent any polish from getting on the fingers.

Other formulations of organic shoe polish in a variety of colors which will work on a variety of shoes should be developed.

REFERENCES

Agency for Toxic Substances and Disease Registry (ATSDR). (1995). **"Toxicological profile for Stoddard solvent."** Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service. Retrieved on August 2, 2015 from http://www.atsdr.cdc.gov/toxprofiles/tp79.pdf.

Ameh, Charles Ugbede. (2011). **"Thermophysical properties of shoe polish manufactured from pure water sachet."** AU J.T. 15(2): 129-132. Retrieved on August 7, 2015 from http://www.journal.au.edu/au_techno/2011/oct2011/journal152_article10.pdf.

Bradbear, Nicola.(2009). **"Bees and their role in forest livelihoods: a guide to the services provided by bees and the sustainable harvesting, processing and marketing of their products."** Rome, Italy: Food and Agriculture Organization of the United Nations. Retrieved on November 15, 2015 from ftp://ftp.fao.org/docrep/fao/012/i0842e/i0842e00.pdf.

Centeno, Antonio. (2015). **"Why condition leather shoes."** Retrieved on August 4, 1015 from http://www. realmenrealstyle.Com/condition-shoes-leather-honey-interview/.

Chhetri,Arjun Bahadur, Md. Safiur Rahman, & Md.Rafiqul Islam. (2006). **"Production of truly 'healthy' health products."** Retrieved on August 2, 2015 from http://www.appropriatetech.net/files/Production_of_Truly.pdf

CATUBIG *EMBAJADA*: A DOCUMENTARY, RETRIEVAL AND TRANSLATION

Leilani G. Garbo
College of Arts and Communication
University of Eastern Philippines
University Town, Northern Samar

Villa C. Carpio, DA
College of Arts and Communication
University of Eastern Philippines
University Town, Northern Samar
vilcarp@yahoo.com

Greggy E. Lluz
College of Arts and Communication
University of Eastern Philippines
University Town, Northern Samar

***Weny M. Cardeño**
College of Arts and Communication
University of Eastern Philippines
University Town, Northern Samar
wenycardeo@yahoo.com

Abstract-- **This descriptive-qualitative research on oral literature was aimed at gathering and translating the *embajada* of Catubig, Northern Samar. Specific objectives were to: find out its origin; collect and translate the script of the *embajada*, describe its performance, recognize its cultural and historical impact to the new generation. It also analyzed the worldview mirrored in the *embajada*.**

Using triangulation technique: interview, participant observation, questionnaire and documents, the researchers were able to gather the origin of *embajada* from the fourteen informants. These informants met the criteria set namely: native of Catubig; sixty years old and above; not yet senile; never went beyond grade three; and never left the place except for occasional visits.

The *embajada* is a folk drama that tells about the war between the Moors and Christians. Its script was translated through the use of free translation to come up with an English version for universal understanding.

The *embajada* still exists in Catubig, but it could vanish as time passes. Having originated from the creative minds of the folk bearers and performed in an open stage with an exchange of lines and verses, it is a means of entertainment and has a cultural and historical impact.

Keywords: embajada, sinulog, triangulation technique, free translation, participant observation.

Introduction

The Philippines is rich in folk literature as a way of leisure and entertainment. It is oral literature that distinguishes people from different countries of the world. This distinction makes one country unique. It is therefore important that these oral literatures be preserved for the upcoming generations, especially the vernacular literature in remote areas.

Through this study, the researchers took an initial step in retrieving and preserving *embajada* in Catubig, Northern Samar. This will be of great help in preserving the slowly dying *embajada* and for the folks to become aware and appreciate it. In that way, they will continue to dramatize the story behind the bloody battle between the Christians and Muslims (moors) for the sake of their religion.

Objectives of the Study

Specific objectives of the study were to: 1) know what is *embajada*, 2) trace the origin of *embajada*, 3) know the cultural and historical impact of Catubig *embajada* to the new generation, and 4) analyse the worldviews reflected in the *embajada*.

Methodology

This study used the descriptive-qualitative method and participant observation to analyse the data. The oral history of *embajada* was obtained through triangulation technique.

The study was conducted in Catubig, Northern Samar. The informants were those who met Manuel's test of folklority [9]. They are the natives of Catubig; sixty years old and above, not yet senile; who never went beyond grade three and those who never left the place except for occasional visits to other towns or cities. They are the persons who know and who have first-hand information about *embajada*. Fourteen (14) informants met the criteria set.

The data of this study consisted of the origin of *embajada* gathered through oral interview with the use of the tape recorder and its script that was handed to the researchers by the folk bearers.

Findings

Objective 1. Know what is embajada

The *embajada* is a short drama with verses, dances, and sword fights depicting the battles between Christians and Moors over religion [5]. The word *embajada* is taken from the Spanish word embassy, which means any official mission. It is the mission of the Moors for Christians to embrace their god, Jupiter Mahoma and at the same time a mission of the Christians to convert the Moors to become Christians. The ambassadors who are more aggressive and violent than the Sultan are sent by the Moors to the Christians to bring out their plans. They serve as a bridge in both factions to know their plans and course of action. It ends up in war since both groups are unwilling to be defeated. However, because of the Christians' faith to the Holy Infant, they end up triumphant.

War dance is the dance in *embajada* wherein two great warriors perform at each other in a terrible mortal duel. In dancing, they sway from left and right followed by a dip to the side or backwards, right foot step backward a close step, then onward movement commencing with the right foot. Their left hand holds the shield while the right hand holds the sword and feet alternating in a swaying rhythm. The right hand with a sword moves back and forth and their hands move sideward and upward.

Objective 2. Trace the origin of embajada

Embajada was performed long ago but it was stopped for unknown reasons. It was in 1957 when it was brought back by Felix Pujante, a protestant converted to Christian, to its performance by sharing it to Mariano Lucero who became the Hermano of the feast of Sto. Niño for 10 years. He formed an organization of Moors and Christians aimed at performing a play to entertain the natives of Catubig during the feast day. The tradition bearers reconstructed the old play from memory. They collaborated in conceptualizing the play, the dance, the duels, the songs and the delivery of the lines.

The *embajada* is performed in an open stage where people are gathered to watch it. The play begins with a faction in both groups. The Christians, in black pants and white long sleeves, at the right side of the stage, while the Moors in red are in the left side. The king leads his men in praising the icon of the Sto. Niño. On the other hand, the Sultan of the Moors, sends his son to keep watch on the actions of the Christians. The son, nude crawled at the Christians' place. Then another two ambassadors arrive with a message to sign the documents in exchange of the icon of Sto. Niño. The ambassadors are arrogant and their eyes are fierce as they face the Christians, but the Christian King refuses. Instead, he asks for the Sultana to face them. The Sultana arrives to the Christians place alone. The slow beat of the drum (repellon) is heard. She dances the *sinulog* and sways her spear in the her right hand, moving it back and forth and her head moving upward as if insisting for a fight. After dancing they have an exchange of words with the King's son. She fights with the king's son and is captured. Rope is tied to her body. She sings *"Ay, ay Kakuri* (Oh! Oh! How Difficult) in a mournful tone because of fear that she will not be released. The Sultan hears her song and immediately looks for his wife. He faces the King angrily. It is followed by a fast beating of the drum and the King and the Sultan dance the *sinulog*. They face each other furiously. The next scene is followed by sword fights and duels. Pairs of Moors and Christians face each other holding their shields and swords. During the fight, the count goes one strike up, one towards the leg, another towards the side followed by a thrust and a parry. This is repeated three times. They act as if stabbing one another. Their left hand holds the shield while the sword is held by the right hand, feet alternating in swaying rhythm. The right hand moves sideward and upward. Loud noise coming from the wooden shields of both warriors can be heard as both shields clash. However, at the end of the sword fight, Moors slowly kneel; others die. Finally, the Moors are defeated and baptized as they form a long line. Then pairs of Christians and Moors sing the song "*Matahom na Bata*" (Sweet Holy Child)

Script of Embajada (English Version)

Embassy

I - Dialogue of the Christians

King:
Listen, all of you, my people
To my words that you should keep.
Since we are gathered and none is absent
So you will understand my plans.
I have heard stories
That the Moors are campaigning
To the Christians to join them
What they want is for us to be converted
To their god, Jupiter Mahoma.
If ever those Moors will come
To change our faith
To deny them is our only answer
Let us not believe on their own plans.

Queen:
My beloved spouse,
I heard your words
I am in conformity with your plans
We should not be threatened by those Moors.

Princess:
For me, my respected King,
This is my advice:
If their sultan will send a messenger
This is what we should do.
So that the two factions will not have trouble
We should be good at answering
If they let us follow their religion,
we will drive those Moors

Counselor:
Respected King whom we obey
I will answer your words
You should not be worried for me
I will be the one who will defend our group

Woman I:
For me my respected King,
You should not be worried for my defense
Since I am a woman I have devotion
For our Infant Jesus is powerful
He will not abandon us if we have sufferings.

Man I:
I already heard your words
All of my answers are good
For me you will see
The defense that I will make.

Woman II:
Our respected King
So that you will be cleared of what I want
Let us be one in our plans
So that those Moors will be afraid.

Man II:
My King and my Queen who I obey
Trust in my defense
These hands of mine are so quick
Those Moors will surely suffer.

Woman III:
Since I am a woman my stand is to trust
always in God's power.
In all sufferings.
He will not abandon us,
This Infant Jesus, because He is so powerful.

Prince:
My father, because it is you whom we obey
In our nation you are respected
All of us to you will follow
Your plans and all the good things
That you will do

Queen:
Respected King,
Now that you have understood their reasons
Don't delay our comrades
So that we will not be captured by the Moors.

King:
I understood your words
In defense of our group
Let's finish at once this argument
For their servants may come here

II – Dialogue of the Moors

Sultan:
Listen all of you my people
Because we are here in the land of the Christians
That you will follow my plans,
All of you must follow and fulfil
what is good in this plan of mine
I will give command to keep watch on them
One will go naked
So that their leader will not notice.
Only one child will be sent first.
That none of them will see him.

Chorus:
Respected Sultan, your advice is good.
We will all follow.

First Ambassador:
For me, my respected Sultan
So that you will understand my advice
All courage I will do
So that they will be afraid and will follow us.

Second Ambassador:
Honored Sultan as well as Sultana
Respected by all of Torkeya
All courage we should do
That they will be converted by Jupiter Mahoma

Sultan:
My son, come
Quickly, don't tarry

Son:
My father, I am here
What is your command?

Sultan:
You listen to my words
Go to the plaza and find out what is it
that they do, so that we will know
their secrets
Whatever it is that you will see
return immediately
That is my word
Right now, you must go.

Son:
My respected father, my beloved
I will go as you ordered me
To that plaza I will go
I will see what they are doing
If ever I will find out
I will return at once.
(The son will return)

Son:
I went to that plaza
Many people have I seen
Their group has a leader
Has ways to guard the town.
My father, now that you know what I have seen
The plans that you will make
All of us to you will obey.

Sultana:
My people you already heard
What the child told us
There are many people there
Be ready because we will go
Beloved Sultan, whom we obey
You select our ambassadors
Embajada in the town will be held
So that the Christians will immediately obey
You already understand my beloved Sultan what I have said,
Start at once our duties
That we will present *embajada* in that plaza
That we will tell what we yearn for
Just send one ambassador
So that we will find out their answer.

Sultan:
Ambassador Kidlatan, come here
Don't delay
Listen so that you will understand
Because you are robust, I have trust in you
If they will see you, they will be afraid
Their companions will surely kneel.
When we arrive in that plaza
Immediately tell what you want
Have these documents signed by them
Then ask the icon
worshipped by the Christians.

Ambassador:
Respected Sultan, whom we follow
I will go where you ordered me
I hope these documents will be received at once
And the icon of the Infant Jesus be given to me
If they will not I'll show my speed
That they will believe our true religion

II – Dialogue Two

(Ambassador arrives in the plaza)

Kidlatan:
I am asking all of you
Who is really your leader?
Answer me, don't hesitate
So that you will be saved from sufferings
Because our sultan commanded
that you sign these documents.

King:
I am the King of this land
You are disrespectful, you are ill-mannered
Here in this plaza you will receive
Your brutal death
If you want to be saved
Go back, tell your Sultan
Because you are disrespectful, you ill-mannered
Your plan is to discipline my kingdom

Kidlatan:
I will leave this plaza
I will tell those in our place
Your answers are all challenging
Our Sultan and Sultana are brave.
(Ambassador will return)

Kidlatan:
Respected Sultan whom we obey
I followed your command
I let them signed these documents
But their leader denied me
Respected Sultan, now that you understood
We want all your plans fulfilled.

Sultan:
Two ambassadors, come here!
Listen, because I will let you
Present an *embajada* to those fools
(Two ambassadors arrive in the plaza)

Ambassador I:
Why is it that you are gathered?
Where is your leader?
Our Sultan has order to give the Infant
So that your town will be peaceful

Ambassador II:
Answer me, don't delay
This is an urgent order of the Sultan
That these documents be signed
If you will not sign, immediately we will fight.

Minister:
I will answer your purpose
So that you will understand that I am worried
You two must go back
Tell your Sultan to come
We are ready to face him
So that we will believe in their force

Two ambassadors:
We will go back if you will not permit us
So that you will be satisfied and understand
We are not carried with beautiful stories
Our troop will go on a battle.
(Two ambassadors will return)

Two ambassadors:
Respected Sultan and Sultana
We went to that plaza
We told them what you ordered us, but

they only challenged us
We were driven by their minister
What they wanted is for you to come
Because they are ready to face you.
(Sultana will order two ambassadors)

Sultana:
Two ambassadress come here
Because I am going to command you
To present an *embajada*

Ambassadress I:
Sultana, we are here, what is it that you want us to do in that plaza?

Sultana:
Listen to my words
You go to those fools
Whatever is their answer
Tell them to follow our religion

Ambassadress II:
Respected Sultana, we will go
In that place that you ordered us, we will courageously do our best
So that they will be afraid to fight us.

Sultana:
My command to both of you.
Go to that plaza to present an *embajada*
Before you leave you must show your speed
Because you are popular in this place
You made the strong weak.

Ambassadress I and II:
Our King, the one who is obeyed in your nation
We come here because of our Sultan's command
Your infant Jesus must be given immediately
So that you will follow our religion.

King:
Ambassadress, I already heard your purpose
In our place you must not return
If that's your only purpose, go back home
We will not follow your religion
Instead, let your Sultana come here.
(Two ambassadress will return)

Ambassadress I and II:
Sultan, because of your command
Their answer is to degrade our religion
That's why we returned immediately
They want the Sultana to face them.

Sultana:
Sultan, now you understand what you've to present an *embajada*
Their answers are all denial.
Their purpose is to fight
That's why this is what I want to say
So that you will understand, beloved Sultan
I will go myself
That the Christians will kneel and be our slaves
If I will not come back
Immediately follow, and bring our troop
I will go right now.
(Sultana will arrive in the plaza)

Sultana:
I am asking all of you
Where is your leader?
Stand up right away and face me.
I am Sultana, the wife of the Sultan
I am hurt with your actions
Those are all insult for us
Sword and shield I brought
To fight is my purpose to come,
Stand up, don't delay
Now you must face me.
This is my purpose so that you will understand
You must be afraid of this force of mine
I am here to fight
So that you will get what you want.

King:
In this plaza I will let my son face you
Because I will not give you attention
You are a woman you will not endure
My son, come here!
You must face the Sultana
Show your speed, my son
Because the Sultana has a force
Be vigilant, do not be tricked
And be cautious that you will not be caught
Wait until she becomes weak
Because to you, she will not endure
When she kneels, use this rope to tie her
If she will be captured and she will not return,
Immediately her troop will look for her.

Son:
Respected father, whom I obey
I listened to your words
Do not worry I will tie
This Sultana when she falls on her kneels.

Sultana:
If you will fight, do not delay
So that you will see my being a warrior.

Son:
I beg your pardon, so you are the Sultana
I will answer your words
I will fulfil what you want
So that you will see my strength
Famous Sultana in your place
We must start our fight.
(*Sinulog* dance for 3-5 minutes)

Sultana:
I will kneel, for I will not endure
This body of mine please spare it
If you will give me hope

My beloved Sultan, I will let him come.

Son:
Our purpose is not to kill you
We will tie you so that you will be searched.
By your beloved Sultan.

King:
Now that you are our captive
Our command you must obey
If you will be good
Then we will not kill you
Since you are our captive
You must render a song
Our queen you must follow, because she is merciful,
She might release you home.
(The Sultana will sing)

Oh, oh how difficult
How difficult is my situation
I am tied and will never be released.
What will happen to me
I am tied and will never be released

Chorus:
Oh heavens'
Where is the pain?
Help me in this situation
That I might return to my parents
And see my children
(The Sultan will arrive)

Sultan:
I am asking all of you, who is your leader?
Rise don't delay
Those I commanded you only insulted
I also heard her voice you let her sing
Where is my Sultana
Immediately let me see her
Because it has been a long time since they have left

King:
I am the most adored in this Kingdom
You are an ill-mannered Sultan
You do not respect my kingdom
Your beloved will not be released
You deeds insulted me
This very moment you will receive
Your brutal death.

Sultan:
Do not speak too long
Do not threaten me
I am hurt by your deeds
I will cut off your head.

(*Sinulog* dance followed by a duel between the Moors and Christians for 35 minutes)

(Moors will be defeated and will be converted. They will form a long line, raising their hands as they sing *Matahom na Bata*)

Plate 1. The King, Queen, Sultan and Sultana

Plate 2. Fight between the King and the Sultan

Objective 3: Cultural and historical impact of Catubig embajada to the new generation.

Plate 3. The battle between Christians and Moors

Only few are now interested in *embajada*. Only the performers can be seen in the streets, probably because of the change of time and the death of the tradition bearers. Ati-atihan has now ruled in the feast of Sto. Niño because of its popularity. But even if there have been changes in the performers of *embajada*, there are still some people who watch it since it is entertaining and it shows the history of Christianity.

Objective 4: Worldviews mirrored in embajada.

Respect for parents is mirrored in *embajada*. Through this practice, the children show their unfailing love and respect to their parents. This is shown in the line of the princess, which says: "For me, my respected King." Another is in the line of the prince: "My father, because it is you whom we obey. In our nation you are respected."

Respect for superior is also mirrored in the *embajada*. The constituents are expected to respect their superior. This is mirrored in the line of the counsellor. "Respected King, whom we obey, I will answer your words."

Obedience is another worldview that is mirrored in the *embajada*. The member of the family are expected to obey their parents, likewise with the constituents towards their leader. This is shown in the lines of the son. "Father, my beloved, I will go to the place where you ordered me." Another is the line of the ambassador. "Respected Sultan whom we obey, I will go where you ordered me."

Conclusions

1. *Embajada* still exists in Catubig. But through the passing of time, it is possible that this will vanish from the Catubig culture and tradition because of ati-atihan that has become popular to the new generation. This only implies that people change their taste to such entertainment as time passes.
2. *Embajada* originates from the creative minds of the folk. Through the activer bearers, the were able to memorize its performance by word of mouth from generation to generation. This only implies that tradition bearers are able to transmit their knowledge of *embajada* to the upcoming generation.
3. *Embajada* has a *cultural* and historical impact to
4. the new generation. Since the play itself has a glimpse of history, this will enrich their minds from the traditions that the ancestors have imbedded to the people. Through this play the people will adopt Christianity as their religion. *Embajada* has been a part of Catubignon culture. Through this play they were able to mirror that the good will always win over evil. Through their devotion and faith in God, they will always win.

The *embajada* as it is performed by the folk bearers serves as an entertainment to the guests and to the natives of Catubig. Through their colorful costumes, it shows how vibrant are the people of Catubig.

Recommendations

1. The hermano mayor of the feast of Sto. Niño in Catubig, together with the school, the province and the Municipality of Catubig should have a collaborative effort in preserving *embajada* by bringing the play back to its original performance as it has been performed by the folks long ago.
2. *Moro-moro* and other folk drama should be taught in school to appreciate their own cultural heritage and to understand their own selves. Through this, they will not forget the tradition of the past and will continue performing it.
3. Further investigation on the folk drama should be done to have a larger collection of this folklore in order to show its cultural and historical impact to the new generation.
4. The Department of Tourism should help in funding this *embajada* to preserve its colorful tradition. Northern Samar needs a festival that can be called as their own, and *embajada* having its unique presentation, can be considered as an official festival in Northern Samar.

Acknowledgment

The researchers are grateful to the *embajada* performers and tradition bearers of Catubig, Northern Samar for preserving this folk drama.

References

[1] Ada, M.R. (2001). "Riddles from the selected areas of the pacific towns in Northern Samar their social and cultural implication." Unpublished ABLLT Thesis, University of Eastern Philippines.

[2] Alcera, M.E. (2005). "Supernatural tales told in Rosario, Northern Samar." Unpublished ABLLT Thesis, University of Eastern Philippines.

[3] Bautista, M.A. (1994). "*Literaturang pambayan ng mga gaccang, isinay at ilongot ng Nueva Viscaya: pagtitipon, pagsasalin at pagbasang kontekstual.*" DALL Dissertation, Dela Salle University.

[4] Carunungan, C.A.L. New communication arts for Social Living IV. Manila Social Studies Publication, Inc.

[5] Croghan, R.V. The development of Philippine literature in English since 1900. Phoenix Publishing House Inc., Manila.

[6] Dela Rosa, L.P.E. (2004). "The center for Samar studies" A festschrift in honor of *Pedro Derpo Destura*. Manila: Melbros Printing Center.

[7] Eugenio, D.L (1985). Philippine folklore and nationalism. Quezon City: UP Diliman Press.

[8] Leondicho, M. A handbook of the Philippine folklore. Diliman: The University of the Philippines Press.

[9] Manuel, A.E. (1975). Guide for study of Philippines Folklore, Manila

[10] Maramba, A.D. The early Philippine literature from ancient times to 1940. Phoenix Publishing House, Inc.

[11] Natividad, P. (1985). Philippine folklore in education for nationhood, on elementary levels. UP Diliman Press.

[12] Ocampo, A. (2006). "Pulangiyon Manobo culture comes alive in samay-an festival". *Agung*, Vol. IX, No. 4 (July-August).

[13] Tagros, R.B. (2006). "Bobon ati-atihan: A historical glimpse" Bobon Agta-agtaan 2006 Souvenir Program.

[14] Tuason, T. C. and Medina, B. Jr. (1914). Philippine literature from ancient to present. Phoenix Publishing House Inc.

ANTAS NG KAMALAYAN AT ANTAS NG PAGTANGGAP NG MGA GURO SA FILIPINO NG 2009 REBISYON NG MGA TUNTUNIN SA PAGBABAYBAY NG MGA SALITANG HIRAM

*Adeline E. Basiloy, PhD (*Units*)
Assistant Professor I
Departamento ng Wika at Komunikasyon
Pamantasan ng Silanganing Pilipinas,
Pamantasang Bayan, Hilagang Samar
adelinebasiloy.ab@gmail.com
09084944243

Abstrak – Ang pag-aaral na ito ay naglalayong malaman ang antas ng kamalayan at antas ng pagtanggap ng mga guro sa Filipino ng 2009 rebisyon ng mga tuntunin sa pagbabaybay ng mga salitang hiram. Ito rin ay naglalayon malaman an *profile* ng mg guro, malaman ang kaugnayan ng antas ng kamalayan ng mga guro sa kanilang profile at pagtanggap sa 2009 rebisyon, at malaman ang dahilan ng pagtanggap at hindi pagtanggap sa 2009 rebisyon ng mga tuntunin.

Ang disenyong diskriptibo at pamaraang *correlational* ay ginamit sa pag-aaral na ito. Dalawampu't apat na mga guro sa Filipino ng tatlong *campuses* ng UEP: ang UEP *main campus*, UEP Laoang, at UEP Catubig ang mga naging tagatugon (*respondents*).

Ayon sa kinalabasan ng pag-aaral, karamihan sa mga guro ay nagtapos ng kursong BSED Filipino, pantay ang bilang ng mga matatanda na, katamtaman pa lamang ang edad at bata pa, magkakasindami rin ang bilang ng baguhan sa pagtuturo at ng medyo matagal na sa pagtuturo, at karamihan sa kanila ay walang dinaluhang seminar na may kinalaman sa 2009 rebisyon ng mga tuntunin sa pagbabaybay.

Lumabas din sa pag-aaral na mababa ang antas ng kamalayan at antas ng pagtanggap ng mga guro sa Filipino sa tuntunin ng pagbabaybay ng mga salitang hiram.

Ayon sa pagsusuri, tanging ang kursong natapos lamang ang may makabuluhang ugnayan sa antas ng kamalayan. Samantalang walang makabuluhang ugnayan ang antas ng kamalayan at antas ng pagtanggap ng mga guro.

Naging katanggap-tanggap sa mga guro ang 2009 rebisyon ng mga tuntunin sa pagbabaybay, dahil sa ito ay malinaw at hindi nakalilito ang mga tuntunin sa pagbabaybay ng mga salitang hiram ngunit marami sa kanila ay hindi tanggap ang nasabing tuntunin dahil ito ang panibagong pag-aaralan na naman sa parte ng mga guro.

Keywords: Antas Ng Kamalayan; Antas Ng Pagtanggap; Filipino; Pagbabaybay; Salitang Hiram

PANIMULA

Ang wikang Filipino katulad ng ibang wika sa mundo ay may kayangiang angking. Ito ay may konsistent na sistema ng pababaybay. Nangangahulugan ito na ang bawat letra sa alpabeto ay may katumnbas na tunog. Ito ay isa sa mga dahilan kung bakit napadadali ang pagkatutong bumasa at sumulat ng wikang Filipino.

Subalit ang katangiang ito ay hindi sapat. Habang anfg wika ay buhay, patuloy at patuloy itong uunlad. Kaakibat ng pag-unlad ang pangangailangan sa pagbabago. Upang matugunan at masabayan ang mga pagbabagong ito, panahon na upang pag-aralan ang mga pagbabago ng otograpiyang Filipino. Nakapaloob sa otorapiyang Filipino ang mga letra ng alpabeto at kung paano ito tatawagin. Kasama rin ditto ang Sistema ng pagsulat maging ang tuntunin na dapat sundin sa pagbabaybay. Ang komisyon ng Wikang Filipino (KWF) ang siyang nanguna sa pagrereporma. Isa sa pinagtuunan nila ng pansin ang pagrebisa sa mga tuntunin sa pagbabaybay sa mga Salitang Hiram.

Alinsunod sa kautusang nakapaloob sa konstitusyon ng 1987, ang KWF ay nagsagawa ng rebisyon sa otograpiyang Filipino. Nakasaad sa konstitusyon na ang pambansang wika ng Pilipinas ay Filipino at samantalang nililinang, ito ay dapat payabungin at pagyamanin pa salig sa umiiral na wika sa Pilipinas at sa iba pang wika (Nolledo, 2003).

Sinikap ng KWF na magsagawa ng rebsyon. Nabuo nila ang "2001 Rebisyon ng Alfabeto at Patnubay sa Ispeling ng wikang Filipino." Sa hangaring maipaabot sa lahat ng kinauukulan sa lalaong medaling panahon ang mga isinagawang rebisyon csa ilang mga tuntunin ng otograpiya, ang kagawaran ng Edukasyon, Kultura at Isports (DECS) ay nagoalabas ng kautusang Pangkagawarang Blg. 45 s. 2001. Nakasaad sa kautusan na gamitin bilang gabay ang 2001 Rebisyon ng Alfabeto at patnubay sa ispeling ng Wikang Filipino sa pagtuturo, pagsulat ng *textbooks* at koresponden-syang opisyal, at iba pang Gawain ng departamento.

Sa kabila ng pagsisikap ng mga dalubhasa ng wika nag awing estandarlisado at intelektuwalisado ang wikang Filipino, marami parin ang nagpapahayag ng hindi pagsang-ayon sa rebisyon. Ito ang dahilan kung kaya ang Komisyon ng Wikang Filipino ay ngsagawa muli ng pag-aaral. Nabuo nila ang "Gabay sa Otograpiyang Filipino". Kaugnay nito, isang kautusang pangkagawaran Blg. 104 s. 2009 ang ipinalabas ng Departamento ng Edukasyon. Nakasaad dito na ang "Gabay sa Otograpiyang Filipino" ay dapat palaganapin gamitin at ipatupad bilang gabay at tuluyan ng isantabi ang 2001 Rebisyon ng Alfabeto at 1987 Alpabeto.

Pagkaraan ng ilang tao, muling nagpalabas ang KWF ng bagong gabay sa Otograpiya wikang Filipino. Nakapaloob dito ang 2013 rebisyon ng mga tuntunin sa pagbaybay ng mga salitang hiram.

Dakila ang naging hangarin ng KWF. Ginawa na nia ang lahat upang gawin isang Estandardisado at Intel-ektuwalisado ang wikang Filipino. Subalit sa kabila ng ka-nilang pagsisiskap, kapansin-pansin parin ang ibang problemang nararanasan ng mga guro at estudyante. Nagka-roon ng kalituhan sa pagbabaybay lalo na sa mga salitang hiram. Bunga ito ng palagiang pagbabago sa mga tuntunin ng pagbabaybay. Hindi paman tuluyang nakakabisa hang-gang ngayon sa mga guro ang tuntunin 2009, mayroon na naming bagong tuntunin na dapat pag-aralan at pagtuunan ng pansin. Ito ang tuntunin 2013. Kung nalilito ang mga guro sa mga tuntunin mas higit na malilito ang mga es-tudyante. Umaasa lamang ang mga ito sa mga itinuturo ng guro. Isang ulat ukol ditto ang iniharap sa mga kasapi ng isang konsultatibong kumperensya at worksyap na isina-gawa ng KWF. Sinasabi ng wikang Filipino ang kakulangan ng isang estandardisadong Sistema ng pagbabaybay lalo na sa proseso ng pagsusulat at pagbabasa ng wika. Kapansin-pansin ito kapag nahaharap anag mambabasa sa pagkakaiba-iba ng pagbabaybay sa mga pahayagan, aklat at iba pang babasahing isinulat ng mga guro, manunulat at iba pa na ginagamit sa loob ng silid-aralan (KWF).

Ang Bagong tuntunin sa pagbabaybay ay ipinatu-pad dalawang tao tuntunin ng 2009. Karugtong ng suliran-ing ito ay ang sirkulasyon ng mga aklat na maaaring umabot hanggang sa malalayong lugar ng Pilipinas. Taglay ng mga aklat na ito ang mga salitang binaybay ayonsa nakasulat sa tuntunin ng 2009. Lumalabas na suliranin ito ng samba-yanan.

Ang pinakamalaking suliraninng pangwika sa kasalukuyang panahon ay ang walang pakundangang panghihiram ng mga batayang salita. Ayon kay Santiago (2003) palasak na ang panghihiram ng mga Filipino at ito ay kapansin-pansin kahit sa mga pangungusap sa mga paha-yagan, sa mga pelikula, telebisyon, radio, anunsyo at mga babalang pangmadla. Nagpapatunay lamang ito na ang panghihiram ay sadyang hindi maiiwasan. Ayon sa KWF (2001) isang katotohanan ang pangangailangan ng wikang Filipino na manghiram ng Ingles, kastila at iba pang wika ng daigdig para matugunan ang malawakang pagpasok ng mga bagong konsepto na dala ng modernisasyon at teknolo-hiya. Subalit nakasaad sa Gabay ng ortograpiyang Filipino ng KWF (2001) na hangga't maaari ay tumbasan muna angkasalukuyang leksikon sa Filipino ang mga salitang hiram at pagkatapos saka pa lamang tuluyang hiramin ang mga ito.Ang mga nabanggit ay nakapagdulot ng samut0sar-ing kalituhan. Dahil sito marapat lamang na pagtuunan ng pansin ang mga nasabing suliranin kung kaya't lumitaw ang pag-aaral na ito.

Isa sa mga hangarin ng Komisyon sa Wikang Filipino ang gawing modernisado at intelektwalisado ang wikang Filipino gaya ng wikang Ingles. Subalit hindi ito kailan man mangyayari hangga't nariyan pa ang mga suliranin na nagsisilbing hadlang o balakid sa nasabing hangarin. Ang kalituhan ng mga estudyante at mga guro sa Filipino sa tamang pagbabaybay ng mga salitang hiram ay isa sa mga suliraning ito.

Ang nabanggit na suliranin ay isa sa mga dahilan kung bakit lumitaw ang pag-aaral na ito.

MGA LAYUNIN NG PAG-AARAL

Ang pag-aaral na ito ay naglalayong matamo ang mga sumusunod: (1) malaman ang *profile* ng mga guro ayon sa kursong edad, haba ng taon sa pagtuturo, at dami ng seminar na dinaluhan; (2) malaman ang antas ng kamalayan ng mga guro sa Filipino sa 2009 rebisyon ng mga tuntunin sa pagbabaybay ng mga salitang hiram; (3) malaman ang antas ng pagtanggap ng mga guro sa Filipino sa 2009 re-bisyon ng tuntunin sa pagbabaybay ng mga salitang hiram; (4) malaman ang kaugnayan ng antas ng kamalayan ng mga guro sa Filipino sa 2009 rebisyon ng tuntunin sa pagbabay-bay ng mga salitang hiram sa kanilang *profile* at pagtanggap sa rebisyon ng tuntunin sa pagbabaybay; at (5) malaman ang dahilan ng pagtanggap at hindi pagtanggap ng mga guro sa Filipino sa 2009 rebisyon ng mga tuntunin sa pagbabay-bay ng mga salitang hiram.

METODOLOHIYA

Ang pag-aaral na ito ay isinagawa sa tatlong *cam-puses* ng UEP: ang UEP *main campus*, UEP Lao-ang, at UEP Catubig.

Ginamit sa pag-aaral na ito ang disenyong dis-kriptibo at pamaraang *correlational* sapagkat pinag-uugnay nito ang mga punong-salik (independent variables) at bun-gang-salik (dependent variables).

Mga guro sa Filipino ng tatlong *campuses* ng UEP ang mga naging tagatugon (respondents). Umabot sa bilang na dalawampu't apat na mga guro ang mga tagatu-gon. Ito ay *complete enumeration*.

Sa pag-aaral na ito, ang instrumentong ginamit ay talatanungan (questionnaire). Binubuo ito ng apat na bahagi. Ang unang bahagi ay naglalaman ng mga datos ng mga tagatugon. Ang pangalawa ay naglalaman ng pagsubok sa pagbabaybay ng mga salitang hiram. Ang ikatlong bahagi ay naglalaman ng mga katanungang may kinalaman sa antas ng pagtanggap ng mga guro sa nirebisang tuntunin ng pagbabaybay sa Filipino ng mga salitang hiram. Ang ikaapat na bahagi naman ay naglalaman ng mga katanun-gang may kinalaman sa antas ng pagtanggap ng mga guro sa nirebisang tuntunin ng pagbabaybay sa Filipino ng mga salitang hiram.

Sa paglikom ng mga datos, isang liham ng paghingi ng pahintulot ang ipinadala ng mananaliksik sa mga dekano ng Kolehiyo ng Edukasyon at ng Kolehiyo ng Sining at Komunikasyon at sa dalawang *executive director* ng dalawang *extension campuses* ng UEP. Ang nasabing liham ay naglalaman ng paghingi ng pahintulot ng manana-liksik sa pamimigay ng mga talatanungan. Pagkatapos ng pagpapadala ng liham ay personal na ibinigay ng manana-liksik ang mga talatanungan para malaman at makuha ang dahilan ng mga guro sa kanilang pagtanggap o di-pagtanggap sa nirebisang tuntunin ng pagbabaybay sa Fili-pino ng mga salitang hiram.

Sa hangaring matiyak ang kawastuan at magka-roon ng malalimang pagsusuri sa mga nalikom na datos, gumamit ng mga pamamaraang istatistikal ang manana-liksik.

Upang makuha ang bilang ng mga gurong nagtapos sa kursong BSED-Filipino, BEED-Filipino, at bilang ng mga gurong nagtapos ng ibang kurso, ginamit ang *percentage*. Sa pagkuha ng *highest* at *lowest scores* sa ibinigay na pagsusulit, ginamit ang *range*. Upang malaman naman ang ugnayan ng punong-salik at bungang-salik ginamit ang *chi square*.

MGA KINALABASAN NG PAG-AARAL

<u>*Profile* Ng Mga Guro</u>

Kursong Natapos. Ayon sa datos, sa 24 na mga guro, 16 o 67 bahagdan ang nagtapos ng BSED Filipino at 8 or 33 bahagdan ang nagtapos ng ibang kurso.

Talahanayan 1-A
Distribusyon Ng Kursong Natapos Ng Mga Guro Sa Filipino

Kursong Natapos	Bilang	Bahagdan
BSED Filipino	16	67
Iba Pang Kurso	8	33
Kabuuan	24	100

Edad. Sa 24 na mga guro sa Filipino, 8 o 33.3 bahagdan ang masasabing mga bata pa; 8 o 33.3 bahagdan ang masasabing may katamtamang edad; at 8 o 33.3 bahagdan naman ang masasabing matanda rin dito na ang *mean* ay nasa 42 taong gulang na kung saan ang pinakabata ay 20 taong gulang at ang pinaka matanda naman ay 63 taong gulang.

Talahanayan 1-B
Distribusyon Ng Edad Ng Mga Guro Sa Filipino

Edad	Bilang	Bahagdan
Matanda Na (51-pataas)	8	33.3
May Katamtamang Edad (35-50)	8	33.3
Bata Pa (Mababa sa 35)	8	33.3
Kabuuaan	24	99.9

Mean: 42; bata pa: 20 taong gulang; matanda na: 63 taong gulang

Haba ng Taon ng Pagtuturo. Sa 24 na mga guro sa Filipino, 9 o 37.5 bahagdan ay baguhan pa lamang sa pagtuturo, 9 o 37.5 baghagdan ang medyo matagal nang nagtuturo, at 6 o 25 bahagdan ang matagal nang nagtuturo.

Talahanayan 1-C
Distribusyon Ng Haba Ng Taon Sa Pagtuturo Ng Mga Guro Sa Filipino

Haba Ng Taon Sa Pagtuturo	Bilang	Bahagdan
Matagal Nang Magturo (20 taon pataas)	6	25.0
Medyo Matagal Nang Nagturo (10-19 taon)	9	37.5
Baguhan Pa Lamang (mababa sa 10 taon)	9	37.5
Kabuuan	24	100.00

Mean: 15; pinakamaikli: 1 Taon; pinakamatagal: 39 taon

Dami ng Seminar na Dinaluhan. Sa 24 na mga guro sa Filipino, 21 o 87.5 bahagdan ang walang seminar na dinaluhan at 3 o 12.5 bahagdan lamang ang may kaunting seminar na dinaluhan. Ipinakita ng mga datos na marami sa mga guro sa Filipino na walang dinaluhang seminar na may kinalaman sa 2009 na tuntunin ng pagbabaybay ng mga hiram na salita.

Talahanayan 1-D
Distribusyon Ng Dami Ng Seminar Na Dinaluhan Ng Mga Guro Sa Filipino

Dami Ng Seminar Dinaluhan	Bilang	Bahagdan
May Kaunting Seminar (1-5)	3	12.5
Walang Seminar (0-walang seminar)	21	87.5
Kabuuan	24	100.00

<u>Antas Ng Kamalayan Ng Mga Guro Sa Filipino Sa 2009 Rebisyon Ng Mga Tuntunin Sa Pagbabaybay Ng Mga Salitang Hiram</u>

Batay sa pag-aaral, mababa ang antas ng kamalayan ng mga guro sa Filipino ng tatlong *campuses* ng UEP sa 2009 tuntunin ng pagbabaybay ng mga salitang hiram.

Talahanayan 2
Distribusyon Ng Antas Ng Kamalayan Ng Mga Guro Sa Filipino Sa 2009 Tuntunin Ng Pagbabaybay Ng Mga Salitang Hiram

Antas ng Kamalayan	Bilang	Bahagdan
Mataas ang Antas ng Kamalayan (MTK) (31-40)	1	4
Katamtaman ang Antas ng Kamalayan (KT) (21-30)	8	33
Mababa ang Antas ng Kamalayan (MBK) (11-20)	11	46
Lubhang Mababa ang Kamalayan (LMK) (10 pababa)	4	17
Kabuuan	24	100

Mean: 19 Mababa ang Antas ng Kamalayan (MBK)

<u>Antas Ng Pagtanggap Ng Mga Guro Sa Filipino Sa 2009 Rebisyon Ng Mga Tuntunin Sa Pagbabaybay Ng Mga Salitang Hiram</u>

Ipinakita rin ng pag-aaral na ito na bagamat mababa ang antas ng kamalayan ng mga guro sa Filipino sa 2009 tuntunin ng pagbabaybay ng mga salitang hiram, naging mataas naman ang antas ng kanilang pagtanggap sa nasabing tuntunin.

Talahanayan 3
Distribusyon Ng Antas Ng Pagtanggap Ng Mga Guro Sa Filipino Sa 2009 Tuntunin Ng Pagbabaybay Ng Mga Salitang Hiram

Antas ng Pagtanggap	*Bilang*	*Bahagdan*
Lubhang Katanggap-tanggap (LKT) (4.5-5.0)	13	54
Higit na Katanggap-tanggap (HKT) (3.5-4.4)	7	29
Katanggap-tanggap (KT) (2.5-3.4)	4	17
Kabuuan	24	100

Mean: 4.30 Higit na Katanggap-tanggap (HKT)

Kaugnayan Ng Antas Ng Kamalayan Sa Mga *Profile* At Antas Ng Pagtanggap

Ang mga datos ukol sa ugnayan ng mga salik at antas ng pagtanggap sa antas ng kamalayan ay iniharap sa talahanayan 4. Sa 4 na *profile*, isa lang ang may makabuluhang kaugnayan sa antas ng kamalayan, ito ay ang kursong natapos.

Lumabas din sa pag-aaral na ang antas ng kamalayan at antas ng pagtanggap ng mga guro sa Filipino ng tatlong *campuses* ng UEP sa 2009 tuntunin ng pagbabaybay ng mga salitang hiram ay walang makabuluhang ugnayan.

Talahanayan 4
Mga Ugnayan Ng Mga Salik At Antas Ng Pagtanggap Sa Antas Ng Kamalayan

Mga Salik	X^2_c	X^2_t	Df.	*Antas Ng Ugnayan*
Kamalayan at				
Kursong Natapos	10.11	7.81	3	*May Ugnayan*
Edad	10.24	12.59	6	*Walang Ugnayan*
Haba Ng Taon Ng Pagtuturo	4.82	12.59	6	*Walang Ugnayan*
Pagtanggap	5.67	12.59	6	*Walang Ugnayan*

Dahilan Ng Pagtanggap At Hindi Pagtanggap Ng Mga Guro Sa Filipino Sa 2009 Rebisyon Ng Mga Tuntunin Sa Pagbabaybay Ng Mga Salitang Hiram

Ang mga datos ukol sa mga dahilan ng pagtanggap ng mga guro sa Filipino sa 2009 tuntunin ng pagbabaybay ay iniharap sa talahanayan 5-A. Sa 24 na mga guro, 10 o 1.5 bahagdan ang sumagot nang malinaw at hindi nakalilito ang mga tuntunin sa pagbabaybay ng mga salitang hiram, 10 o 1.5 bahagdan naman ang sumagot na binigyan-diin sa mga tuntunin ang tamang pagbabaybay ng mga salitang banyaga lalo na ang mga salitang Ingles at Espanyol; 9 o 3 bahagdan naman ang ng naging malinaw ang mga tuntunin dahil sa mga ibinigay na mga halimbawa; 6 o 4.5 bahagdan naman ang sumagot na may sapat na paliwanag sa bawat tuntunin; 6 o 4.5 ang sumagot ng ginawang payak ang bawat tuntunin; 3 o 6 na bahagdan naman ang sumagot ng sandaling maunawaan dahil ito ay hawig sa 1987 na mga tuntunin; 1 o 7 bahagdan ang sumagot ng obligasyon ng mga guro sa Filipino ang sumusunod sa ipinag-uutos ng KWF; at 1 o 8 bahagdan ang sumagot ng bumalik tayo ky Lope K. Santos.

Masasabi sa kinalabasan ng pag-aaral na nangunguna ang dahilang malinaw at hindi nakalilito ang mga tuntunin sa pagbabaybay ng mga salitang hiram at binigyan-diin sa mga tuntunin ng tamang pagbabaybay ng mga salitang banyaga lalo na ang mga salitang Ingles at Espanyol. Samantalang ang dahilang bumalik tayo kay Lope K. Santos na may 1 o 8 bahagdan lamang ay ang panghuli sa lahat ng mga dahilan.

Talahanayan 5-A
Ang Pagkasunod-Sunod Ng Mga Dahilan Ng Pagtanggap Sa Mga Guro Sa 2009 Rebisyon Ng Pagbabaybay Ng Mga Salitang Hiram

Mga Dahilan Ng Pagtanggap	Bilang	Bahagdan
1. Malinaw at hindi nakalilito ang mga tuntunin sa pagbabaybay ng mga salitang hiram.	10	1.5
2. Binigyang diin sa mga tuntunin ang tamang pagbabaybay ng mga asalitang banyag lalo na ang mga salitang Ingles at Espanyol.	10	1.5
3. Naging malinawa ang mga tuntunin dahil sa ibinigay na mga halimbawa.	9	3
4. May sapat na paliwanag sa bawat tuntunin.	6	4.5
5. Ginawang payak ang bawat tuntunin.	6	4.5
6. Madaling maunawaan dahil ito ay hawig sa 1987 na tuntunin.	3	6
7. Obligasyon ng mga guro sa Filipino ang sumunod sa ipinag-uutos ng KWF.	1	7
8. Bumalik tayo kay Lope K. Santos.	1	8

Ang mga datos ukol sa mga dahilan ng hindi pagtanggap ng mga guro sa Filipino 2009 tuntunin ng pagbabaybay ay iniharap sa talahanayan 5-B. Sa 24 na mga guro, 12 o 1 bahagdan ang sumagot ng dahilang panibagong pag-aaralan na naman ito sa mga parte ng mga guro sa Filipino: 6 o 2.5 bahagdan ang sumagot ng dahilang nakakawalang gana dahil sa palagiang pagbabago ng mga tuntunin sa pagbabaybay; 6 o 2.5 bahagdan din ang sumagot sa dahilang hindi maliwanag kung paano at kung kailan gagamitin ang 8 dagdag na letra sa alpabeto; 5 o 4.5 bahagdan ang sumagot sa dahilang walang sapat na paliwanag; 2 o 6 na bahagdan ang sumagot sa dahilang mahirap ituro sa mga estudyante dahil alam na nila ang 2001 tuntunin ng pagbabaybay; at 1 o 7 bahagdan ang sumagot sa dahilang walang seminar na isinagawa ukol dito.

Masasabi sa kinalabasan ng pag-aaral na nangunguna ang dahilang panibagong pag-aaralan na naman sa parte ng mga guro sa Filipino sa mga dahilan kung bakit hindi tinatanggap ng mga guro sa Filipino ang Salitang Hiram. Samantala, ang dahilang walang seminar na isinagawa ukol dito ang panghuli sa mga dahilan ng hindi pagtanggap ng mga guro sa 2009 tuntunin ng pagbabaybay ng mga salitang hiram.

Talahanayan 5-B
Ang Pagkasunod-Sunod Ng Mga Dahilan Ng Hindi Pagtanggap Sa Mga Guro Sa 2009 Rebisyon Ng Pagbabaybay Ng Mga Salitang Hiram

Mga Dahilan Ng Hindi Pagtanggap	Bilang	Bahagdan
1. Panibagong pag-aaralan na naman sa parte ng mga guro sa Filipino.	12	1
2. Nakakawalang gana dahil sa palagiang pagbabago ng mga tuntunin sa pagbabaybay	6	2.5
3. Masyado nakalilito ang mga tuntunin	6	2.5
4. Hindi maliwanag kung paano at kailan dapat gamitin ang walong dagdag na letra sa alpabeto.	5	4.5
5. Walang sapat na paliwanag	5	4.5
6. Mahirap ituro sa mga bata dahil alam at kabisado na nila ang 2001 tuntunin sa pagbabaybay.	2	6
7. Walang seminar na isinagawa ukol dito.	1	7

MGA

KONGKLUSYON

Batay sa kinalabasan ng pag-aaral, nakuha ang mga sumusunod na kongklusyon:

1) Sang-ayon sa kinalabasan ng pag-aaral, ang karamihan sa mga guro sa Filipino ng tatlong *campuses* ay nagtapos ng kursong BSED Filipino; magkakasindami ang bilang ng mga gurong matatanda na, gurong katamtaman pa lamang ang edad at ng mga gurong bata pa; magkakasindami rin ang bilang ng mga gurong baguhan sa pagtuturo at ng mga gurong medyo matagal na sa pagtuturo; at karamihan sa kanila ay walang dinaluhang seminar na may kinalaman sa 2009 rebisyon ng mga tuntunin sa pagbabaybay ng mga salitang hiram.

2) Lumabas sa pag-aaral na mababa ang antas ng kamalayan ng mga guro sa Filipino ng tatlong *campuses* ng UEP sa 2009 tuntunin sa pagbabaybay ng mga salitang hiram.

3) Sang-ayon sa pag-aaral, higit na katanggap-tanggap para sa mga guro sa Filipino ng tatlong *campuses* ng UEP ang 2009 tuntunin sa pagbabaybay ng mga salitang hiram.

4) Lumabas sa pag-aaral na sa mga nabanggit na *profile* ng mga guro sa Filipino ng tatlong *campuses* ng UEP, tanging ang kursong natapos lamang ang may makabuluhang ugnayan sa antas ng kamalayan. Lumabas din sa pag-aaral na ang antas ng kamalayan at antas ng pagtanggap ng mga guro sa Filipino ng tatlong *campuses* ng UEP sa 2009 tuntunin ng pagbabaybay ng mga salitang hiram ay walang makabuluhang ugnayan.

5) Sang-ayon sa pag-aaral, sa mga dahilan ng pagtanggap ng mga guro sa Filipino sa 2009 rebisyon ng mga tuntunin sa pagbabaybay ng mga salitang hiram, nangunguna ang dahilang malinaw at hindi nakalilito ang mga tuntunin sa pagbabaybay ng mga salitang hiram. Sa mga dahilan naman ng hindi pagtanggap ng mga guro sa Filipino sa 2009 rebisyon ng mga tuntunin sa pagbabaybay ng mga salitang hiram, nangunguna ang dahilang panibagong pag-aaralan na naman sa parte ng mga guro sa Filipino.

MGA REKOMENDASYON

Batay sa mga napag-alaman at kongklusyon, narito ang mga naging rekomendasyon:

1) Dapat lamang na ang mga nagtuturo ng mga asignaturang Filipino ay nagtapos sa kursong BSED-Filipino.

2) Hindi dapat gawang basehan ang edad at haba ng taon sa pagtuturo sa pagpili ng mga guro na magtuturo ng mga asignaturang Filipino.

3) Inirerekomenda rin ng mananaliksik sa mga pinuno ng tatlong *campuses* ng UEP na pangunahan ang pagsasagawa ng seminar ukol sa 2009 tuntunin ng pagbabaybay ng mga salitang hiram nang sa gayon ay mapaunlad ng mga guro ang kanilang kamalayan sa nasabing tuntunin.

4) Sa mga estudyante, maging maalam sa mga isyung pangwika partikular ang tuntunin ng pagbabaybay sa Filipino ng mga salitang hiram.

5) Inirerekomenda ng mananaliksik na magsagawa ng panibagong pag-aaral ukol dito at gamitan ng karagdagang salik at mga tagatugon.

PASASALAMAT

Nais iparating ng mananaliksik ang kanyang taos-pusong pasasalamat at pagtanaw ng utang na loob sa UEP at sa mga taong walang sawang sumuporta upang mabuo ang pag-aaral na ito.

BIBLIYOGRAPIYA

[1] Komisyon sa Wikang Filipino. 2001. Revisyon ng Alfabeto at Patnubay sa Ispeling ng Wikang Filipino. Maynila: Elvita Printing and Advertising.

[2] _____. 2009. Gabay sa Ortograpiyang Filipino. Maynila: KWF.

[3] Nolledo, J. P. 1992. The Constitute of the Republic of the Philippines Explained. Caloocan City: Philippines Graphic Arts, Inc.

[4] Santiago, A. O. 2003. Sining ng Pagsasaling-wika. Quezon City: Rex Printing Co., Inc.

[5] Santiago, A., *et al*. 2003. Makabagong Balarilang Filipino. Manila: Rex Bookstore, Inc.

ODYSSEUS' ACTIONS AND POETIC EXPRESSIONS IN HOMER'S "THE ODYSSEY" AS VIEWED FROM FREUD'S PERSONALITY STRUCTURE

*Anatolia Bido-Basista, DALL (*Candidate*)
Associate Professor I
Languages and Communication Department
College of Arts and Communication
University of Eastern Philippines
Catarman, Northern Samar
anang70@yahoo.com
09184146778

Abstract – This study analyzed the actions and poetic expressions of Odysseus in The Odyssey viewed from Freud's conceptualization of personality structure as to *id, ego, superego*. The qualitative design was employed utilizing descriptive textual analysis on the character of Odysseus.

It further drew the view of the present-day generation towards Odysseus' characterization. In the process of drawing the view of today's generation, 20 literary criticism students and 4 teachers served as respondents.

The analyses indicated that Odysseus showed multiple personality influenced by the three structures of personality of Freud. With the dictate of *id*, he is found to have desire for recognition, fondness for food, was curious, wrathful, vengeful, and soft-hearted. While commanded by *ego*, he is suspicious, curious, clever, courageous, proud, self-restrained, careful, and loving. Influenced by *superego*, he is found to be submissive, humble, prudent, graceful, proper, responsible, and grateful.

The present day generation viewed Odysseus positively as hero, brave, courageous, responsible, intelligent, family-oriented, grateful, optimistic, considerable/patient, realistic and practical, goal-oriented, and loving husband. However, they disdained his being cruel, selfish, unfaithful, curious, egocentric, and hot-tempered.

It was further noted that all the positive character traits of Odysseus were all found in his actions and poetic expressions. On the other hand, the respondents' negative perception does not readily agree with the results of the character analysis performed.

With all those characteristics of Odysseus, it is concluded, based on Freud's theory, that he has a healthy personality for he creates a balance between the *id*, the *ego*, and the *superego*.

Keywords: The Odyssey; actions; poetic expressions; character; personality structure

INTRODUCTION

Reading literary pieces influences one's behavior, cultivates his character, and develops capacity to understand other people leading to an improved relationship. It provides the readers various experiences in a very pleasing and convenient manner. It could bring them to wonderful places of the world. It could as well lighten their hearts and make smiles on their faces. And it could influence them towards appreciation of humanity and immerse them to the values essential for a happy life.

However beneficial through reading literature is, many a student today would rather prefer to be exposed to the technologies of the times such as surfing the net, chatting or texting with friends, singing along his/her favorite songs with the *barkadas*, listening to his/her favorite music download on MP3 or ipod, playing computer games, and the like. The new generation fop today could hardly appreciate the advantage of reading literature. They often regard literature books as part of the past having no relevance to the ways and styles of the present. This problematic situation is felt by every literature teacher who should try his/her best to motivate students in reading literature.

In 1996, the Commission on Higher Education in order to update the General Education mandated the inclusion of two literature courses: Literature of the Filipinos and Literatures of the World in the curriculum of degree courses to underscore the importance of literature to those seeking professional courses to widen their horizon as industry leaders.

This order made way for the students to give importance to literature leaving them choice less for a time. However, effective teaching and learning process should come out from a good teacher and an interested learner. Teachers, therefore, should be able to move and stir the minds of the students to make them realize and understand the value and worth of reading and enjoying literary pieces of all times. They should be able to lead the students to read literature, not only because it is a requirement to finish their course, but also, because of recognition, awareness, and appreciation of the true value of literature.

The researcher, thus, chooses to study on Odysseus, a character from the Iliad and the Odyssey – a selection which could never fade in its universality. Homer's The Odyssey, a sequel to the Iliad, is surely one of the most appealing books Homer had ever written. It provides something for every kind of reader: the glories of war, wrath, and the entertainment of a suspenseful adventure story complete with magical transformations, witches, and giants, as well as the illumination of many varieties of human interaction. These are books which could win every preserving reader to appreciate its compensating virtues, a must for every literature student.

The Odyssey remained a vital book through centuries of Christian humanistic education, and its poetry continued to convey not only aesthetic delight but the nature and significance of decay and regeneration of sin and redemption (Rees, 1977:11)

Every literary scholar would agree to the greatness of Homer's The Iliad and The Odyssey. However, great as the books may be, many a literature student still finds them uninteresting. Reading literary selections are often regarded by students as a bothersome chore that merely delay concentration on the other 'useful' subjects they are taking.

On the other hand, some students who may find pleasure in reading may be caught up wondering about the hero's character in Homer's The Iliad and The Odyssey. They may have a blurred idea as to how a "liar", "treacherous", and "murderous" Odysseus is considered a hero.

Odysseus is characterized variously as "shrewd", "subtle", "sly", "suave", "wily", "clever", "cunning", "deft", "tactful", "scheming", and "crafty". In this constellation of qualities, one sees the range of connotations *metis* carries – the capacity for skillful planning, and the capacity for manipulation and deceit. Indeed, other representations of Odysseus emphasize this latter dimension of his character, and he is sometimes portrayed as far from a hero, to shed light on the hero's character, this study is conceived. It is believed that this study on Homer's Odysseus will give a clearer view of the timeless hero. Analyzing Odysseus as a major character, using Freud's conceptualization of personality structure will reveal the true nature and personality of Odysseus. Understanding the major character will make way to the readers' better comprehension of the books. This may further be the first step to the readers' development of appreciation, love, and sensitivity to the value of literature.

OBJECTIVES OF THE STUDY

This study, which zeroed in on the characterization of Odysseus on the basis of Freud's concept of personality, aimed to achieve the following: (1) identify the actions and expressions, which will reveal the character and personality of Odysseus that adhere to *id*; (2) classify the actions and expressions of Odysseus as to whether each action or expression of Odysseus adheres to *ego*; (3) ascertain the actions and expressions of Odysseus as to whether each action or expression of Odysseus adheres to *superego*; (4) analyze the character traits of Odysseus that is reflected from each of his actions and poetic expressions; and (5) point out which values and traits of Odysseus are considered good and not good from the point of view of the present day generation.

METHODOLOGY

This study employed a qualitative research design coupled with descriptive textual analysis, focusing on the character of Odysseus in The Odyssey as seen from Freud's conceptualization of personality structure. Every action performed by the character in the story was treated and analyzed as either a manifestation of *id*, *ego* or *superego* as conceptualized by Freud.

This study further traced Odysseus' characterization from the point of view of the present day generation to find out whether the researcher's analysis and justification of Odysseus actions have some similarities. To achieve this purpose, the researcher considered drawing relevant data from the present day generation – literature students and literature teachers.

Twelve (12) Bachelor of Secondary Education (BSED) major in English majors enrolled in Literary Criticisms, four (4) Bachelor of Arts in Literature and Language Teaching (AB LLT) enrolled in Literary Masterpieces, and four (4) literature teachers were chosen as the respondents.

The purposive sampling was used in this study with the researcher intentionally choose the student-respondents on the following criteria: 1) that he/she belongs to the present day generation and 2) that he/she must have already taken and passed literature subjects such as Literature 121 and Literary Masterpieces.

To qualitatively obtain the needed data on the traits and values of Odysseus from the point of view of the present day generation, an instrument was formulated which consists of matrix that serves also as the analysis guide. On a tabular matrix, each respondent was made to pinpoint a character trait/values of Odysseus. On the second column the respondent was asked to recall the context in the epic that relates to the trait. On the third column the respondent judges if the trait is relevant in today's generation or not.

In analyzing the character under study, the following steps were observed: 1) read entirely The Odyssey of Fitzgerald's version; 2) make a table listing of every action and poetic expression performed by Odysseus; 3) make columns for actions identified as *id*, *ego*, and *superego*; 4) indicate the corresponding book and line numbers; 5) analyze each action performed, being reflective of Odysseus' human nature in terms of *id*, *ego*, and *superego*; 6) pinpoint Odysseus' values and virtues that are considered good or bad; and 7) draw out findings, formulate conclusions and implications, and finally draw recommendations.

FINDINGS

<u>Odysseus' Actions and Poetic Expressions that Adheres to *Id*</u>

Table 1 shows the actions and expressions of Odysseus which adhere to *id* with its contextualization and analyses.

The *id* is driven by the pleasure principle which strives for immediate gratification of all desires and needs.

Odysseus' personality characteristics that are revealed on these actions and expressions with adherence to *id* are the following: a) desire for recognition, b) fondness for food, c) curious, d) wrathful, e) vengeful, and f) soft-hearted.

Table 1
Actions and Poetic Expressions of Odysseus that Adheres to *Id*

Actions	*Expressions*	*Prevalent Character and Personality Analysis*
He thought he is going to die and envy those who died in war and given proper burial.	"Rag of man that I am, is this the end of me. I fear the goodness told it all too well. Predicting great adversity at sea and far from home. Now all her things bear her out. The whole rondure of heaven hooded so by Zeus in woeful cloud and the sea raging under such winds. I am going down, that's sure. How lucky those Danaans were who perished on Troy's wide seaboard, serving the Atreidai! Would God I, too had died there – met my end that time the Trojans made so many casts at me when I stood by Akhilleus death. I should have had a soldier's burial and praise from the Akhaians – not this choking waiting for me at sea, unmarked, and lonely." (*Book 5, pp. 89-90, lines 309-323*)	Desire for Recognition This is the first time Odysseus expressed hopelessness. He knew he was going to die and he expressed his preference to die in war than to die at sea. These lines show his need to be honored and praised. It reveals his being human, his being emotional, and his need for recognition.
He exposed himself to Nausikaa. He did not anymore mind how he looked. All he wanted was to be noticed by the girls and to be given food.	"He pushed aside the bushes, breaking off with his great hand a single branch of olive, whose leaves might shield him in his nakedness; so came out rustling, like a mountain lion, rain-drenched, wind buffeted, but in his might at ease, with burning eyes – who prowls among the herds or flocks, or after game , his hungry belly taking him near stout homesteads for hs prey. Odysseus had this look, in his rough skin advancing on the girls with pretty braids and he was driven on by hunger, too. (*Book 6, p. 103, lines 137-147*)	Fondness for Food The impulse of Odysseus to face the people that he heard was immediate because he knows that they can give him what he needs at present – food and shelter. Odyseus is really a hero who always takes care of his stomach. It could be remembered from the Iliad that he objected to Akhilleus' proposal that they should fast until Patroklus is avenged. He told Akhilleus that they need food in order to be strong.
He expressed how he refused to go back to their ship, for he wanted to see the being who dwelt in that cave.	"Ah, how sound that was! Yet I refused. I wished to see the caveman, what he had to offer – (*Book 9, p. 151, lines 247-249*)	Curious Another reason for his wanting to see the caveman is he might have something good to offer to his quest. As when they went to Ismaros, they were able to get the sweetest wine that no one could ever resist.
He taunted the Kyklops, shouting as loud as he could.	"O Kyklops! Would you feast on my companions? Puny, am I, in a caveman's hands? How do you like the beating that we gave you, you damned cannibal? Eater of guests under your roof! Zeus and the gods have paid you! (*Book 9, p. 159, lines 518-522*)	Wrathful In these lines, the reader could feel the anguish of Odysseus towards the Kyklops which he tried to control when they were still inside the cave or else they will be betrayed. And now, that they escaped; he got the freedom to say as he pleases, to release his feelings. Just like a child who quarrels, his purpose is to anger the enemy. So is Odysseus. He wanted the Kyklops to feel what he feels inside his cave, watching his men being devoured by him. Yet he could not kill him. For to do so means to bury themselves forever in that cave.
He finally revealed to the suitors that he is Odysseus. And he expressed that revenge was at hand	"You yellow dogs, you thought I'd never make it home from the land of Troy. You took my house to plunder, twisted my maids to serve your beds. You dared bid for my wife while I was	Vengeful His personal outpouring had begun and his first shot went to the most hated suitor. Then he had to reveal himself for

	still alive. Contempt was all you had for the gods who rule wide heaven, contempt for what men say of you hereafter. Your last hour has come to die in blood." (*Book 22, p. 410, lines 36-42*)	them to know the justification of what he did and the rest of what he would still do to implement his revenge.
He wept with despair for his country.	"And then he wept, despairing, for his own land, trudging down beside the endless wash of the wide, wide sea, weary and desolate as the sea." (*Book 13, pp. 236-237, lines 272-275*)	Soft-Hearted His act of weeping for his dear land is normal for a person who spent years in trying to go home even reaching the land of the dead just to be able to go home. Then at that moment when he was almost sure of going home, he would find out that he is far from home yet. Indeed, Odysseus feeling comes from his unconscious being.

Odysseus' Actions and Poetic Expressions that Adheres to *Ego*

Table 2 shows the actions and expressions of Odysseus which adhere to *ego* with its contextualization and analyses.

The *ego* operates based on the reality principle, which strives to satisfy the id's desire in realistic and socially appropriate ways. The reality principle weighs the costs and benefits of an action before deciding to act upon or abandon the impulses.

Odysseus' prevalent characteristics that are motivated by *ego* are his being: a) suspicious, b) curious, c) scheming/clever, d) courageous, e) proud, f) self-restrained, g) careful, and h) love for his family and home.

Table 2
Actions and Poetic Expressions of Odysseus that Adheres to *Ego*

Actions	*Expressions*	*Prevalent Character and Personality Analysis*
Odysseus expressed his doubt to the kindness of Kalypso. So he made her promise not to perform enchantment that will harm him.	"After all these years, a helping hand? O goddess, what guile is hidden here? A raft, you say to cross the Western Ocean? Seaworthy ships that glory in god's wind will never cross it. I take no raft to grudge me out to sea. Or yield me first a great oath, if i do, to work no more enchantment to my harm." (*Book 5, p. 86, lines 183-190*)	Suspicious Odysseus characteristic that could be reflected from these lines was his being very careful and suspicious. He always thinks before acting. Clearly, this is ego that works here for he was not carried away by his longing for home. Also because of his own deviousness, he could not help but attribute it to others.
He went to investigate what kind of people dwelt in that mainland. He asked his other men to just wait for his findings.	"Old shipmates, friends, the rest of you stand by; I'll make the crossing in my own ship, with my own company, and find out what the mainland natives are – for they may be wild savages, and lawless, or hospitable and god-fearing men." (*Book 9, p. 150, lines 184-189*)	Curious Again, the curiosity of Odysseus would always win. Also he only wanted to find out the truth. The people living there may be kind, may be able to give them provisions for their further voyage. Or they might be people who could give them an idea on how to go home. At the same time, he could not put everybody's life in danger so he asked others to just stay. We could see Odysseus' concern for others here.
He explained to Polyphemus how they got there and asked for his help or gifts as that was their custom to honor strangers.	"We are from Troy, Akhaians, blown off course by shifting gales on the Great South Sea; homeward bound, but taking routes and ways uncommon; so the will of Zeus would have it. We served under Agamemnon, son of Atreus – the whole world knows what city he laid waste, what armies he destroyed. It was our luck to come here; here we stand, beholden for your help, or any gifts you give – as custom is to honor strangers. We would entreat you, Great Sir, have a care for the god's courtesy; Zeus will avenge the unoffending quest." (*Book 9, pp. 152-153, lines 281-293*)	Scheming/Clever It was probably difficult for Odysseus to choose words that will have a greater effect on this monster. However, he was able to answer him, and more he was able to remind him of their god's law-protecting and honoring strangers . obviously, he schemed this idea to remind the monster of protecting them.

He was able to catch a gif tree in whirlpool of Kharybdis. Then he waited for his mast and keel to come back when Kharybdis would spout.	“There, as the whirlpool drank the tide, a billow tossed me, and I sprang for the great fig tree, catching on like a bat under a bough, nowhere had I to stand, no way of climbing, the root and bole being far below, and far above my head the branches and their leaves. Nothing but fatal trouble shall we find here. Pull away, then, and put the land astern.” (*Book 12, p. 224, lines 551-564*)	<u>Courageous</u> Odysseus courage, patience, and endurance are shown here. Shipwrecked as he was, still he was able to make use of what was only available; his mast and keel. Then, he was forbidden to land there, still he had to tell them. He is also strong against temptation. Although he was very tired, he was not tempted to take a rest on this island.
He was filled with laughter as the name he gave to the Kyklops deceived Polyphemus and the other Kyklops.	“So saying they trailed away. And I was filled with laughter to see how like a charm the name deceived them.” (*Book 9, p. 157, lines 449-451*)	<u>Proud</u> His sweet feeling of satisfaction for the fulfillment of the probable effect of his plan is what he is experiencing here.
He decided to knock down the beggar, not kill him, for he might betray his identity.	“Royal Odysseus pondered if he should hit him with all he had, and drop the man dead on the spot, or only spar with force to knock him down. Better that way, he thought – a gentle blow, else he might give himself away.” (*Book 18, p. 338, lines 109-114*)	<u>Self-Restrained</u> In his own hall while pretending as a beggar, he showed so much self-restraint. He had always considered the great plan of revenge that is soon to happen.
He put the beeswax think on the ears of his men while he was tied to a mast after.	“...I carved a massive cake of beeswax into bits and rolled them in my hands until they softened – no long task, for a burning heat came down from Helios, lord of high noon. Going forward I carried wax along the line and laid it thick on their ears. They tied me up, then plumb amidships, back to the mast, lashed to the mast, and took themselves again to rowing.” (*Book 12, pp. 214-215, lines 208-216*)	<u>Careful</u> Odysseus applied the wax to his men to make sure that the deed would be carefully done.
He assured Penelope of Odysseus’ coming.	“Dear honorable lady, wife of Odysseus Laertiades, let there be no postponement of the trial. Odysseus, who knows the shift of combat, will be here: aye, he’ll be here long before one of these lads can stretch or string that bow or short to thread the iron!” (*Book 19, pp. 371-372, lines 664-670*)	<u>Love for His Family and Home</u> Odysseus wanted his wife to feel at ease. He wanted to take all the pains and worries that she have been feeling all those years.

<u>Odysseus’ Actions and Poetic Expressions that Adheres to *Superego*</u>

Table 3 shows the actions and expressions of Odysseus that adhere to *superego* with its contextualization and analyses.

The *superego* is the aspect of personality that holds all of our internalized moral standards and ideals that we acquire from both parents and society – our sense of right and wrong. The two parts of *superego* are “the ego ideal” and “the conscience”. The go ideal includes the rules and standards for good behaviors and the conscience includes information about things that are viewed as bad by parents and by society.

The characteristics of Odysseus that adhere to *superego* herein indicated are the following: a) submissive, b) humility, c) prudence, d) gracefulness, e) propriety, f) responsibility, and g) gratefulness.

Table 3
Actions and Poetic Expressions of Odysseus that Adheres to *Superego*

Actions	*Expressions*	*Prevalent Character and Personality Analysis*
He prayed to the lord of the sea.	“O hear me, lord of the stream: how sorely I depend upon your mercy! Derelict as I am by the sea’s anger. Is he not scared, even to the gods, the wandering man who comes, as I have come, in weariness before your knees, your waters? Here is your servant: lord, have mercy on me.” (*Book 5, p. 94, lines 463-471*)	<u>Submissive</u> Clever and confident as he is, Odysseus is also submissive and humble when it comes to gods. No wonder he is favored by gods.
He excused himself of not joining the contest.	“Laodamas, why do you young chaps challenge me? I have on my mind than track and field – hard days, and many, have I seen, and suffered. I sit here at your field meet, yes; but only as one who begs your king to send him home.” (*Book 5, pp. 89-90, lines*	<u>Humility</u> Odysseus refused to join because he did not want to show up his talent and skill at that time. What he wanted to do was to go home.

	309-323)	
He addressed Queen Arete with supplication.	"Arete, admirable Rhexenor's daughter, here is a man bruised by adversity, thrown upon your mercy and the king your husband's, begging indulgence of this company – may the god's blessing rest on them!...My life is pain." (*Book 7, p. 115, lines 111-119*)	Prudence Odysseus is not only intelligent and wise, he is also prudent and careful of his actions that he may be pleasing to others. He knows how to become a suppliant and he knows exactly what he is going to say and do so as not to displease them.
He spoke to reply to King Alkinoos to let him know that he is pleased with his personality.	"Alkinoos, you may set your mind at rest. Body and birth, a most unlikely god am I, being all of the earth and mortal nature. I should say, rather, I am like those mean who suffer the worst trails that you know, and miseries greater yet, as I might tell you – hundreds: indeed the gods could send no more... Rough years I've had; now may I see once more my hall, my lands, my people before I die!" (*Book 7, p. 117, lines 174-192*)	Gracefulness Indeed, Odysseus knows how to show his manners especially to the King. He knows exactly how he would make his hosts understand his behavior so as not sow distaste in their hearts and minds. He is trying to show that he himself is of noble birth from the way he speaks and behaves.
He asked first to purify the hall before considering his looks in front of Penelope.	Let me have the fire. The first thing is to purify this place." (*Book 22, p. 425, lines 546-547*)	Propriety Odysseus conformity to their ways is shown here. He did not forget the step by step procedure in making his wall fresh and alive again.
He saw the soul of Antikleia, his mother. He grieved and was in pain while he wept. However, he held her off until Teiresias' soul came.	"Now came the soul of Antikleia, dead, my mother, daughter of Autolykos, dead now, though living still when I took ship for holy Troy. Seeing this ghost I grieved, but held her off through pang on pang of tears, till I should know the presence of Teiresias. (*Book 11, p. 187, lines 94-99*)	Responsibility This has something to do with moral obligation. Odysseus going there with his men waiting outside was on purpose of talking to Teiresias. Odysseus therefore could not afford talking to his mother first before he finished his task. Majority first before personal concern.
He was overjoyed to see that he was indeed in his own land that he kissed the earth. Then he praised Zeus' daughter.	"... Then indeed Odysseus' stirred with joy. He kissed the earth, and lifting up his hands prayed to the nymphs: '... O listen smiling to my gentle prayers, and we'll make offering plentiful as in the old time, granted I live, granted my son grows tall, by favor of great Athena, Zeus's daughter, who gives the winning fighter his reward!" (*Book 13, p. 241, lines 508-518*)	Gratefulness Odysseus, a man of many wiles is also a man who depends on gods and goddesses. In his sweet success of reaching home, he attributes it to his patron Athena. No wonder, he is Athena's favorite. He always shows his gratitude to the gods.

<u>Odysseus' Character Traits Reflected from His Actions and Expressions</u>

Table 4 presents the character traits of Odysseus reflected from each of his actions and expressions as to *id*, *ego*, and *superego*.

As influenced by *id*, Odysseus acted through his unconscious behavior, which he tends to be wrathful, proud, and instinctive. These three characteristics ranked highest. As to the *ego*, the three most prevalent characteristics are clever, determined, and family-oriented. While the Odysseus' character traits prevalent when influenced by the *superego* are proper, concern for others, and faith in god.

Table 4
Character Traits of Odysseus Reflected from Each of His Actions and Expressions

Actions	*Frequency*	*Rank*
Id		
Wrathful	7	1.5
Proud	7	1.5
Instinctive	6	3
Curious	4	4.5
Loving	4	4.5
Sarcastic	1	10
Patient	1	10
Grateful	1	10
Faith in God	1	10
Indignant	1	10
Doubter	1	10
Apprehensive	1	10
Compassionate	1	10
Longing for Home	1	10
Ego		
Clever	35	1
Determined	20	2
Family-Oriented	5	3
Concern for Others	4	5.5
Transparent	4	5.5
Suspicious	4	5.5
Proper/Polite	4	5.5
Curious	3	8.5
Faith in God	3	8.5
Proud	2	10.5
Skillful	2	10.5
Humble	1	16
Indignant	1	16
Secured	1	16
Earthly	1	16
Tolerant	1	16
Chaste	1	16

Realistic	1	16
Just	1	16
Vindicative	1	16
Superego		
Proper	9	1
Concern for Others	5	2
Faith in God	4	3
Just	3	4
Self-Sacrifice	2	5.5
Determined	2	5.5
Frank	1	8
Loving Husband	1	8
Optimistic	1	8

Odysseus' Values and Traits Relevant to the Point of View of the Present-Day Generation

Table 5.1 presents the multiple responses of the respondents on the values and traits of Odysseus to be relevant and perceived as positive in today's generation.

The present-day generation viewed Odysseus positively as hero, brave, courageous, responsible, intelligent, family-oriented, grateful, optimistic, considerable/patient, realistic and practical, goal-oriented, and loving husband. It was found out further that all the positive character traits of Odysseus as perceived by the respondents were all found in Odysseus' character traits reflected

Table 5.1
Values and Traits of Odysseus Relevant to the Present-Day Generation

Odysseus' Values and Traits	*Relevance to the Present-Day Generation*	*F*	*R*
Heroism, Bravery, and Courage	➤ Corrupt society challenges people to be courageous, brave, and become heroes in their own way ➤ It is what one needs to face life's difficult tests	12	1
Concern for His People/Good and Responsible Leader	➤ In today's time when true leaders are hard to find, this character traits and acts of concern for others remind the leaders to think of their people's welfare, not just their own interest ➤ In a country that practices democracy, individuals must be responsible for his actions	11	2
Witty and Intelligent	➤ In the midst of hardships and difficulties, people must be witty enough to overcome them	10	3
Family-Oriented	➤ Due to technology and modernization, family becomes so unnoticed ➤ Yet everyone has to consider the family as a very significant unit of the society	5	4
Grateful	➤ The permissiveness of the present-day generations reminds people to be obedient to God's commandment and laws of the land	3	5
Optimistic	➤ In the midst of pressing times, what the society needs is to be forward looking with hope	2	6
Considerable/ Patient	➤ With the pressing time, it pays for one to be patient and considerate	1	8.5
Realistic and Practical	➤ Today's time sometimes the real is too far from the ideal	1	8.5
Goal-Oriented	➤ When one sets a direction where he is bound for he could achieve what he has conceived	1	8.5
Loving Husband	➤ The society today seems weak that demands husbands to be loving and faithful to their wives	1	8.5

Odysseus' Values and Traits Not Relevant to the Point of View of the Present-Day Generation

Table 5.2 presents the multiple responses of the respondents on the values and traits of Odysseus considered not relevant from the viewpoint of the present-day generation and perceived as negative.

The present-day generation disdained Odysseus as cruel, selfish, unfaithful, curious, egocentric, and hot-tempered. It was found out further that the negative perception of the respondents towards the characteristics of Odysseus does not readily agree with the results of the character analysis performed.

Table 5.2
Values and Traits of Odysseus Relevant to the Present-Day Generation

Odysseus' Values and Traits	*Not Relevant to the Present-Day Generation*	*F*	*R*
Cruelty/ Selfish	➤ No matter what it costs, values are absolute ➤ There is due process of law and the rights of persons must not be deprived	10	1
Unfaithful	➤ Although in context (in the epic) it seemed justifiable, if such an act will	8	2

	be tolerated as reasons/alibi in the guise of man's wickedness and lustful ➢ Then if the justice system is rotten, it is anyway commendable to look at both sides of the coin		
Curiosity	➢ "Curiosity kills the cat"; respect other's privacy	2	3.5
Egocentrism	➢ One does not need to kill whatever causes it maybe; today's time rather seeks people to be non-violent if only to avoid	2	3.5
Hot-Tempered	➢ Allowing anger to dwell in one heart is foolishness; self-control is necessary to handle provoking situation	1	5

CONCLUSIONS

Based on the findings of the study, the following conclusions were drawn:

1) Odysseus is a character who has a healthy personality for he could create a balance between the id, ego and superego.

2) Most of his characteristics are good personality traits worthy of emulation.

3) Contextualization analyses result and the view of the present day generation have more similarities than differences. Both view Odysseus as responsible leader, an intelligent scheming man, a family-oriented man and an optimistic man. The differences noted are present day's condemnation of murder of the suitors and their disapproval of his telling lies. It is concluded therefore that the ancient Greeks' justice is different from the justice viewed at present.

RECOMMENDATIONS

The findings and conclusions of this study led to the following recommendations

1) The results of the study revealed many positive characteristics of Odysseus that still relate to the present times. The researcher therefore recommends to the literature teachers that the epic The Odyssey be given more time for discussion so as to give the students ample time to truly understand the epic hero.

2) The researcher further recommends that this study be used as a guide by teachers for them to be able to look deeper into the story and into the personality of Odysseus without necessarily reading the whole text.

3) For future researchers to conduct more studies on character analysis using other epic heroes and classical characters such as Rama in "Ramayana" and Aeneas in "Aeneid" for it will help teachers and students of literature to understand and appreciate better literary classical heroes whose attitudes and traits could be universal and timeless.

4) That a study of the entire book of "Odyssey" be conducted. Analyzing each character in the story and relate their utterances and attitudes to the behavior of the hero and to the preset day generation.

ACKNOWLEDGMENT

The researcher expresses her heartfelt appreciation and profound gratitude to Atty. Mar P. De Asis, Dr. Leah A. De Asis, the UEP Graduate Studies, and the literary criticism students and teachers. Also, to her husband Danny and children, for the wholehearted support and inspiration. Above all, the Almighty Father, for giving her strength and power to finish this task and for all the blessings.

BIBLIOGRAPHY

[1] _____. 1992. Webster Comprehensive Dictionary. Encyclopedic Edition. Chicago: J. G. Ferguson Publishing Company.

[2] Adlawan, C. M. 2003. "The Mythological Allusions of Dante's Inferno". Unpublished Master's Thesis. University of Eastern Philippines.

[3] Bower, G. H., et al. 1987. "Freud's Psychoanalytic Theory". Principle of Psychology Today. New York: Random House Inc.

[4] Delorino, J. L. 2008. "The Unfaithful Husbands in Greek Mythology: Their Message to Modern Day Generation Husbands". Unpublished Master's Thesis. University of Eastern Philippines.

[5] Madison, J. 2001. "The Romantic Hero in a Post-Modern World American Culture and Moral Responsibility in the Fictions of Morrison, Naylor, and Pynchon". Unpublished Dissertation. University of California.

[6] Magan, M. S. B. 2003. "The Women in the Iliad". Unpublished Master's Thesis. University of Eastern Philippines.

[7] Nagler, M. 1947. Spontaneity and Tradition: A Study in the Oral Art of Homer. Berkeley: University of California.

[8] Newton, R. M. 1978. The Aristotelian Unity of Odysseus. Wanderings, Berkeley: University of California.

[9] Olsen, S. H. 1978. "Literature and Truth". The Structure of Literary Understanding. London: Cambridge University Press.

[10] Patron, I. Y. 2002. Interactive Reading – Responding To and Writing About Philippine Literature. Quezon City: Great Books Trading.

[11] Rees, E. 1977. The Odyssey of Homer – A Verse Translation. Indianapolis: Boobs-Merrill Educational Publishing

[12] Rexine, J. E. 1981. The Hellenic Spirit: Byzantine and Post- Byzantine. Belmont: Institute for Byzantine and Modern Greek Studies.

[13] Stanford, W. B. The Ulysses Theme: A Study in the Adaptability of a Traditional Hero. Second Edition. Michigan: University of Michigan Press.

[14] Tener, R. 1973. "A Portfolio for Nausicaa". Classical Bulletin 49.

[15] Tulio, D. D. 2007. Foundations of Education. Mandaluyong City: National Bookstore.

[16] Valerio, C. F. 1992. "Iba't-Ibang Larawan ng Kababaihan sa mga Piniling Nobela ni Lualhati Bautista". Unpublished Dissertation. De La Salle University. Manila.

[17] Wellek, R. and Warren, A. 1949. Theory of Literature. New York: Hancourt Brace and Company.

[18] Zacarias, E. S. 1995. "Moral Value Transmission Among Christian Families". Unpublished Dissertation. De La Salle University. Manila.

[19] Zulueta, F. N. and Maglaya, E. 2007. Foundations of Education. Manila: National Bookstore.

DOCUMENTATION OF THE SALTED MEAT, "INNASIN", OF BONTOC, MOUNTAIN PROVINCE

*KAREN B. CUE, MBA, DipHEM
Department Chairperson, Research Coordinator
Department of Hotel and Restaurant Management and Tourism
Mountain Province State Polytechnic College
Bontoc, Mt. Province

Abstract

Bontoc, Mt. Province offers international tourism and a variety of indigenous cuisines that are delightful to the palate and a source of economic revenue for its residents; however there are only few studies on these cuisines. Furthermore, the identity of some of these cuisines are unclear due to the fusion of ingredients from the consumers choice of taste, confusion of name (etagvsinnasin), and region they represent. This work aimed to identify and document one of the traditional popular cuisine/delicacy of Bontoc which is 'innasin", to assessed knowledge on the locally used ingredients and how it is prepared.

Results of the study revealed that the meat "innasin" vendors and local consumers are knowledgeable on the local ingredients and the customary preparation of the "innasin" due to their length of experience in preparing, selling and consuming the dish. However, despite of the traditional preparation of the "innasin, the study revealed that the use of traditional bottle gourd is only applicable for personal and family consumption since the container is very small to accommodate large quantity of meat for commercial market. The availability of this gourd in the market is limited reason why meat vendors preferred using plastic pail as an alternate container in preserving meat in a larger quantity.

The study recommends the patency of the delicacy to secure ownership and identity of the dish. The department of trade and industry should strengthen the opportunity of international marketability by improving its packaging and labeling to compete in the market. To sustain its potential market niche, there is a need to educate the market vendors on the proper hygiene preparation of the product as well as the importance of packaging to attract other consumers not limited only to local residents. Farmers are also encouraged to sustain the production of the bottle gourd "lutsen" to sustain the traditional preparation of the "innasin" with the help and support of the department of Agriculture. With the government's drive to make the food industry one of the pillars of economic stability, there is a need for concerned individuals to support this program to help sustain the economic growth that can support financial steadiness of the province.

Keywords: innasin, etag, delicacy, lutsen, Bontoc.

Introduction

The preservation of meat by the use of salt started in ancient Egypt. According to the notes of Kurlansky (2003), in his epic chronicle of salinity, Egyptians found salt very useful in preserving meat as well as an effective aid in mummification. However, Egyptians were not alone in the appreciation of the value and the usefulness of salt in ancient civilization for food preservation- the Chinese were pioneers too, with the earliest record of fish preservation using salt, the Chinese were recorded as the oldest to 2000 BC.

Salt is a substance resulting from the chemical interaction of an acid and a base, usually sodium and chloride. It is also defined as a white granular substance sued to season food. History records that salt has been used as the primary method of preserving meat. Today, salting as a method of preservation is generally and commonly used in salting meat products, fish and the like.

Curing and drying meat under natural temperatures, humidity and circulation of the air, including direct influence of sun rays. This process allows gradual dehydration of pieces of meat which are cut into specific uniform shape that permits the equal and simultaneous drying of whole batches of meat. (http://www.fao.org/docrep). The adding of salt prolongs the shelf life of the meat that can be consumed for a longer period of time.

In the Philippines, curing meat is a method used in preserving meat and fish to extend its shelf life for a later consumption. Filipinos from different regions preserved meat and fish using salt in different preparations. The Slow Food Foundation for Biodiversity mentioned one method in extending the shelf life of native pork is called "Kiniing", salted meat process of Benguet. "Kiniing" is a cured pork product made from meat obtained from locally raised native black pigs. It is boiled in water with guava leaves and salt, drained and hanged in the "Suuban" an Ilokano term for traditional kitchen (the top of the clay stove used for daily cooking) and smoked with pinewood to give its flavor. This method of preserving meat by smoking is somewhat similar to the procedure of the "etag" (salted meat) of Sagada Mountain Province, only it does not involve boiling in water with guava leaves. The "etag" of Sagada is cured with salt and then hanged on the top of the stove for smoking process until it achieves its reddish color like ham. The "etag" of Sagada has a smoky taste and smell and is cooked best with "pinikpikan", legumes, or plain vegetables.

Salting meat in the Cordillera is an ancestral heritage which had been handed down by our ancestor's centuries ago. The salted meat of the Cordillera is similar to the famous "Tapa" of the lowlands, and the "binurong karneng baboy" of the Ilocanos. According to history, the term "Tapa" originated in Spain but the tapa of Spain are used as appetizer accompanied by wine. The Spanish "Tapas" are snacks, canapés or finger food and can be practically anything from a chunk of tuna, cocktail onion and an olive skewered on a long toothpick, to piping hot meat with sauce served in a miniature clay dish - or anything in between. The Filipino "tapa" is very much different from this; the "tapa" of the Filipinos is basically a beef preserved meat rubbed and cured with salt, vinegar, garlic and other kinds of spices to give a distinctive flavor and taste of the meat. The common meat used in tapa for the Filipinos are beef, deer, pork and chicken meat. The people of Mountain Province also prepares their "tapa" called "Innasin" or "etag", best used with native pig, preserved by rubbing the meat with salt then either hanged for smoking (Sagada'setag), or placed inside a squash gourd "lutsen" or dried direct from sunlight. "Lutsen" is described as a bottle gourd, a nonedible fruit of various plants of the gourd family (cucurbitaceae); generally, they have a tough, hard shell that can be used as utensil or storage unit once the flesh is removed and the shell is dried up. Commonly this are made from dried large squash.

The Bontok's "innasin" preferred to cure their salted meat inside a bottle gourd then hanged inside a dirty kitchen to achieve a yellowish color of the dried meat inside and out. Underneath the hanged meat is a "chalikan", a fireplace where cooking takes place and emits heat that caused the meat to dry up. The yellowish discoloration of the meat refers to as "tinmangki" by the local people, it is caused by the dried fat meat which makes the flavorful taste of the "innasin"

For a more detailed information and awareness on the traditional preparation of the "innasin" or salted meat of Bontoc, Mountain Province, this study was conducted.

Statement of the Problem

This study aimed to document the existing traditional salting of meat or otherwise called "innasin" in Bontoc, Mountain Province. Specifically it aims to answer the following questions:

1. What are the ingredients used in making traditional "Innasin" in Bontoc?
2. How are the preparations of the traditional "innasin" in terms of:
    a. Equipment and Tools
    b. Methods in preparing traditional "innasin" in Bontoc

METHODOLOGY

Research Design

The study used the qualitative research using descriptive method of research utilizing documentary analysis and interview. It described the ingredients used in making "innasin" of Bontoc, Mountain Province and the pertinent preparation and methods in making "innasin". A questionnaire was formulated by the researcher submitted and reviewed by a panel of critiques. Questions and personal interviews to key personnel were employed to validate responses.

This study was limited to the five (5) barangays of the municipality of Bontoc, Mountain Province; namely, Poblacion (Bontoc), Bontoc Ili, Maligcong, Mainit, and Samoki. The researcher limits the respondents to the five (5) most "innasin" produced barangays of Bontoc who sells the product in the market. The key respondents were the local meat "innasin" vendors and consumers aged 45 years old and above, male or female, who are residents of Bontoc and who are knowledgeable in the ingredients and procedures in making the traditional "Innasin" of Bontoc, Mountain Province.

To determine the ingredients used in "innasin" of Bontoc, relative frequency and ranks was used. To determine the presentations of the "innasin" in terms of methods in food preparation, the z-test for proportion was used.

A questionnaire and interview guide was used to gather data. The data gathered from the questionnaire and interviews were supplemented by library, documentary analysis and web surfing.

RESULTS AND DISCUSSION

Ingredients of Making "Innasin" of Bontoc, Mountain Province

Table 1 shows ingredients used in making "innasin" of Bontoc, Mountain Province

Table 1. Ingredients used in Making "innasin" of Bontoc, Mountain Province (N=90)

As shown below from the table, the findings on salt and meat as the ingredients in making the "innasin" has the highest mean of 80 (89%) by the respondents. The result indicates that the traditional recipe in crafting the salted meat of Bontoc was the simplest process of rubbing salt to the meat that was practiced and existed centuries ago. This collaborated to the study made by the previous researcher on the "Revitalization of Indigenous Cuisines of Bontoc, Mountain Province where "etag" or "innasin" was the most popular indigenous cuisine of Bontoc, Mountain Province. As to the ingredients of salt, pepper, garlic and meat garnered a mean of 8(9%) this indicates the transition of food innovations due to variation and interventions of foreign delicacies. This displays that the taste palates of consumers also vary as more and more variations of food is being introduced in the market. The salt, rosewood leaves and meat has a mean of 2(2%).

Ingredients of Innasin	Respondents	Percent
1. Salt and Meat	80	89
2. Salt, Pepper, Garlic and Meat	8	9
3. Salt, rosewood Leaves and Meat	2	2

Preparation of Innasin in Terms of Equipment and Tools

Table 2 shows the preparation of salted meat "innasin" of Bontoc in terms of equipment and tools.

Table 2a. Preparation of "innasin" of Bontoc in terms of Equipment and Tools (N=90)

As to the preparation of the "innasin" of Bontoc, the use of Pail/Bucket has the highest mean of 48(53%) compared to "lutsen", the traditional container of "innasin" which has a mean of 25(28%). Most of the respondents said that the use of "lutsen" or bottle gourd is very limited since the supply of this container is inconsistent in the market. The use of pail/bucket is common to the "innasin" makers that produced a large quantity of salted meat. They used this container for mixing and curing the meat for a few weeks then hang the meat direct to sunlight for drying. The bottle gourd "lutsen" is common to small consumption since the container is very small; the existence of these containers is still practiced in Bontoc for meat curing. The use of fanga/ furnay is also known to consumers which has a mean of 10 (11%) followed by the used of glass or ceramic container with a mean of 7(8%). The use of glass or ceramic is only good as "innasin" container but not for the preservation since the glass and ceramic cannot absorb the water content of the meat. The consumers included the glass or ceramic as identified equipment for "innasin" because it seals perfectly for dried salted meat that can be kept to the kitchen cabinet that does not exhaust undesirable odor.

Equipment and Tools	Respondents	Percent
1. Lutsen	25	28
2. Fanga/furnay	10	11
3. Glass or Ceramic Container	7	8
4. Pail/ Bucket	48	53

Table 3. Preparation of "innasin" of Bontoc in terms of Methods and Procedures (N=90)

The sun drying of salted meat in Bontoc is very much popular nowadays. As seen on the table, the process of marinating meat and sun drying has a mean of 42(47%) by the respondents. Take note the handling term included, since the "innasin" makers considers proper handling in producing meat preserve, it is included as a procedural method process. This drying technique is done mostly for commercial consumption due to the limited and inconsistent source of the traditional "lutsen" meat curing. The "lutsen" meat curing has a mean of 22(24%) by the respondents. The "lutsen" as described by the respondents are used only for personal consumption since the container can only accommodate small amount of meat. The process of sun drying the meat after marinating in a pail/bucket is preferred by the "innasin" vendors here in the province because the vendors can produce a bulk quantity of salted meat then hanged freely under the sun for drying. Fanga or banga is a traditional container for "tapuy" rice wine in the cordillera, but some consumers used it as a container to preserve salted meat. Though the quality of the cured meat may not be similar with the texture of the preserved salted meat in "lutsen", some consumers still use this for curing their salted meat. This process has a mean of 10(11%) by the respondents. The practice of drying salted meat atop of a rice granary has a mean result of 8(9%) by the respondents. This method of drying meat atop of a rice granary is seen mostly in the barangay of Bontoc Ili, Bontoc. This traditional method is done during summer where the province reaches the hottest temperature of the year. The drying method with the smoke of rosewood leaves is a practiced resembling the method of Sagadian's "etag" where smoking meat is the traditional technique used. Here in Bontoc, some of the consumers adopt this practice to enhance the flavor of the "innasin" but the result of the salted meat may not be similar to the traditional yellowish color that they called "tinmangki". This method of smoking salted meat regardless of the type of wood used has a mean score of 6(7%) and 2(2%) by the respondent respectively.

Methods and Procedures in Drying "innasin"	Respondents	Percent
1.Marinating, handling and Sun Drying	42	47
2.Handling, lutsen Meat Curing	22	24
3.Handling, Fanga/Furnay Meat Curing	10	11
4.Handling, marinating and smoke drying with rosewood Leaves	6	7
5.Handling, Marinating and drying atop of a rice granary	8	9
6.Handling, Marinating, Smoking and Drying	2	2

CONCLUSION

In light with the results identified, the following conclusions were drawn:

1. The use of salt in curing and preserving meat in Bontoc is still the practiced used for preparing "innasin" either for commercial and personal consumption.

2. The use of pail/bucket is the common containers used for mixing and marinating salted meat in Bontoc either commercial or personal consumption. The availability of these materials in the market is one reason why it is very common to use, while the use of the bottle gourd is slowly diminishing in the practice of curing salted meat because of the limited and inconsistent supply of the container in the market.

3. The traditional process of drying salted meat in Bontoc is keeping inside a “lutsen” until it dries off. This technique secures the meat from contamination prevents from harmful bacteria that can spoil the curing process of the meat. With result shown above, drying salted meat direct to sunlight is the common practice used in Bontoc either for commercial market or personal consumption due to the limited supply of the bottle gourd “lutsen”. The sun drying technique is used since it can produce a larger amount of salted meat than the ones placed inside a bottle gourd.

RECOMMENDATIONS

The researcher recommends the following based on the conclusions of the study.

1. To preserve the traditional salted meat of Bontoc, it is recommended that the indigenous delicacy be patented for security ownership of the product. The department of trade and industry should focus on developing its packaging that could be marketed in supermarkets and be displayed in the meat dry section of the grocery stores. Hotels and restaurants should include this delicacy to their menu to help promote the product. The office of the municipal mayor should as well feature the salted meat in all the festivals of the province.
2. The use of bottle gourd “lutsen” in curing meat is slowly diminishing due to the limited source of this container. The supply of the bottled gourd sold in Bontoc market either produced in Betwagan, Sadanga or Kalinga. It is recommended that since Bontoc uses bottle gourd in curing “innasin”, farmers should propagate gourd “upo” or squash in their farm to supply the market and households as well. The department of agriculture can support the farmers by providing the seedlings of this vegetable so they could produce more of these containers. Besides the use of gourd plays a vital role in preserving the “innasin” healthier preventing the meat exposed to microorganisms.
3. The sun drying technique is common in early centuries in curing salted meat, and have had been adopted today. The difference is, traditional sun drying is done in a location or place of where there is limited contamination, most commonly seen in the middle of the rice field or nearby their house atop of the mountain. Nowadays, drying meat is hanged besides the road of where car smoke contaminates the meat. This process risks the cleanliness of the product that can cause any disease to consumers. It is recommended to those vendors who sells salted meat nearby roads to keep the salted meat in a container after the meat had dried off. This is to protect consumers from any bacteria or microorganism that can cause food borne illness. Trainings and seminars on HACCP and food handling sanitation is a must for meat vendors to educate them on proper handling of meat to prevent the spread of food-borne illnesses.

ACKNOWLEDGEMENT

The researcher yearns to convey his gratefulness to the following who extensively contributed to the success of the study.

The Almighty God, for His infinite bequests and directions that the researcher needed and providing her the will, power and fortitude to carry out this research.

Daniela Chumacog, Mr. Kiat-ong, Victoria Fagyan and Mrs. Paula Acofo for imparting their expertise and sharing their myth beliefs on the preparation of “innasin” of Bontoc Mt. Province.

Mr. Bantic, a salted meat “inasin” vendor for his unselfish assistance in teaching the researcher the different applications in creating “innasin” for commercial and family consumption.

The college librarian, who generously granted the researcher the reference materials necessitated in this research.

The respondents, for their time and effort in providing the crucial responses needed to make the study reliable;

The faculty members of the hotel and restaurant Management & Tourism department, for their continued encouragements and inputs and for personally doing some of the data gathering aspects;

To her mother, Mrs. Angelita Fagyan for her untiring efforts and encouragement until the completion of this research;

To her children, Treyshaun Charlie and Wynona Czuresh for their warm loving and understanding while the researcher was conducting the research; and

Lastly, to her husband Norberto Jr. for his continuous support, love and understanding in helping her finish the “innasin” research.

REFERENCES

Cue, K. (2010).*Revitalization of Indigenous Cuisines of Bontoc Mountain Province.*Published by LAP LAMBERT Academic Publishing GmbH & Co. KG and Licensors, Germany.

Kurlansky, M. (2003). *Salt: A World History.* Published by Penguins Books.

Ray, F. (2014). *Meat Curing*. Research Paper Division of Agricultural Sciences and Natural Resources Oklahoma State University.

Soriano, N. (2010). *A Guide to Food Selection, Preparation and Preservation.* Published and Distributed by REX Bookstore, Manila Philippines

http://www.themorningnews.org/article/the-art-of-the-cure "The Art of the Cure" by Josh Friedland

http://www.pinoybisnes.com/food-business-ideas/meat-processing-guide-cured-meat-products-ingredients/#ixzz3JTZZMLQI

http://www.fao.org/docrep/003/x6932e/X6932E02.htm#ch2

http://www.slowfoodfoundation.com/ark/details/2083/kiniing#.VGv4_CPF9qU / 2014

http://www.todayifoundout.com/index.php/2013/01/why-salt-preserves-meat/DavenHiskey

http://www.smithsonianmag.com/arts-culture/a-tasting-tour-of-salts-around-the-world-87988067/#R5oXUVRSVDC5UJ1I.99

Environment-Related Awareness of Children Ages Six to Eight Years

Kriscile Princess C. Fernandez
College of Teacher Education
Palawan State University
Puerto Princesa City, Palawan, Philippines
kriscilefernandez@gmail.com

Abstract— **This exploratory research investigated the environment-related awareness (ERA) of children ages six to eight years. A total of sixty (60) randomly selected children from the urban (Brgy. Culiat, Quezon City, Metro Manila) and sub-urban locales (Brgy. Model, Puerto Princesa City, Palawan) participated in the study using a qualitative research design. Data were gathered initially through drawings of children, followed by individual in-depth interviews with the informants and their parents. Transcribed data were analyzed according to common themes and were validated with the help of two experts on environment and children.**

Majority of the children across sexes and locales perceived the environment as composed of everything surrounding them. They were aware that the environment is important for the beautification of the surroundings, for the prevention of environment destruction, and for the survival of living organisms. They also showed awareness that pollution destroys the environment and that negative outcomes would happen in the future if people would continue to destroy the environment.

Keywords- environment-related awareness; urban and sub-urban locales; children; environment

Introduction

Children are naturally driven to make inquiries and explorations of the things found around them, allowing them to gain a sense of awareness about their physical environment. For this reason, children should be provided with activities that would increase their interest in discovering and interacting with various objects found in their environment that would develop a heightened level of environmental awareness in them.

Children possessing a heightened level of environment-related awareness (ERA) are expected to improve the condition of the environment (Blanchard and Buchanan, 2011). In the Philippines, the Department of Education has integrated the topic about caring for the environment in the K to 12 curricula of the various subject matter areas in order to produce children who can “appreciate and care for …the world and the environment.” (K to 12 Toolkit, 2012). For instance, in the K-12 Curriculum Guide for Science, 6- to 8-year-old children are already expected to acquire curiosity to explore their physical environment as well as to demonstrate the value of showing care for the environment.

To further emphasize the need to increase the children’s ERA, the Department of Environment and Natural Resources (DENR)—the government agency that is responsible in formulating and implementing programs to achieve a clean and healthy environment—has declared the month of November as the “Environmental Awareness Month” (http://www.denr.gov.ph). During this month, various environment-related activities are implemented for the children in order to raise their awareness about the ways of caring for the environment. For instance, children are taught how waste segregation is done, and they are encouraged to practice it at home. Afterwards, those who successfully segregated their wastes at home can bring the recyclable materials to school in exchange for school supplies or cash (http://www.denr.gov.ph).

Children’s ability to construct knowledge is a product of their maturation as well as their interaction with various socializing agents in different settings. According to Easterling et. al. (1995), children become more prepared to gather information about the objects and people surrounding them as their age increases. Moreover, their exposure, experiences, and relationships with others play an important factor on how they acquire knowledge of their environment. When children feel secure in their relationship with adults, they become more encouraged and more confident to figure things out on their own.

The role of the social environment in the children’s acquisition of knowledge is recognized in the Socio-cultural Theory of Lev Vygotsky (1978). According to this theory, the child’s interactions with more experienced partners (e.g., parents, siblings, etc.) help in improving his or her understanding of the world. A child’s understanding would even become more enhanced when the partner’s support for learning is targeted at his or her zone of proximal development (Parke and Gauvain, 2009). Vygotsky describes the zone of proximal development (ZPD) as the region of maximization of the learning process and skills which is characterized by the “difference between a child’s actual developmental level as determined by independent problem solving and his potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (Vygotsky,1978). As the child and his/her partner collaborate in solving problems, the child acquires the opportunity to participate in actions that are greater than his/her capacities. This form of instruction in which the more knowledgeable partner adjusts the amount and type of support that he or she gives to the child as they interact with one another is called scaffolding. Specifically, scaffolding includes the following processes: modeling of steps, adjusting the task according to the child’s developmental level, and providing assistance when necessary, and encouraging the child to perform the task (Parke and Gauvain, 2009).

Jean Piaget also explained how children construct knowledge based on hands-on learning experiences. According to the Cognitive Theory of Development (Parke and Gauvain, 2009), children construct their own understanding from what they experience through their interaction with their environment. In his theory, Piaget believed that children's knowledge of the world is organized into structures. This cognitive structure is an organized group of interrelated memories, ideas, and strategies that children use in order to understand their world. He called this organized unit of knowledge as schema. According to Piaget, the process of schema building involves two complementary activities namely, assimilation and accommodation. During assimilation, children imbibe facts from what they see to fill up their schema. But when children encounter new opportunities to use their perceptions, they undergo the process of accommodation wherein another new behavior or perceptual skills are created in order to become more appropriate with the situation. (Park and Gauvain, 2009).

Bredekamp and Rosegrant's (1992) Learning Cycle for young children supports the theory of both Piaget and Vygotsky (1978) for it is assumed that children construct knowledge in an experiential, interactive, concrete, and hands-on way. The four repeating processes in learning—awareness, exploration, inquire, and utilization—emphasize the role of experience in the child's learning process. Awareness is the point in which children see and recognize various objects, people, and events around them through experience. After gaining awareness, children move to the point of exploration wherein they use their sensory experiences to construct their own meanings of what they have seen. When children have already made their personal meanings about it, they check if these constructions are culturally acceptable. Inquiry is, then, the point in which children compare if their constructed meanings are the same with adults. As differences and commonalities are seen, children will make generalizations that would be more like adults. Utilization is the point in which children can already utilize and apply their understanding of concepts in dealing with new settings or situations in the environment.

Statement of the Problems/Objectives

The aim of the study, then, is to determine the environment-related awareness of children ages six to eight from the urban (Brgy. Culiat, Quezon City, Metro Manila) and the sub-urban (Brgy. Model, Puerto Princesa City, Palawan) locales.

Specifically, this study aims to describe the children's environment-related awareness along the following areas: awareness about what could be found or seen in the environment, awareness about the importance of taking care of the environment, awareness about environmentally-destructive actions, and awareness about the effects of environmentally-destructive actions. Moreover, this study seeks to determine whether there is a difference in the children's ERA across sexes and locales.

Two research hypotheses are considered in this study: (1) there is no significant difference in the ERA between males and females, and (2) there is no significant difference in the ERA of children from urban and sub-urban locales.

Methodology

This is an exploratory and qualitative study that describes the environment-related awareness (ERA) of children ages six to eight years. Sixty (60) children from the urban (Brgy. Culiat, Quezon City, Metro Manila) and sub-urban locales (Brgy. Model, Puerto Princesa City, Palawan) were randomly selected to participate in this study. Data were gathered through individual in-depth interviews with children. Data gathering instruments were originally developed by the researcher, as there was no instrument found appropriate for use in fulfilling the objectives of the study.

A. Sampling Scheme

Five (5) children from each sex were chosen to represent each age group (6-, 7-, and 8-years old) in order to have equal representation across all age groups and sexes. The researcher considered that only children ages 6 to 8 would participate in this study since children ages 4 to 5 found it difficult to depict the environment through a drawing based on the pretesting done in Brgy. Holy Spirit, Quezon City on September 2012.

This study has two research sites: Urban Locale or UL (Brgy. Culiat, Quezon City, Metro Manila) and Sub-Urban Locale or SUL (Brgy. Model, Puerto Princesa City, Palawan). These communities were chosen since their characteristics fit with the study's operational definition of an urban and sub-urban locales. Moreover, the families residing in these locales share common community practices. Respondents of this study were randomly selected from two public schools situated in the above-mentioned locales, namely, East Central School and Culiat Elementary School, respectively.

B. Data Gathering

This study consisted of the individual in-depth interviews with the children. Individual in-depth interviews were conducted in order to get substantial information from the respondents, which was necessary for a descriptive study.

Selected children were interviewed individually during their free time in a place where they could draw and be interviewed by the researcher with minimal distractions. The questions were asked in Filipino, for it was the more preferred language by the children during the interview. A digital voice recorder was used in order to document the responses of the children during the interview. For every child, the interview was estimated to last for around 20-25 minutes.

Findings

A. ERA About What Could be Found or Seen in the Environment

The children across sexes and locales depicted the environment as composed of everything that they perceive around them (see Table 1). This idea is similar with Bonette and Williams' study (1998), in which the children also described the environment as the "world", "earth", and "universe" where all the living and non- living things are found. In Laza et. al's (2009) study most children ages seven - to eight-years old obtained high scores when their environment-related awareness were tested. The ability of the children to show heightened awareness of what could be found/seen in the environment is consistent with the standards and competencies in the K to 12 Curriculum Guide for Science (2012) which states that children ages five to eight years (Kindergarten to Grade 3) should display awareness about the physical characteristics of the environment.

A six-year-old child from the UL described the environment as the world where all the living and non-living things live. She drew the planet Earth (which she called "mundo") to portray what the environment looks like. In her drawing, various trees/plants, people, and animals were depicted. According to her, "Nakikita sila sa mundo."

Among the various kinds of living things, 57 children from both locales depicted plants in their drawings. In the study of Bonette and Williams (1998), plants or trees were regarded by most children as important elements in the environment because they believe that they are the source of food and shelter to other living organisms. However, although there were more children who drew plants or trees in their drawings, it is inconclusive to assume that they perceived the environment as mostly composed of these living organisms because they are easier to draw compared to animals or people.

Children in two different locales vary in terms of the activities of the people depicted in their drawings (see Figure 1).

This variation may be accounted to the differences in their exposure and experience in their own locales since the char-

(Illustrated by a boy from the sub-urban locale) (Illustrated by a girl from the urban locale)

Figure 1. Different activities of the people in the environment as depicted by two children from the urban and sub-urban locales

acteristics of the UL is more congested in terms of people and establishments compared to the SUL (National Statistical Coordination Board). According to Barrraza and Cuaron (2004), "the children's understanding of the environment is in most cases related to their experience or exposure to them". This implies that one's experience or contact with and observation of the things around them plays a vital role in the children acquisition of ERA. In Bredekamp and Rosegrant's Learning Cycle, children in the exploration stage (Level 2) process information according to their experiences. The exploration stage is the point wherein "they begin to search for the elements that define the issue or idea that captures their attention" (Melendez and Beck, 2010). In relation to the children's ERA, it is during this stage when they start to gather information and form knowledge about the elements that compose the environment.

Table 1. Children's ERA About the Elements that are Found or Seen in the Environment (n=60)

Elements	Distribution of responses (*f)				TOTAL f	%
	UL		SUL			
	M (n=15)	F (n=15)	M (n=15)	F (n=15)		
Living Things	15	15	14	15	59	98.33
Places in the Community	10	11	12	12	45	75.00
Land, Water, and Sky	7	12	11	11	41	68.33
Objects found in the home	1	3	4	8	16	26.67
Transportation Vehicles	2	2	4	6	14	23.33
Objects founds outside the home	1	3	3	4	11	18.33
Total	36	46	48	56	186	

*multiple responses
UL- Urban; SUL- Sub-urban; M- Male; F- Female

B. ERA about the importance of taking care of the environment

Findings reveal that all children across sexes and locales perceived that people should take good care of the environment (Table 2). This finding is consistent with the study of Laza et. al (2009), since the children also believed that the environment should be properly managed, lest many environment-related problems will appear in the future. The result is also parallel with the standards and competencies for children ages six to eight years since they were able to demonstrate the understanding about the importance of caring for environment (K to 12 Curriculum Guides for Science, Araling Panlipunan, and Edukasyong sa Pagpapakatao, 2012).

Table 2. Children's ERA About the Importance of Taking Care of the Environment (n=60)

Importance	Distribution of responses (*f)				TOTAL f	%
	UL		SUL			
	M (n=15)	F (n=15)	M (n=15)	F (n=15)		
For the beautification of surroundings	4	6	8	8	26	43.33
For the prevention of environmental destruction	7	4	6	5	22	36.67
For the provision of basic needs	7	2	2	2	13	21.67
For the improvement of health and well-being	3	4	3	2	12	20.00
Other responses	0	3	1	0	4	6.67
Total	21	19	20	17	77	

*multiple responses
UL- Urban; SUL- Sub-urban; M- Male; F- Female

Twenty-six (26) children coming from the UL and SUL reported that the environment would be clean and beautiful when people take care of the environment (Table 2). This is consistent with the standards and competencies in the K to 12 Curriculum Guide for Araling Panlipunan (2012) in which children ages six to eight are expected to understand the need to maintain the cleanliness of the environment. According to Laza et. al (2009), a clean and beautiful environment is described by the children to have the following characteristics: (1) clean, (2) scenic, (3) fresh, (4) free from pests, and (5) full of beautiful and healthy plants and animals.

Thirteen (13) children from the UL and SUL believed that it is important to take care of the environment since it provides the individuals and families with food and shelter. This result is parallel with Staden's (2006) study because the children also perceive that their environment is important for the fulfillment of their basic needs for survival. This reveals that the children are aware that people and other living organisms depend on the environment for survival.

Twelve children (12) from the UL and the SUL likewise perceive that taking care of the environment is important for the improvement of the people's health and well-being. This is related with the results of Bonnett and Williams' (1998) study because the children believed that the environment has an impact or effect on the people's health. For this reason, it appears that the children are aware that people depend on the environment to attain a healthy state of body.

The children's ERA about one's role in performing environment-friendly activities appears to vary across sexes since there were more girls than boys who reported that cleaning the surroundings is what other people expect them to do. According to Weinraub's (1983) study, most children reported that it is the girls' responsibility to clean the house since it is the boys who will grow up to be the boss. In this case, it shows that gender-role stereotype is a contributory factor to the children's ERA.

According to a boy from the SUL, new things would be discovered in the environment if people would take care of the environment. Indeed, there are a lot of things to discover about the environment because according to Jose L. Atienza, Jr (Secretary of the Department of Environment and Natural Resources),

> *"The Philippines abounds with nature's bounties. Our archipelago is home to two-thirds of the world's biodiversity and 70-80% of the world's endangered species. Thus, the Philippines is one of the 17 mega-diverse countries of the world." (Mission Vision Mandate Thrust Programs, DENR, 2009, p.6).*

Therefore, to protect and conserve the country's environment and natural resources, the DENR was mandated by the State to be responsible in formulating and implementing environment-related policies, guidelines, rules and regulations for the purpose of achieving a clean and healthy state of environment (Department of Environment and Natural Resources, 2009). This way, the present and future generation of Filipinos would be able to enjoy the benefit of what the environment has to offer.

Lastly, it should be noted that a person's religion or belief in a Supreme Being is contributory to one's awareness about the importance of taking care of the environment. According to a girl from the SUL, performing environment-friendly activities is important in order to please God. This shows that aside from gender or location, the children's ERA could also be affected by other factors, such as religion, as in this case.

C. Awareness about the Environmentally Destructive Actions (EDA)

Majority of the children (66.67%), predominantly girls, reported that improper waste disposal destroy the environment. In the K to 12 Curriculum Guide for Edukasyon sa Pagpapakatao (2012), six- to eight-year old children are expected to know that waste products should be disposed properly; otherwise, the environment would be destroyed. Results of Laza et al.'s (2009) study likewise show that seven to eight year old children were able to show awareness about the meaning of "waste" as well as the kind of objects, which are considered as wastes. Results of the present study are also consistent with Laza et al's (2009) study because both show that there were more girls than boys who reported that throwing wastes anywhere harm the environment. This implies that gender-role stereotypes, in which girls are more associated with cleaning-related awareness and behaviors, may be contributory to the children's ERA.

Twenty-three (23) children reported that harming plants and animals destroys the environment (See Table 3). According to the study of Bonnett and Williams (1998), children give intrinsic worth to plants and animals because just like the human life, the lives of these living creatures are likewise perceived important. Therefore, when plants and animals are hurt, the environment would likewise get hurt.

Table 3. Children's ERA about the Kinds of Environmentally Destructive Actions (EDA) (n=60)

EDA	Distribution of responses (*f)				TOTAL f	%
	UL		SUL			
	M (n=15)	F (n=15)	M (n=15)	F (n=15)		
Polluting the surroundings	5	8	13	14	40	66.67
Harming the living organisms	9	6	4	4	23	38.33
I do not know	1	3	0	0	4	6.67
Not cleaning one's body	1	2	0	0	3	5.00
Total	16	19	17	18	70	

*multiple responses
UL- Urban; SUL- Sub-urban; M- Male; F- Female

Although majority of the children were able to show awareness about the various human activities that destroy the environment, there were four (4) children from the UL who admitted that they do not know what human activities that could damage the environment. This may be because they have limited access to relevant information that could increase their awareness about the activities that could destroy the environment. Moreover, they may also have limited opportunity to observe how the actions or behaviors of other people could damage the environment.

D. Awareness about the effects of EDA

Nearly all children across sexes and locales reported that negative consequences would happen if people destroy the environment (Table 4). In the study of Laza et. al's (2009), most also children believed that many problems would happen in the future when the environment is not properly managed. This means that the children were aware that abuses in the environment entail serious consequences to the people. According to Secretary Jose L. Atienza, Jr. of the Department of Environment and Natural Resources, "Our environmental problems and the inability of our people to fully benefit from our natural resources are mainly due to abuses." (DENR, 2009).

Table 4. ERA About the Effects of Environmentally Destructive Actions as Perceived by the Children (n=60)

EDA	Distribution of responses (*f)				TOTAL f	%
	UL		SUL			
	M (n=15)	F (n=15)	M (n=15)	F (n=15)		
The surroundings would get dirty and ugly.	9	9	7	12	37	61.67
Living organisms would get sick and/or die	13	8	6	6	33	55.00
Calamities would occur	2	3	4	2	11	18.33
Authorities would get angry	2	1	2	0	5	8.33
Nothing would happen	1	0	0	0	1	1.67
Total	27	21	19	20	87	

*multiple responses
UL- Urban; SUL- Sub-urban; M- Male; F- Female

Eleven (11) children reported that the massive flooding in streets and communities is due to improper waste disposal and cutting of trees. This result is consistent with the results of the previous studies since some children likewise perceived that throwing garbage anywhere is harmful to the environment (Laza et. al's study, 2009) and that cutting down trees is wrong (Bonnett and Williams, 1998). This shows that the children were aware about the effects of harmful human activities to the environment.

One child from the UL reported that nothing would happen even if people would destroy the environment. The children's poor or lack of awareness about this issue may be due to their limited access to information or experience with the environment. Thus, to enhance the children's awareness, the socializing agents at home, in school, and the community should provide them with opportunities that would heighten their awareness about the environment (Melendez and Beck, 2010).

Conclusion

All in all, results show that majority of the children across sexes and locales were aware that the environment is composed of everything that they perceive around them. As depicted in their drawings, these include all the living and non-living things found on land, in water, and on air, including those that are not visible or tangible.

1. Similar to previous studies, the amount of exposure, experiences, as well as the location where the children reside, largely contribute to their ERA.
2. Findings also reveal that majority of the children across sexes and locales were aware that the environment should be taken cared of for the beautification of surroundings, for the prevention of environmental destruction, for the provision of basic needs, and for the improvement of health and well-being.
3. Results also show that majority of the children across sexes and locales were aware that polluting the surrounding has harmful effects to the environment.

Majority of the children across sexes and locales were aware that negative outcomes would happen in the future if people destroy the environment. They perceived that the environment would get dirty and ugly, living organisms would get sick or die, and calamities would occur once the environment is harmed. Other children also reported that authorities would become angry and would punish the people for destroying the environment.

Recommendation

The following recommendations are given for the teachers and academicians, and municipal ordinance-makers as they facilitate the children's ERA. Because the children perceived the home as the most significant context that is contributory to their ERA, the recommendations below are all geared towards helping the parents/caregivers in enhancing the children's level of awareness about the environment in a fun, child-centered way.

2. For the municipal officials, it is recommended that policies be made to highlight the role of the families as significant contributory factors to the children's ERA. It is also recommended that these policies should encourage the participation of both the parents and their children in the environment-related programs and activities that are being implemented in their locale.

For Teachers

A. For the teachers, it is recommended to conduct Parent Seminars on environment awareness to increase the parents' awareness on how they can motivate their children to perform environment-friendly behaviors at home, in school, and in the community. Through these seminars, the teachers can collaborate with the parents on how they can both stimulate the children's interest in showing concern for the environment. And as for the academicians, it is recommended to investigate on the factors that are contributory to the family's ERA. Thus, they can look into the relationship of the family's socio-demographic characteristics and the family members' performance of environment-related awareness.

B. For Municipal Officials

For the municipal officials, it is recommended that policies be made to highlight the role of the families as significant contributory factors to the children's ERA. It is also recommended that these policies should encourage the participation of both the parents and their children in the environment-related programs and activities that are being implemented in their locale.

Acknowledgment

This study acknowledges support from the Palawan State University.

References

Blanchard, P. & Buchanan, T. (2011). Environmental Stewardship in Early Childhood.Childhood Education, 232-238.

Bonnett, M., & Williams, J. (1998). Environmental education and primary children's attitudes towards nature and the environment. Cambridge Journal of Education, 28(2), 159-174. Retrieved from http://search.proquest.com/docview/206066293?accountid=141440

Bredekamp, S., & Rosegrant, T. (1992). Reaching potentials: Appropriate Curriculum and assessment for young children. (Vol. 1). Washington, DC. National Association for the Education of Young Children.

Department of Environment and Natural Resources. (2012). Retrieved from http://www.denr.gov.ph/ on March 10, 2012.

DENR lines up activities to promote November as the month for Environmental Awareness, Clean Air. (2012, November 7). Retrieve from http://www.denr.gov.ph/news-and-features/latest-news/1033-denr-lines-up-activities-to-promote-november-as-month-for-environmental-awareness-clean-air-.html on April 17, 2013.

Did you know that … Quezon City is the most populated city and Davao City is the largest city among the country's 136 cities? (2008, May 13). Retrieved from http://www.nscb.gov.ph/factsheet/pdf08/FS-200805-PP2-01.asp.

Child Development and Parenting. California: Glencoe Publishing Co., Inc.

Early Childhood Care and Development Council. (2012). Retrieved from http://www.eccdcouncil.gov.ph/cmsms/index.php?page=sotardcs on March 10, 2012.

Easterling, D., Miller, S., & Weinberger, N. (1995). Environmental consumerism: A process of children's socialization and families' resocialization. Psychology & Marketing (1986-1998), 12(6), 531-531. Retrieved from http://search.proquest.com/docview/230388193?accountid=141440

Gabay sa Kurikulum K to 12—Edukasyon sa Pagpapakatao (Unang Baitang at Ika-10 Baitang). (2012, Enero). Retrieved from https://docs.google.com/file/d/0ByEjlCTS1hu5Q2NGck1DcjZQXzA/edit?pli=1.

K to 12 Curriculum Guide—Science (Grade 3 to Grade 10). (2012, January). Retrieved from https://docs.google.com/gview?url=http://www.gov.ph/ downloads/2012/01jan/SCIENCE-K-12-Curriculum-Guides.pdf&chrome=true.

K to 12 Curriculum Guide—Araling Panlipunan (Grade 1 to Grade 7). (2012, January). Retrieved from https://docs.google.com/file/d/0ByEjlCTS1hu5Q2NGck1DcjZQXzA/edit?pli=1.

K to 12 Toolkit: Resource Guide for Teacher Educators, School Administrators, and Teachers. (2012). Philippines: Southeast Asian Ministers of Education (SAMEO) Regional Center for Educational Innovation and Technology (INNOTECH)

Laza, V., Lotrean, L., Pintea, A., & Zeic, A. (2009). Knowledge, attitudes, and environment oriented behaviours for 7-8 year old children. Applied Medical Informatics, 24(1), 59-66. Retrieved from http://search.proquest.com/docview/212033457?accountid=141440

Melendez, W. & Beck, V. (2010). Teaching Young Children in Multicultural Classrooms: Issues, Concepts, and Strategies. 3rd Ed. Canada:Wadsworth.

Mission Vision Mandate Thrust Programs (2009). Quezon City: Department of Environment and Natural Resources.

Parke, R.D., & Gauvain, M. (2009). Child Psychology: A Contemporary Viewpoint. New York: McGraw-Hill.

Personal Conversation with Hon. Norma S. Supapo on December 20, 2012.

Personal Conversation with Hon. Rolando G. Bondad on February 11, 2013.

Staden, C. (2006). South African Children's Concept of their Future. International Journal of Early Childhoods, 38, 2, 37-56. Retrieved from http://search.proquest.com/docview/194774021?accountid=141440

Vygotsky, L.S. (1978). Mind in society: The development of higher psychological functions. Cambridge, MA: Harvard University Press.

Weinraub, M & Brown, L. (1983). The Development of Sex-Role Stereotypes in Children: Crushing Realities" in http://people.mills.edu/spertus/Gender /pap/ node6.html.

THE MONETARY AND NON MONETARY BENEFITS OF SERVICE CREW UNDER CONTRACTUAL EMPLOYMENT IN FASTFOOD CHAINS IN MANILA

* Luz P. Banes, PhD
Professor
Universidad de Manila
C. Munoz Palma, Mehan Gardens, Ermita, Manila

Abstract

This study is focused on the monetary and non-monetary benefits received by a service crew worker while under a contractual employment in selected fastfood store. The clamor that job contractualization is a downside for the Filipino workers and "the Herrera Law suppresses the right of the workers to sec

Security of tenure, exploit vulnerable Filipino workers and created a legal grounds for contractual work arrangements that cheapened workers' wages according to Ecumenical Institute for Labor Education and Research (2014). However, according to this study job contractualization resulted a positive rating for all the items in the monetary benefits and non monetary benefit received by the service crew under a job contract.

The descriptive research was used in this study. It uses survey research and employ questionnaire sheet to a total of 80 service crews coming from different fast food in Manila. The findings indicate that participants are more of male, single, high school graduate, age ranging from 18-22 years old with salary range of 3,000-5,000 per month. The members of this study answered a very satisfactory rating for almost all the items in the monetary and non monetary benefits.

The researcher recommends that the Department of Labor and Employment should review laws on labor only contracting and pass a directive that prioritize College students for a contractual job.

Likewise, the Department of Education, Commission on Higher Education and Technical Education and Skills Development Authority to collaborate on assessing subjects to be included on each curriculum with greater emphasis on the subjects dealing with human behavior and relations, work ethics, managerial subjects and labor laws. Further, mandatory requirement for all fast food owners to give scholarships for the service crews who would like to finish their College courses.

Five (5) Key words:

Job Contractualization/Casualization – is the practice of hiring a worker in a continuous period not exceeding five months for a specific job after which a new worker is hired to take his/her place to do the same for the next five months.

Job insecurity – is a condition wherein employees lack the assurance that their jobs will remain stable from day to day, week to week, year to year.

Monetary rewards – any financial, money or cash incentive

Non Monetary – anything that gives pleasure and motivation to aside from cash.

Example: cars, gasoline allowance, travel, housing, gasoline allowance, scholarship. This may include special privileges like being a member of clubs and associations.

Security of tenure – Article 279 of the said Code, that the employer shall not terminate the services of an employee except for a just cause or when authorized by the code.

INTRODUCTION

The contractual employment generates job definitely and terminate workers certainly. Article II, Section 18 of the 1987 Philippine Constitution, the State clearly affirms labor as a primary social economic force and that it shall protect the rights of workers and promote their welfare. Article 3 of the Presidential Decree (P.D.) No. 442, otherwise known as the Labor Code of the Philippines, highlights the State's policy to afford protection to labor and to promote full employment. The same article manifests the State's mandate to assure the rights of workers to security of tenure. These provisions emphasize that security of tenure is a worker's constitutional right. Since the creation of the Herrera law in 1989 it expanded the system of contractualization from the factory workers who are in the elementary level of the factories, to the service crew workers who are college levels. The trend of job contractuals existed as part of the solution for employment of the workforce in the Philippines.

This study is focused on the benefits received by the labor force under a contractual employment specifically the fast food crews in different department Stores. Are the crews satisfied with the benefits they received in accordance with the law? Are they treated with equality compared to other employees of the same fast food store. Are the rights and privileges of the service crew protected? Is it right that the Philippine government allows contractualization to large corporation and performing business firms? These are the questions that usually play in the mind of the researcher hence this study.

As per study the benefits received by service crew under a job contractual scheme are comparable to the benefits received by the permanent employees minus other fringe benefits. The Labor Code of 1974 was amended by former Sen. Ernesto Herrera, the leader of the yellow Trade Union Congress of the Philippines. It was called the Herrera Law. The law expanded the system of contractualization. Since then the Labor contractualization, has spread to other factories mostly economic zones factories like NXP Semiconductors Cabuyao, Inc., located at the Light Industry Science Park 1 in Laguna (formerly known as Philips), a firm with 5,000 workers and 1,700 of them are contractuals. (Philstar, 2014) The Herrera Law allowed various forms of contractual employment, including the currently widespread system of employing workers through layers of agencies. More than 90% of currently available jobs in the Philippines are contractual in nature. (Ang Bayan, 2012)

Contracting and sub-contracting arrangements are commonplace in most business transactions. Entrepreneurs hired their own messengers, janitors and security guards, to labor only contractors. Contracting out jobs is actually more cost-efficient in terms of time and money for the usual businessman. However, contracting arrangements are regulated by Philippine labor laws to ensure that these arrangements do not result in the exploitation of contractual employees. *(Nicolas and De Vega Law offices)*

As an effect of contractualization, workers have been deprived of their right to job security and have become defenseless on a daily basis to more intense exploitation by the capitalists. In this study, the fast food crews are not exempted in the job contractualization trend in the business sector.

The growth of the fastfood chain is obvious. Department stores paves the way of increasing the number of fastfood in the country. Fast food chain offers contractual employment to the labor force. Simply because businessmen learned the value of outsoucing.

OBJECTIVES:

- To study the monetary and non-monetary benefits received by service crew while under a contractual employment;
- To determine the job satisfaction rating of the contractuals to the management;
- To determine the advantages and disadvantages of job contractualization to labor force to boost Philippine economy

RESEARCH PROBLEM

This research studies the Monetary and Non Monetary Benefits of service crew under contractual employment in selected fastfood chain in Manila. Specifically it sought answers to the following questions:

What is the profile of the participants as to

1.1 Age;

1.2 Gender;

1.3 Educational Attainment;

1.4 Monthly Income;

1.5 Number of working students;

1.6 Nature/Term of work

2. What is the satisfaction rating of the fast food crew on the extent to which the owners of the fast food establishment adhere to labor laws?

2.1 monetary benefits

2.1.1 Basic salary

2.1.2 Emergency Cost of Living allowance

2.1.3 Cash bonus

2.1.4 13th month pay

2.2 non monetary

2.2.1 promotion and growth

2.2.2 Awards, Certificates or Plaque to recognize achievements

2.2.3 job security

2.2.4 Opportunities to improve job skill and knowledge

2.2.5 Team Building Events

Being Recognized by

supervisor

Insurance

3. What are the advantages and disadvantages of job contractualization

REVIEW OF RELATED LITERATURE

According to the Asia-Pacific Research Network, in 2000, as per 20 branches of SM, 92 percent of the workers are either direct hired or concessionaire hired contractuals. To date, SM branches have mushroomed to 40. This means that in 10 years, SM branches have doubled and also doubled hired workers under a contractual basis. This has been the practice in retail business such as SM, Robinsons and Rustan's, and other companies engaged in semiconductors and electronics, garments, retail/mall and manufacturing in general.

In the case of Philippine Airlines, the regular pilots were offered an early retirement package as part of the new emergence of Airphil Express. Said pilots would then be rehired with lower salaries and less benefits as pilots of AirPhil Express, which is a sister company of PAL. This is also a contractualization case.

"To date, this trend on contractualization has spread to business process outsourcing with 208,316 non-regular workers or close to one-third of the total 731, 548 workers in all industries." In 2008, DOLE through the Bureau of Employment Labor and Statistics conducted a survey. The survey indicated that some 25 percent of the total workers fall under the non-regular worker category such as probationary worker, casual worker, contractual/project-based workers, seasonal worker and apprentice/learner.

On February 2002 under the *Herrera* ***Law*** *Section 8. Rights of Contractual Employees. States "the contractual employee shall be entitled to all the rights and privileges due a regular employee as provided for in the Labor Code, as amended, to include the following:*

(a)Safe and healthful working conditions;
(b) Labor standards such as service incentive leave, rest days, overtime pay, holiday pay, 13th month pay and separation pay;
(c) Social security and welfare benefits;
(d) Self-organization, collective bargaining and peaceful concerted action; and
(e) Security of tenure.

On November 2011 another Department Order 18 -A Series of 2011was issued by Secretary Rosalinda Baldoz to wit: By virtue of the power vested in the Secretary of Labor and Employment under Articles 5 (Rule-making) and 106 (Contractor or Subcontractor) of the Labor Code of the Philippines, as amended, the following regulations governing contracting and subcontracting arrangements are hereby issued: Section 1. Guiding principles. - Contracting and subcontracting arrangements are expressly allowed by law and are subject to regulation for the promotion of employment and the 1.observance of the rights of workers to just and humane conditions of work, 2.security of tenure, 3. self-organization, and 4. collective bargaining. Labor-only contracting as defined herein shall be prohibited.

Section 2 Coverage. - These Rules shall apply to all parties of contracting and subcontracting arrangements where employer-employee relationship exists. Placement activities through private recruitment and placement agencies as governed by Articles 25 to 39 of the Labor Code are not covered by these Rules.

The contractor's employees shall be entitled to all the rights and privileges as provided for in the Labor Code to include the following:

(a) Safe and healthful working conditions;
(b) Labor standards such as but not limited to service incentive leave, rest days, overtime pay, holiday pay, 13th month pay, and separation pay as may be provided in the Service Agreement or under the Labor Code;
(c) Retirement benefits under the SSS or retirement plans of the contractor, if there is any;
(d) Social security and welfare benefits;
(e) Self-organization, collective bargaining and peaceful concerted activities; and
(f) Security of tenure.

Secretary Rosalinda Baldoz, tries to address contractualization by implementing the Republic Act 9520 where contractual workers would be given the right to unionize, security of tenure, 13th month pay, SSS, retirement pay, PhilHealth.

The Philippine government has taken steps to ensure that contractual employees are as protected by law as permanent employees. In 2011, the Department of Labor and Employment issued **Department Order 18-A, Series of 2011**, which lists the rights (Section 8) that contractual employees are entitled to, as well as the guidelines for the terms of their contracts.

The rights of a contractual employee?

1. Safe and healthful working conditions
Whether your position is a desk job or it entails a lot of physical labor, your employer should ensure that your health isn't compromised at work.

2. Service incentive leave, rest days, overtime pay, holiday pay, 13th month pay, and separation pay
Aside from your wage or salary, you should also be given paid time off, as well as additional pay for any work done beyond your contract's work hours, 13^{th} month pay and a separation pay if your employment is terminated early.

3. Retirement benefits under the SSS or retirement plans of the contractor, if there is any
If your employer has a retirement plan for their permanent employees, you should also be granted the same benefit.

4. Social security and welfare benefits
Your employer must also grant you SSS, PhilHealth, and Pag-Ibig benefits, just like any other permanent employee.

5. Self-organization, collective bargaining and peaceful concerted action
Contractual employees may also join or form employee unions, collective bargaining agreements, and join peaceful demonstrations or protests.

6. Security of tenure
You should be ensured secure employment for the duration stated on your employment contract, unless your employer has a defensible reason for early termination (such as your inability to perform tasks specified in the contract) and has terminated you under due process.

THEORETICAL FRAMEWORK

Article II, Section 18 of the 1987 Philippine Constitution, the State clearly ―affirms labor as a primary social economic force and that ―it shall protect the rights of workers and promote their welfare. Article 3 of the Presidential Decree (P.D.) No. 442, otherwise known as the Labor Code of the Philippines, highlights the State's policy to ―afford protection to labor and to ―promote full employment.

METHODOLOGY

The descriptive research was used in this study. It uses survey questionnaire as a tool in gathering data to a total of 80 service crews coming from different fast food located in different Department store in Manila. The qualitative research was used in the rating of the benefits given to the fast food crew. Observation were used to analyze the plight of the service crew while they are working. Interview was employed to know the advantages and disadvantages of job contractualization.

FINDINGS :

1. **What is the profile of the participants:**

The findings indicate that participants are more of male, single, high school graduate and college level and are in the age ranging from 18-22 years old.

Distribution of Participants as to Age

Table 1.1

Age	Frequency	Percentage
18 – 22	40	50%
23 – 27	34	42.5%
28 – 32	6	7.5%
33 – 37	0	0%
Total	80	100%

Based on Table 1, majority of the respondent are at the age of 18 – 22 years old while 28 – 37 years old has the least number of respondents.

Distribution of Participants as to Gender

Distribution of Participants as to Gender

Table 1.2

Gender	Frequency	Percentage
Male	46	57.5%
Female	34	42.5%
Total	80	100%

Table 1.2 Present and percentage distribution of the participants as to their Gender. Among 80 participants, 57.5% are male and 42.5% are female.

Based on Table 1.2, most of participants are male.

Distribution of participants as to the Educational Attainment

Table 1.3

Educational Attainment	Frequency	Percentage
High School Graduate	36	45%
College Graduate	14	17.5%
Undergraduate	30	37.5%
Total	80	100%

Table 1.3 Presents the frequency and percentage distribution of the participants as to their Educational Attainment. Among 80 participants, 45% are High School Graduate, 17.5% are College Graduate and 37.5% are Undergraduate.

Based on Table 1.3, majority of participants are High School Graduate while College Graduate has the least number of participants.

Distribution of Participants as to Monthly Income

Table 1.4

Monthly Income	Frequency	Percentage
3,000 – 5,000	40	50%
6,000 – 8,000	34	42.5%
9,000 – 10,000	6	7.5%
Others	0	0%
Total	80	100%

Table 1.4 Presents the frequency and percentage distribution of the respondent as to their Monthly Income. Among 80 respondents, 50% have a monthly income of 3,000 – 5,000, 42.5% have a monthly income of 6,000 – 8,000, and 7.5% have a monthly income of 9,000 – 10,000.

Based on Table 1.4, most of participants have a monthly income of 3,000 – 5,000, while 9,000 -10,000 have a least number of participants.

Distribution of participants as to the number of working students

Table 1.5

Working Student	Frequency	Percentage
Yes	17	21.25%
No	63	78.75%
Total	80	100%

Table 1.5 Presents the frequency and percentage of the participants if they are Working Students. Among 80 participants, 21.25% answered "Yes" and 78.75% answered "No".

Based on Table 1.5 most of the participants are NON Working Students.

Distribution of Participants as to Nature/Term of work

Table 1.6

Term of Work	Frequency	Percentage
Regular	31	38.75%
Seasonal	4	5%
Casual	45	56.25%
Per Project	0	0%
Total	80	100%

Table 1.6 shows that 56.25% are in a casual work status followed by 38.75% regular status, and 5% Seasonal worker

What is the satisfaction rating of the fast food crew on the extent to which the owners of the fast food establishment adhere to labor laws?

2.1. monetary benefits

2.1.1 Distribution of participants at to Basic Salary

Table 2.1.1

Verbal Interpretation	Frequency	Percentage
Very Satisfactory	57	71%
Satisfactory	13	16%
Not Very Satisfactory	7	9%
Not at All Satisfactory	3	4%
Total	80	100%

Table 2.1 shows that 71% of the total number of participants rated, basic wage is "very satisfactory", 16% rated "satisfactory", 9% answered "not very satisfactory", and 4% answered "not at all satisfactory". This means that majority of the participants are very satisfied in the monetary benefit, "basic salary".

2.1.2 Distribution of Participants in E COLA

Table 2.1.2

Verbal Interpretation	Frequency	Percentage
Very Satisfactory	27	34%
Satisfactory	29	36%
Not Very Satisfactory	16	20%
Not at All Satisfactory	8	10%
Total	80	100%

Table 2.1.2 shows that 34% of the total number of participants is "very satisfactory", 36% rated "satisfactory", 20% answered "not very satisfactory". and 10% answered "not at all satisfactory". This means that majority of the participants are "satisfactory" in the monetary benefit, "wages".

2.1.3 Distribution of Participants as to Cash Bonus

Table 2.1.3

Verbal Interpretation	Frequency	Percentage
Very Satisfactory	39	49%
Satisfactory	27	34%
Not Very Satisfactory	9	11%
Not at All Satisfactory	5	6%
Total	80	100%

Table 2.1.3 shows that 49% of the total number of participants rated cash bonus is "very satisfactory", 34% rated "satisfactory", 11% answered not very "satisfactory", and 6% answered "not at all satisfactory" This means that majority of the respondents are very satisfactory in the cash bonus.

2.1.4 Distribution of Participants as to rating of 13th Month

Table 2.1.4

Verbal Interpretation	Frequency	Percentage
Very Satisfactory	36	45%
Satisfactory	29	36%
Not Very Satisfactory	9	11%
Not at All Satisfactory	6	8%
Total	80	100%

Table 2.1.4 shows that 49% of the total number of participants rated that 13th month is "very satisfactory", 36% rated " satisfactory", 11% answered "not very satisfactory", and 8% answered "not at all satisfactory". This means that majority of the respondents are very satisfactory in the 13th month pay.

2. What is the rating of the service crew under job contracts in terms of:

2.2 Non-Monetary

2.2.1 Promotion/Growth

Table 2.2.1

Verbal Interpretation	Frequency	Percentage
Very Satisfactory	40	50%
Satisfactory	20	25%
Not Very Satisfactory	10	12.5%
Not at All Satisfactory	10	12.5%
Total	80	100%

Table2.2.1 shows that 50% of the total number of participants rated that the Promotion and Growth in the company is "Very satisfactory". 25% rated "satisfactory", 12.5% answered "not very satisfactory", and 12.5% answered "not at all satisfactory" This means that majority of the participants are "very satisfactory" in the Promotion and Growth of the company.

2.2.2 Awards, certificate or plaque to recognize achievements

Table 2.2

Verbal Interpretation	Frequency	Percentage
Very Satisfactory	45	56%
Satisfactory	22	28%
Not Very Satisfactory	10	12%
Not at All Satisfactory	3	4%

Table 2.2.2 shows that 56% of the total number of participants stated that giving of award certificate or plaque to recognize achievements is very satisfactory, and 28% stated that satisfactory, and 12% answered not very satisfactory, and 4% answered not at all satisfactory. This means that majority of the respondents are very satisfied in the giving of award certificate or plaque to recognize achievements.

2.2.3 Job Security

Table 2.2.3

Verbal Interpretation	Frequency	Percentage
Very Satisfactory	47	59%
Satisfactory	16	20%
Not Very Satisfactory	11	14%
Not at All Satisfactory	6	7%
Total	80	100%

Table 2.2.5 shows that 61% of the total number of participants, answered that team building events is "very satisfactory", 28% answered, "satisfactory", and 9% answered "not very satisfactory". 2% answered "not at all satisfactory". This means that majority of the participants answered " very satisfactory" in the non monetary benefit in the team building events.

2.2.6 Being Recognized by Supervisor

Table 2.2.6

Verbal Interpretation	Frequency	Percentage
Very satisfactory	28	35%
Satisfactory	26	33%
Not Very Satisfactory	23	28%
Not at All Satisfactory	3	4%
Total	80	100%

Table 2.2.6 shows that 35% of the total number of respondents, answered that being recognized by the supervisor is very effective, 33% stated that effective, and 28% answered not very effective. 4% answered not at all effective. This means that majority of the respondents are very satisfied that they are being recognized by the supervisor.

2.2.7 Insurance

Table 2.2.7

Verbal Interpretation	Frequency	Percentage
Very Satisfactory	47	59%
Satisfactory	19	24%
Not Very Satisfactory	12	15%
Not at All Satisfactory	2	2%
Total	80	100%

Table 2.2.7 shows that 59% of the total number of respondents, stated that insurance is “very satisfactory”, 24% stated “satisfactory”, 15% stated “not very satisfactory”, 2% stated not at all “satisfactory . This means that majority of the respondents are very satisfied in the insurance given by their company.

The job contractualization monetary and non monetary benefits of fast food crew in different stores in Metro Manila proves to be satisfying despite no security of tenure.

What are the advantages and disadvantages of job contractualization:

3.1 Advantages of job contractualization

3.1.1 Increases the number of employed person as per indication of good economy. (Philstar, 2016)

3.1.2 Encourage more employers/ entrepreneurs to invest due to lower cost of labor (Philstar,2016)

3.1.3“Higher pay, improved professional satisfaction and greater flexibility are just some of the benefits of contracting.” (Contractor Calculator.Uk.co)

3.1.4. “A contractual job may be an aid or a stepping stone for those who are looking for opportunities (Kunda, Barley and James 2002)

Service crews discusses that the advantages of service crews are:

3.1.5 Crews are striving hard to work effectively and productively in the hope of being absorbed as regular employee;

3.1.6 Crews who are in the high school and college level became competitive in the labor market.

3.2 What are the disadvantages of job contractualization:

3.2.1 Union and strikes are prevented. A five-month or less contract of a job contractual does not give a chance to organize union and strikes;

3.2.2 Most of the contractual workers do not have benefits such as Phil Health and Social Security System especially in an agricultural sector.

3.2.3 Service crew cannot refuse overtime work during the peak season, staying beyond 10 p.m., where the store closes at 10 pm.

3.2.4 Some respondents revealed that they are paid below the mandated minimum wage. From this income, they spend as much as P500 up to P1,000 for application requirements. They also have to pay for the cost of their uniforms and other work paraphernalia.

3.2.5 Contractualization brings down the workers’ self-esteem. The second class citizen is very clear. Best pie is given for the regular employees.

CONCLUSION AND RECOMMENDATIONS:

The amazing result for the monetary and non monetary benefits of the selected service crew is very satisfactory. This signifies that the job contractors are abiding in the provisions of the law in contracting and sub contracting. Business contractors sees to it that laborers/workers are given utmost importance in giving the rightful benefits for the job contractuals. The service crews under contract are satisfied despite the absence of security of tenure. The fastfood owners are willing to hire service crew on a regular basis provided they are college graduates. According to this study, the service crew increases its level of competitiveness in the labor market Therefore the researcher recommends that the:

- Department of Labor and Employment (DOLE) should review existing plans and program that emphasize job contractuals or casualization of employees to protect the service crews from exploitation.

- Government Agencies like Department of Trade and Industry, TESDA, Department of Interior and Local Government , National Bureau of Investigation and Bureau of Internal Revenue. First, to ease the burden of securing legitimate documents in applying for job. Second, provide additional budget for allocation of modern equipment and technology in order to fast track processing of documents. Third jobs on line should always be available and updated.

- The Department of Education together with the Commission on Higher Education and Technical Skills and Development Agency to continue in upgrading the subject curriculum with emphasis in the subjects: Good Manners and Right Conduct, Human Relations and Organization, Managerial skills and Work Ethics for all school level. As service crews relate directly to customers, good values and ethical standards are manifested in the type of service the customers are getting out of the service crews.

- Fastfood owners should intensify scholarship program for service crew who wants to finish college course.The local government should ensure the strict implementation of collaborative engagement between public-private partnerships to sustain employment outcomes. Local government should mandate Barangay level to support new business investment created in the city by giving tax incentives and recognition for the new small medium entrepreneurs.

- The Youth Entrepreneurship support (YES) program of Department of Labor and Employment should be given additional budget to enhance skills of the would-be members of the labor force as productive, resourceful and self-reliant entrepreneurs. . Continue giving seminars and workshop for the young people.

References

Asia-Pacific Research Network, (2000)

Cainglet, F.S., Zapata, A. & Vega T. E. (2012). A social representations study of contractualization: *Thesis Study*

Department Order 18-A, Series of 2011

Department Order No. 18 - 02 (Series of 2002) rules implementing articles 106 to 109 of the labor code, as

Global Philippine Star. (2011)

Labor Code of the Philippines *Article 3 of the Presidential Decree (P.D.) No. 442* handbook on workers statutory monetary benefits

Mayen, J. (2015), Career advice and inspirational stories for filipino millennials

Philippine Constitution, (1987). Article 11, Section 18

Resurreccion, P.S & Ramon del Rosario, Ramon, (2012) Less-than-six-months contract periods: is the retail industry circumventing the law? De La Salle University, Manila, Philippines 29th November 2012. Vol.7 No.1 © 2012 JITBM & ARF.

Society for Human Resource Management (SHRM), (2013)

An overview of employee benefits offerings in the U.S. A, (2013): research report by the society for human resource A Research Report by the

www.tingamajob.com

TOUCHALOGUE: A SELF-CHECKOUT LIBRARY INFORMATION SYSTEM

Prof. Manuel B. Garcia
CS/IT Faculty
STI College Taft
Taft Avenue, Manila, Philippines
hi@manuelgarcia.info

Dr. Brandon G. Sibbaluca
Research Head, IT and Engineering
STI Education Services Group, Inc.
STI Head Office, Cainta, Rizal, Philippines
brandon.sibbaluca@sti.edu

Abstract—**This capstone project, the development of a self-checkout library system utilizing kiosk and RFID technology, is a technological breakthrough in the library. It aimed to fine-tune the conventional librarianship to new realities brought by technology while still serving the needs of patrons who rely on traditional resources. The project has two components: a kiosk terminal primarily for self-checkout transactions and an information system to streamline management tasks. With the kiosk terminal, the patrons can search the library catalog and locate holdings in the shelf list without browsing shelves one by one. A self-checkout service is also available if the patron needs to borrow the book and the assistance of a librarian won't be needed anymore. The information system, on the other hand, will provide functionality to manage the system and the contents of the library. It also consists of automated features to lessen clerical jobs of the librarian allowing him or her to academically deal with the patrons' concerns. With the development of this system, patrons will experience how the library delivers services using innovative technology and the librarians will be able to spend more time in building relationships with the patrons and offer assistance in their specific learning needs.**

Keywords-Local Area Network (LAN); Kiosk: Library Information System;

I. Introduction

Educational institutions set various pedagogical changes to achieve the highest level of quality education where learners are equipped with the knowledge, skills and core transferable competencies that set them in a path of lifelong learning enabling them to succeed in a changing world. As the technology for personal and business use evolves, so do the tools available for educational institutions to enrich quality education. With the emergence and integration of information technology, academic libraries extend its significant role from reflecting values, mission, and goals of the institution of which it is a part to accommodating myriad new information and learning technologies in order to meet today's academic needs as well as those in the future.

The library, which is still a combination of the past (print collections) and the present (new information technologies), must be viewed with a new perspective and understanding if it is to fulfill its potential in adding value to the advancement of the institution's academic mission and in moving with that institution into the future (Freeman, 2005). Since its inception, library management system is mostly librarian -centered whereas the application aims to provide the librarian assistance in managing the library transactions. The technological metamorphosis happening in the repository of collective knowledge, the library, sketches the need of providing assistance for both librarians and its patrons. (Hossain, 2010) asserts that in today's digital environment, libraries must improve their services in order to survive in a technologically-biased, competitive environment and to avoid the possibility of turning it into an obsolete central hub for obtaining the containers of knowledge. The proliferation of books inside the library resulting to a tiresome book hunt and the large array of people who favor the use of internet for research because of its faster search process as well as other factors trigger the demand for developing a patron-centered library system to meet changing user needs. An ideal library makes every reader feels what it's like to have their own personal library where one can explore a world of knowledge in an organized manner with a likelihood of locating the library materials as fast as the Internet search results; and provides the librarian an opportunity in assisting its patrons rather than spending much time in a computer managing the library transactions. Therefore, a technological aid provided for both patrons and librarians will solidify the position of library in terms of offering its service whilst making sure its effectiveness in terms of managing the day-to-day transactions. A system both librarian and patron-centered will keep the traditional hub alive and relevant to its users in both ends.

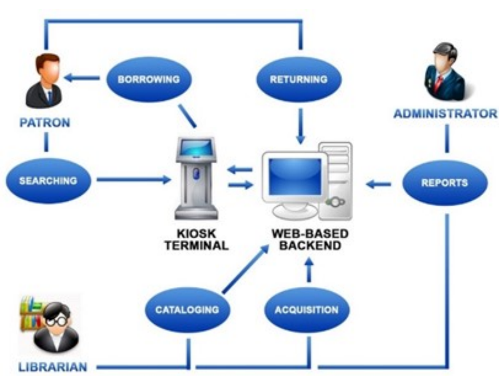
This study is developed to provide a self-checkout library information system for STI College Caloocan that will integrate technological advancements to help its library in transforming it into a center for new digital learning and a point of reference for education institutions. The modernization of the its library will effectively aid its role as the facilitator in organizing and providing knowledge and resources to its users such as the library staff, researchers, faculty, students and other departments within the institution.

II. OBJECTIVES

This capstone project aimed to achieve the following:
Circulate holdings as self-service by incorporating kiosk and RFID technology in the check-out process to free up library staff from a routine and time-consuming task and spend more time with the patrons instead;
Locate holdings in the shelf list without physically browsing the shelves, checking the card catalog nor seeking the assistance of a librarian;
Catalog bibliographic records with automatic metadata generation for call number using the classes of the Library of Congress Classification; and
Monitor library item status with regards to its due dates and availability with automatic fine computation and integration of SMS and Email notification for overdue items.
METHODOLOGY

A developmental research approach has been applied in this capstone project. In order to gather substantive and relevant data needed in developing the system, the librarians of STI College Caloocan were interviewed with questions ranging from the services offered by the library to the library policies, guidelines and procedures. Another subjective method, observation, was done to the patrons of the library to study their experiences with regards to the library services offered to them. Respectively, answers and observations will be analyzed to arrive at a more complete understanding of the current state of librarianship of the school. On the other hand, the system was deployed during the month of March and used by the librarians and patrons of STI College Caloocan to compare the effectiveness of traditional librarianship and Touchalogue system.

Below is the System Block Diagram of this capstone project:



Since this capstone project aimed to cater both patrons and librarians, there will be two components working concurrently to deliver a better service. These are the kiosk terminal for the patrons and a library information system (web-based backend) for the librarians. All the services needed by the patrons such as the checkout, catalog searching and inquiry will be done in the kiosk terminal while all the maintenance of the system such as cataloging, acquisition and circulation monitoring will be done in the library information system.

III. FINDINGS

After the development of the self-checkout library information system, STI College Caloocan delivered a better model for inquiry learning and building knowledge and confidence in seeking and processing information in terms of librarianship. The library strengthened its role as a catalyst for literacy and reading and for teaching and scaffolding inquiry learning. The house of knowledge proved its importance in the 21st century especially to those who prefer the use of Internet search engines and are obviously biased toward the single search box.

On the basis of the data gathered to compare the effectiveness of traditional librarianship and Touchalogue system, the following are the significant findings:

TABLE I. COMPARISON BETWEEN TRADITIONAL LIBRARIANSHIP AND TOUCHALOGUE SYSTEM

Library Services	Traditional Librarianship	Touchalogue System	Percentage Difference
Lending Procedure	520	1250	+240.38%
Return of Overdue Items	11	69	+627.27%
Patron Engagements	579	2786	+481.17%

- According to the data, there is a 240.38% increase of patrons who utilize the borrowing service of the library because they favor the use of self-checkout system than the traditional borrowing process. Touchalogue system lessens the legwork and paper work environment which makes it a better lending procedure for both librarians and patrons.
- The results of the return of overdue items were based from the one hundred holdings borrowed under both platforms. Only 11 out of 100 were returned under the traditional librarianship procedure while 69 were returned under the Touchalogue system. A 627.27% increase was made possible by Touchalogue's automatic Email and SMS notification every day.
- There is a 481.17% increase during the implementation of the Touchalogue system mainly because of the transformation of the services offered by the library. Patrons were attracted of the technology they were using specifically when it comes to the self-checkout system and holdings locator.

IV. CONCLUSIONS

Through the use of kiosk and RFID technology, this capstone project proved that technology can help libraries become a center for new digital learning and a point of reference for educational institutions rather than making it superfluous.

- Librarians were able to accommodate the needs of the patrons in an academically manner because of more free time they have since their assistance is not needed anymore with regards to the checkout process.
- The house of dusty books became the center of creativity, research and collaboration because patrons can easily locate the materials they need in the vast information landscape without physically browsing the shelves one by one.
- Cataloguing the holdings and monitoring library item status became more convenient for the librarians because of automatic metadata generation and fine computation, respectively.

STI College Caloocan now walks a fine line between being a keeper of tradition and a follower of progress. Many libraries all over the world are in transit from the traditional towards the digital library and STI College Caloocan is one of the many that have already arrived at their destination.

V. RECOMMENDATIONS

Based on the foregoing findings of the study, the following are recommended for future enhancements of the developed self-checkout library system:
Create a standalone multi-protocol book drop which will be primarily used for returning library books to complete the self-service system;
Incorporate an RFID handheld reader for physical checkup of the holdings, managing inventory of stock verification and tracking assets in the library shelves;
Implement an anti-theft detection system to strengthen the security for self-checkout process;
Develop a mobile application to cater the students who prefer to use their smartphones; and
Integrate Online Public Access Cataloguing (OPAC) functionality to diversify the materials at the library's disposal.

VI. ACKNOWLEDGEMENT

The researchers would like to express their gratitude to our Almighty God and to the people whose involvement made a huge impact to the successful completion of this project.

REFERENCES

Irokwe, O. P. (2001). "A Blueprint for Implementing Digital Libraries in Nigerian Universities: Blueprint on the National Virtual Library Project". Federal Ministry of Education.

Freeman, Geoffrey T. (2005). "The Library as Place: Changes in Learning Patterns, Collections, Technology, and Use". Council on Library and Information Resources.

Ilomechine, Queenette (2008). "The Significance of School Libraries in the Educational Development of Students: The Case of Novena University Staff School, Kwale, Delta State, Nigeria". Library Philosophy and Practice.

Rahman, A. I. M. J., Khatun, M. and Islam, M. M. (2008). "Library Education in Bangladesh: Strengths, Problems and Suggestions". Library Philosophy and Practice.

Ross, Lyman and Sennyey, Pongracz (2008). "The Library is Dead, Long Live the Library! The Practice of Academic Librarianship and the Digital Revolution". Journal of Academic Librarianship.

Mulla, K.R. (2006). "E-Resources and Services in Engineering College Libraries: A Case Study". Electronic Journal of Academic and Special Librarianship.

Casson, Lionel (2002). "Libraries in the Ancient World". Yale University Press.

Hermosa, N. N. and Anday, A. G. "Distance Learning and Digital Libraries: The UP Open University Experience". Journal of Philippine Librarianship, 28, (1) 90-105.

Jato, M. (2005). "Causes and Effects of Delinquent Behaviour in Academic Libraries". Owena Journal of Library and Information.

Arlante, Salvacion M. (2008). "The UP iLib: An In-House Developed Integrated Library System". Journal of Philippine Librarianship.

Mamatha, Uppala and Dhanalakshmi, M. (2009). "RFID Based Library Management System". Centre for Development of Advanced Computing.

Ogunsola, L.A. (2011). "The Next Step in Librarianship: Is The Traditional Library Dead?" Library of Obafemi Awolowo University.

Troll, Denise A. (2001). "How and Why Are Libraries Changing?" Digital Library Federation. Retrieved from https://old.diglib.org/use/whitepaper.htm.

Coyle, Karen. "The Future of Library Systems, Seen from the Past". Journal of Academic Librarianship. Retrieved from http://kcoyle.net/jal_33_1.html

Abel, David (2009). "Cushing Academy Library Goes Bookless". Boston News. Retrieved from http://www.boston.com/news/local/massachusetts/gallery/090409_cushing_library

Spreadbury, Helen and Spiller, David (1999). "Survey of Secondary School Library Users". Loughborough University. Retrieved from http://www.lboro.ac.uk/microsites/infosci/lisu/downloads/OP21.pdf

Kolokotsas, Dionisis (2013). "Creating the Library of the Future in Greece". Google Europe Blog. Retrieve from http://googlepolicyeurope.blogspot.co.uk/2013/07/creating-library-of-future-in-greece.html

Dempsey, Beth (2010). "State of Self-Service 2010: Do-It-Yourself Libraries". Library Journal Archive Content. Retrieved from http://lj.libraryjournal.com/2010/06/industry-news/state-of-self-service-2010-do-it-yourself-libraries

DOST (2016). “PH’s First Offline Digital Library Helps Rebuild E. Visayas After Yolanda & Ruby”. Department of Science and Technology. Retrieved from http://dost.gov.ph/index.php/knowledge-resources/news/44-2015-news/643-ph-s-first-offline-digital-library-helps-rebuild-e-visayas-after-yolanda-ruby

National Library of the Philippines. “OPAC launching in Public Libraries”. National Library of the Philippines. Retrieved from http://web.nlp.gov.ph/nlp/?q=node/2701

Engel, Elena (2006). “RFID Implementations in California Libraries: Costs and Benefits”.

PERCIEVED RESEARCH PERFORMANCE OF ADMINISTRATORS AND TEACHERS OF SELECTED HIGHER EDUCATION INSTITUTIONS IN REGION 02

Marina Dacaca-Acerit, Ph.D.
Isabela State University
Echague, Isabela Philippines
aceritmarina@gmail.com

ABSTRACT

This study determined the perceived level of performance of HEIs' administrators and teachers in Region 02 along the key aspects of research program namely: priorities and relevance, research funding and other sources, implementation, monitoring, evaluation and utilization of research outputs. The respondents consist of 64 administrators (8 top-level and 56 middle-level) and 479 teachers. This is a descriptive type of research which utilized the survey technique coupled with document analysis and interview to allow triangulation collection of data. Findings revealed that the top-level administrators perceived they are *excellent* in performing the research practices under the aspect of priorities and relevance while the middle-level administrators and teachers perceived that they perform well (*good)*. Indicators under funding and resources are perceived to be *excellently* performed by the top-level administrators, *good* by the middle-level administrators and *fair* by the teachers. Performance indicators under the implementation, monitoring, evaluation and utilization of research outputs are performed *excellently* by the top-level administrators and performed *good* by the middle-level managers and teachers. In the aspect of publication and dissemination, both the top and middle-level administrators perceived that they are *good* while teachers perform *fair*. As a whole, the top-level administrators perceived that they are *excellently* performing the key aspects of research program while both the middle-level administrators and teachers' perceive that they are *good.* The identified best research practices of the respondents include: *establishing research centers with capable personnel, fostering collaborative and interdisciplinary work on research with instruction, extension, training and entrepreneurial activities of the university, requiring/encouraging faculty members to conduct applied and operational researches in line with their fields of specialization,* and *sending of faculty researchers to present their papers in regional and national presentation.* Areas that need to be strengthened are: *encouraging/ involving in the formulation of research agenda; generate income from patents, licenses, and copyrights, and other research outputs; utilizing research outputs as inputs to institutional development, improvement of instructional processes and transfer of generated technology to the community;* and *assisting the faculty and student researchers to publish their research results in refereed journals.*

The study recommends that an inquiry of the factors that contributed to the relatively low level of performance of the middle-level administrators and teachers in the key aspects of research program may be conducted by the HEIs. Designing sustainable and effective mechanisms for the administrators and teachers to improve in their performance along the indicators that need improvement is also recommended.

Keywords- research performace, aspects of research program, HEIs' administrators and teachers

I. Introduction

Asian integration and internationalization movements push Philippine Higher Education Institutions (HEIs) to cooperate and compete with other HEIs in Asia and the whole world. It is then axiomatic for them to exert all their efforts to be at par with other international learning institutions or even to get-in to the HEIs international rankings. In ranking universities, research has given the highest criteria.

It is stated in the second National Higher Education Research Agenda or NHERA 2 (2009-2018), analysts of the knowledge society or knowledge economy characterize the university not just as a generator of knowledge, an educator of young minds and a transmitter of culture but also as a major agent of economic growth. It is both in Research and Development laboratory and a mechanism through which the nation builds its human capital to enable it to actively participate in the global economy.

As Higher Education Institutions (HEIs), State Colleges and Universities (SUCs) are mandated to perform four-fold functions: instruction, research, extension + production. Performing their research function enables them to generate knowledge and technology through their Research and Development programs. Data on the level and how the HEIs' administrators and teachers perform research function is needed to provide baseline information in developing research-improving and sustaining R & D programs and innovations.

Research program of HEIs has four key aspects: Research Priorities and Relevance, Research Funding and Other Resources, Research Implementation, Monitoring, evaluation and Utilization of Research Outputs and research Publication and Dissemination. Each aspect has identified practices that have to be performed well by the administrators and teachers to execute their research program. Research performance is the perceived level of practice of administrators and teachers along the indicators of the key aspects of research program.

OBJECTIVES

1. Determine the perceived level of performance of the respondents along the key aspects of research program namely:

   a. priorities and relevance
   b. funding and other sources
   c. implementation, monitoring, evaluation and utilization of research outputs
   d. publication and dissemination

2. Determine the best research practice/s of the respondents in each aspect of research program.

3. Determine the area/s in each aspect of research program that needs improvement.

II. METHODOLOGY

This descriptive-survey determined the level of performance of the administrators and teachers of selected HEIs in Region 02 to the indicators of the key aspects of their research program. These HEIs include Cagayan State University (CSU), Isabela State University (ISU), Quirino State University (QSU) and Nueva Vizcaya State University (NVSU).

The administrator-respondents were purposively selected on the basis of their direct assignation in the management of research program in the colleges of/and in the university which include the top-level administrators consisting of the vice presidents and directors for Research and Development (R&D) and deans and college research coordinators (middle-level administrators). Stratified random sampling was used in the selection of teacher- respondents. The frequency distribution of the respondents is shown in Table 1.The respondents were consist of eight top-level administrators, fifty six middle-level administrators and 479 HEIs' teachers.

Table 1. Frequency Distribution of the Samples Taken per Selected HEI in Region 02

HEIs	Top-level	Middle-level	Teachers
NVSU	2	14	152
QSU	2	12	57
ISU	2	16	149
CSU	2	14	121
Total	8	56	479

Instrument of Data Collection

The two sets of instruments used in this study is a modified adaptation of the 2006 instrument (for the area of research) used by Accrediting Agency of Chartered Colleges and Universities in the Philippines (AACCUP, Inc) for accreditation purposes. The modified instruments were validated by three research administrators and were piloted to research administrators and teachers of HEIs for reliability test. Using Cronbach's Alpha, the internal consistency of the responses of the respondents was tested. A Cronbach's Alpha of at least 0.80 signifies acceptable internal consistency. The over-all reliability statistics of the survey instrument for the research administrators was 0.96 and the instrument for teachers was 0.97. These results signify that the respondents' responses have internal consistency. Revisions were made according to the result of the validation and pilot try out.

The instruments are on 4-point Likert type scale. The following arbitrary scale was used to describe qualitatively the perceived research performance of the respondents:

4	3.51-4.00	excellent
3	2.51-3.50	good
2	1.51-2.50	fair
1	1.00-1.50	poor

Fink (2009) explained that this method will force the respondents away from the middle ground. This mode of eliciting perceived performance was also based on the study of Yan (2006). The scaling system was adopted from Ramos and Orden (2006).

Mean was used as statistical tool in describing the respondents' level of performing the key aspects of research program.

Follow-up interview and document analysis were also used to triangulate the data collection.

III. FINDINGS

Level of performance of the respondents along the key aspects of research program

Table 2 illustrated the level of performance of the respondents along priorities and relevance.

Indicators on Priorities and Relevance are *excellently* performed by the top-level administrators (M=3.78); and perform *good* by both middle-level administrators (M=3.44) and teachers (M=2.88). The over-all rate of the respondents on the aspect of priorities and relevance is *good* (M=2.95). Expectedly, top-level administrators are the leading persons to know that HEIs are required to conceptualize researches and other related activities that are aligned with the institutional, regional, and national research priorities. The research administrators are fully aware that before the funding/sponsoring agencies invest their resources, they first look for good research proposals. Administrators explained that the number one requirement for good proposal that the funding agencies like Department of Science and Technology (DOST), Department of Agriculture-Bureau of Agricultural Research (DA-BAR), Commission on Higher Education (CHED) etc. are looking for is that the proposals should be aligned with their research agenda and priorities.

During the regular schedule of crafting and reviewing their institutional research agenda, several documents including the research trusts and priorities of the funding agencies (CHED- NHERA, DA-BAR, etc.) are considered by the administrators. The needs of Region 02 are also examined to harmonize with the research agenda of the external funding thrusts and priorities and with the research agenda of the institution. Later, they will come up with institutional agenda which is corresponding with the needs of the region and the research agenda of the external funding agencies. This practice is reflected in the following part of interview with one Vice president for R & D:

Researcher: *What are your ways to align the research agenda of the university to the thrusts and priorities of NHERA and other government agencies?*

VP for R & D: *When we crafted the university research agenda, we reviewed several documents including NHERA, because every funding agency of the government has their own thrusts and priority research agenda. So we reviewed NHERA of CHED, DA-BAR, PCAARRD, and after knowing all their funding thrust (because we are after generating external resources) we have to align our research with them. Aside from that, we look at the need of Region 02 and then come up with the harmonization between external funding thrust and the need of the farmers in Cagayan Valley.*

The HEIs' researchers are directed to conduct research that is anchored in the existing program of the office of the research department and the research center/s of the university. In doing so, there is a greater chance that research projects or proposals will be approved and supported by the research department. As stressed by the administrators, the review committee is very particular to this matter. Hence, during the development of research project, the teacher-researchers have to be acquainted first with the research agenda of the institution. This is one of the role of the college research coordinator, to coordinate to the college/department the university research agenda and to initiate (with the college dean) in the synchronization of these agenda with the research objectives of the college/department.

Meanwhile, the lowest rate (M=2.88) computed from the teachers supports the claim of some teachers during the interview that they have little and limited awareness of the research priorities and agenda of their institution. This can be explained by the reason that teachers' mind set is primarily on instruction. This can be inferred in the following quoted part of conversation with an HEI teacher:

Researcher: *May I know the research agenda of the College Ma'am?*

Teacher: *I think you have to talk to the research coordinator of the college Ma'am because I'm not very aware of the research agenda. I'm not active in doing research for I am focused on instruction.*

In the aspect of funding and other sources, HEIs are encouraged to allot funds for research and to explore resources from various local and foreign agencies to augment the institution's appropriation (AACCUP, Inc., 2006).

Aspects of Research Program	Respondents	N	Mean	Performance
Priorities and Relevance	Teachers	479	2.88	Good
	Top Level	8	3.78	Excellent
	Middle Level	56	3.44	Good
	Total	***543***	***2.95***	Good

Table 3 shows the level of performance of the respondents along the aspect of funding and other sources. The top-level administrators perceived that they are *excellent* (M=3.51) along the indicators of this aspect while the middle-level managers claimed that they are *good* (M=2.74). The teachers rated their performance *fair* (M=2.29). In general, the respondents are *fair* (M=2.35) in this aspect. This relatively low level of performance of the respondents in this research aspect affirms the widely held view that research and development (R&D) and innovative activities are difficult to finance (Hall & Lerner, 2009). Financing of R&D and innovation is a general problem of HEIs. This may be due to limited resources and some budgetary constraints.

Nevertheless, respondents in this study have been establishing linkages for funding support and assistance with other agencies to promote the research thrusts and priorities of the university. They acknowledged that starting and sustaining research partnership with various agencies for funding and assistance does not happen in the HEIs without the aspiration and commitment of the research administrators to put the name of their university in the roster of research leading universities. Clearly, if the figure of R&D projects, rate of completion of projects, publications per faculty, and international faculty and researcher movement and collaboration are significantly improved, then their rank will greatly progress (Bernales, 2011). Hence, the top-level administrators seriously pursue research alliances and partners with big funding agencies. The following observation was noted how they establish research partnerships and collaborations.

The HEIs' R&D programs and/or centers have to establish first their name and credibility in terms of research projects' outputs. This enables them to gain the trust of the funding agencies to invest their research funding and resources to their institution. Consequently, looking for funding resources is no longer difficult because the government and private funding agencies already initiate to seek for the research and development services of these HEIs where they could confidently invest their funding for research projects. In the end, synergetic relationship of the HEI and these research agencies is established. The HEIs are funded and provided with the necessary resources for their research programs. In return, HEIs have to deliver the research services needed by these funding agencies. However, establishing credibility in terms of research needs long years of consistent and conscious effort of the individual researchers and R&D department of the HEIs. This is clearly stated in the following explanations of the top-level research administrators.

Researcher: *How do you establish partnership?*

VP for Research: *You can't establish partnership overnight. You have to establish first your credibility. It needs long, long years of establishing your work, your credibility as research institution and as individuals. When you established your name with these funding agencies, you can easily get approval…*
Now our university has already established its name with all the funding agencies, because when they invest their money to us, we deliver the goods they need.
Research Center Director: *That's the advantage if you have already established a name. Funding agencies themselves will approach you and tell you to increase your proposed budget for the project. Sometimes, they would even call me even if we don't ask for budget. They would ask me to make a proposal if budget is available.*

The next challenge is to sustain the partnership with the collaborators and partners. The administrators emphasized that they protect their professional image by reporting on time and delivering their research services to their partner agencies efficiently and effectively.

In the aspect of implementation, monitoring, evaluation and utilization of research outputs, HEIs' faculty researchers have to conduct research in their specialization to improve instruction and satisfy one of the four-fold mandated functions of SUC (instruction, extension and research + production). Incentives like honoraria, grant of service credits, and work-load adjustments shall be afforded to the faculty who are conducting research as support in sustaining quality of research. Departmental researches in addition to specialized researches undertaken by the faculty are encouraged. At best, a collective and/or collaborative research undertaken by the institution/college must be defined and focused. Moreover, completed researches shall be pilot-tested and eventually utilized (AACCUP Inc., 2006). Table 4 shows that the top-level administrators perceived that they are *excellent* (M=3.79) and both the middle-level administrators (M=3.24) and teachers (M=2.57) believed that they are *good* in this aspect. As a whole, the respondents are *good* (M=2.66) in the indicators of this aspect.

Table 3. Level of Performance of the Respondents along Funding and Other Sources

Aspect of Research Program	Respondents	N	Mean	Performance
Funding and sources	Teachers	479	2.29	Fair
	Top Level	8	3.51	Excellent
	Middle Level	56	2.74	Good
	Total	*543*	*2.35*	Fair

Teacher-researchers imbed their research outputs (such as new technology, software system, protocol or knowledge) in their teaching as well as in their preparation of instructional materials (IMs). As cited by Zaman (2004), research helps in expert and contemporary knowledge being passed onto the student. In certain institutions and disciplines, it is important for students to experience being at the cutting edge of their subject. This is a relationship where the excitement of engaging with the development of the knowledge base of the discipline itself contributes to student learning. Additionally, lectures by active researchers aware of the newest perspectives in their field may be the first point of contact for students with the latest developments. Moreover, results from one's research can be used to clarify, update, and amend the teaching of a topic.

There are also chances that the teachers of HEIs are granted and accepted research project from internal or external sponsors. The teachers present and suggest to the students problems that are covered by the sponsored research project. They then collaborate with their students who are willing and interested of the research project. This research practice promotes synergetic relationship between the teachers and the student-researchers. The teachers get assistance from the students and meet the cut-off date of the research project. Likewise, the students will be given closer and more supervision and guidance in completing research requirement of their course.

As mentioned by one of the VP for research, collaborative research in the university starts with the screening of research proposals. The top-level administrators agreed that there are research problems that require different specialists to come up with viable solutions. During the screening of research proposals of faculty researchers, the review committee is giving more consideration with research projects that involve researchers from different disciplines or departments in the university. They also encourage the practice of developing a clear research framework with cross-cutting disciplines. Research framework guides the researchers to have sustainable research program. Additionally, the research framework, to maximize its purpose, has to be developed to accommodate different disciplines. This will enable the researchers to tap specialists from different departments which call for collaboration. This can be inferred in the following recorded statement of a research director:

Researcher: *How do you promote integrative and interdisciplinary research?*

Research Director: *We prefer integrated research during proposal screenings. Integrated research means it involves technical, social and ICT (Information and Communication Technology) parts. The manpower needed is from different disciplines such as social science and IT, and other cross-cutting disciplines. That's also the way to encourage a multidisciplinary research.*

One Research Director also emphasized the need for a mentoring scheme to promote team research in the university. This statement supports Largo (2011) who cited that a mentoring system where the senior faculty guides the (neophyte) junior faculty who in turn guides the students is one of the elements that must be present in a university to claim that research culture exists. This is exactly what the research administrators in this study are doing. They encourage senior researchers to work in tandem with junior researchers or even to student-researchers. This mentoring scheme enables the institution to sustain and develop research culture. The senior researchers serve as mentors of research skills and attitudes to the junior faculty researchers or student-researchers. Then, the junior teacher researchers as well as student researchers are the mentees who will pass to the next peer group of beginner researchers the research skills and attitudes inculcated to them. This practice is clearly reflected in the following interview with one research director:

Researcher: *How do you promote team research in the university?*

Research Director: *We do principles of mentoring here. If I am senior researcher, I need to look for junior researchers who I can mentor as my students. When I am no longer here, they can eventually take my place. This is an unwritten practice which became a culture. This will provide sustainability and continuity to our program.*

The same Research Director further explained that to promote team researches, administrator has to manage time and manpower effectively. Talking from his own experience, research administrator must know how to find time to handle research opportunities without compromising the quality of the outputs. In doing so, he trains research team members for him to decentralize the technical and administrative part of the research project tasks to be accomplished. The administrator can now focus his more time and effort in supervising his team members and in finalizing the writing of research for publication in journals.

Researcher: *I noticed in your profile various local and international co-researchers. How do you manage this?*

Research Director: *A researcher must be innovative and know how to manage time. Sometimes, we underestimate ourselves too much. If you are given many opportunities, you have to find time to manage and still get the best quality of your output. It's all in how you manage. For instance, I train people below me who can do my work. You have to decentralize your job. There are people who handle the technical part of the project, so it moves forward even without me. The administrative part is also important since the paper has to move without violating laws. Beneath these senior technical people are technical assistants of their own and we are meeting regularly. As for me, I focus on writing and training these people to write publication for journals. Whereas before, I only produce one study in two years, now I can write five or six in a year.*

Table 4. Level of performance of the Respondents along Implementation, Monitoring Evaluation and Utilization of Research Outputs

Aspect of Research Program	Respondents	N	Mean	Performance
Implementation, Monitoring, Evaluation and Utilization of Research Results/Outputs	Teachers	479	2.57	Good
	Top Level	8	3.79	Excellent
	Middle Level	56	3.24	Good
	Total	*543*	*2.66*	Good

The aspect of publication and dissemination directs that researchers whether on the proposal, on-going or completed stage may be published in the proper media and disseminated to target clientele. The indicators in this aspect are performed excellently (M=3.65) by the top-level administrators; *good* ((M=3.18) by the middle-level managers and *fair* (M=2.33) by the teachers. As a whole, the respondents perform *fair* (M=2.44) this aspect of research program. The *excellent* rating by the top-level administrators is an affirmation of the numerous researches co-authored and published in various local and international refereed journals by the top-level administrators. The *fair* rating (M=2.33) of the teachers in this aspect matches with the limited list of researches conducted and published by them. Furthermore, some shared during the interview that the sole research they conducted was their master's thesis or Ph. D dissertation.

Table 5. Level of Performance of the Respondents along Publication and Dissemination

Aspect of Research Program	Respondents	N	Mean	Performance
Publica-tion and Dissemina-tion	Teachers	476	2.33	Fair
	Top Level	8	3.65	Excellent
	Middle Level	56	3.18	Good
	Total	*540*	*2.44*	Fair

Table 6 illustrates that the respondents are *good* (M=2.60) in the entire key aspects of research program. Expectedly, the top-level administrators perceived that they excellently (M=3.68) performing the indicators in the entire aspects of research program. As administrators who are directly assigned in the management and carrying out of the research programs of the university, they are expected to be the role model to the faculty researchers in performing the research function of the university. The perused documents prove that the profile of the top-level administrators and their numerous co-authored and published researches corresponds their *excellent* self-rating. The lower level self-rating by the middle-level administrators (composed of deans and college coordinators) which is *good* (M=3.15) can be explained by the fact that they have other main important functions to perform such as administration of the college and supervision of instruction (for the deans) and the full time instruction function for the coordinators who are usually given only three units in their designation as research coordinators. The lowest self-rating (M=2.52) of teachers implies that they are still focusing on instruction as their main function in the HEI.

Table 6. Over-all Performance of the Respondents along the entire aspects of research program

Respondents	N	Mean	Research Performance
Teachers	479	2.52	Good
Top Level	8	3.68	Excellent
Middle Level	56	3.15	Good
Total	**543**	**2.60**	Good

Best research practices of the respondents

Based on the survey conducted coupled with some document analysis and follow-up interview, strengths that reflect the best research practices of the respondents were identified.

In the aspect of research priorities and relevance, *establishing research centers with capable personnel* was noted as best research practice of the respondents. Interviewed respondents explained various advantages why higher learning institution has to exert effort to establish research center.

First, research centers are established not only to serve as training ground for HEI faculty researchers but also in carrying out its equally important functions: instruction and extension. The presence of well-equipped research centers greatly supports the carrying out of instructional function of the university. The centers are utilized by the students in conducting experiments and laboratory activities. This gives them opportunity to test the theories they are learning in the classrooms. In terms of extension trainings and technology transfer activities, these centers served as venues for the university to extend the products of research such as technology to the target clienteles.

Second, the documented research reports and outputs of the research centers strengthened the research area which is one among the most important areas evaluated by accrediting body. Hence, the products or outputs of research centers greatly contribute in positioning the name of the university in its higher status.

Third, research centers facilitate the publication of conducted studies in refereed journals. These published researches especially if recognized and received awards from prestigious research conferences, pay many benefits not only to the researchers but also to the HEI since the number of these awarded and published papers are one of the criteria in recognizing reputation of HEIs.

As explained by the interviewed administrators, research centers usually started from small study that yielded good results and was able to get funding for a bigger project. When this project produces reputable outcomes, it will become research program then eventually turn into research centers. This is clearly reflected in the following quoted interview with one of the research directors of HEI:

Researcher: *How do you establish research centers in HEIs?*

Research Director: *Research centers did not evolve overnight. We started with small research studies which bore good results. We were able to propose and get funding for a bigger project. Then, the project became a program, and the program became a center.*

The research center personnel are considered by the research administrators as the best assets of the research and development program exceeding the administrative support of the university. Clearly, the success of research centers depends primarily on the good research proposals submitted to the funding agencies. The top-level research administrators recognized this fact that they put the most capable persons in the research department. This only proves that the success of an HEI in its research function lies on the competence and capabilities of the research administrators and personnel. This agrees to the previous conclusion of Sulo, Kendagor, Kosgei, Tuitoek, and Chelangat (2012) that research personnel qualifications is one of the best predictor of research output of a university.

In the aspect of funding and other sources, *fostering collaborative and interdisciplinary work on research with instruction, extension, training and entrepreneurial activities of the university* revealed as the best practice of the respondents.

The research administrators of HEIs in the region revealed strategies they employ to promote collaboration and interdisciplinary work with instruction, extension, training and entrepreneurial activities of the university.

One model of collaboration and interdisciplinary work with research, instruction and extension is illustrated in one of the extension programs of one of the HEIs. The modules for rice and corn production prepared by the teachers in the College of Agriculture for their students were translated into Filipino. The translated module is for the extension activity of the college which is providing seminars to farmers in the province of Isabela. This research-extension activity was conducted through collaboration with the Provincial agriculture office. This extension program strengthens the relationship of instruction, research and extension functions of the university. The preparation of modules for the college students covers the instruction part. The translation of the module and its evaluation by the intended users cover the research part. The extension part is the utilization of this translated module to educate the farmers from their adopted towns of Isabela.

Furthermore, research is the intellectual lifeblood of the university teachers. It should be the ultimate support to instruction (Cheetham, 2007). This is concretized by the top-level administrators when they explained that teacher-researchers can easily integrate the results of their studies in teaching their area of specialization. Teachers can easily facilitate the learning of concepts in a more practical manner different from bookish tradition of teaching. Active researchers are more effective at instilling an actively critical approach rather than a passive acceptance of facts. Additionally, the teacher-researchers can guide more students in the review of related literature for they can suggest their own and others' studies conducted. Zaman (2004) explained that students appreciate teachers who present research that they (teachers) have actually conducted. This provides an authenticity to the presented material that differs from presentations by teachers who are only discussing the work of others in which they have no active involvement. These are reflected in the following parts of interviews with research administrators:

Research Director: *In terms of instruction, I teach my students what we develop in researches. Other than theories, I also show them the actual application based on research. So, I can say that because of the findings of our research, you raise the previous traditional methods and you follow the new one.*

Dean: *Definitely the outputs of our research are translated or delivered or disseminated using various media. For example in instruction, whatever output that our research has I used to integrate that in our lessons. When they are doing research, I guide them by recommending my own published studies for them to review recent related studies.*

Researcher: *How do you use the research results in your instruction, Sir?*

VP for Research: *For those who generated the technologies, they can easily embed it in their teaching and in their subject. So while they prepare syllabus, they can incorporate the results of their study for their discussion. Instead of just talking about theories, you talk about realities and you can give concrete examples.*

Specifically, when it comes to collaboration between research and extension, one faculty of HEI who was awarded as best researcher in 2011 by the DOST shared that when they were conducting research on the different diseases of citrus plants in Kasibu, Nueva Vizcaya, they lived in the place with citrus farmers for two years. While their group was living with the farmers, they educated them with scientific method of avoiding and combating citrus diseases. This practice also was reflected in the type of researches conducted by the administrators of the HEIs. The list of researches perused by the researcher is primarily aimed to help the banana farmers, rice and corn farmers, goat and sheep raisers, fish pond owners etc. to improve and increase the production. The top-level administrators explained that the products of their researches like new technology, developmental procedure or materials should be extended to the target users or community to be fully transformed into its potential use. The role of research is the generation and development of new applicable knowledge and technology and once that these are fully developed; the extension department take over to extend these to the target clientele. Various researches conducted have been extended to their target clientele.

In the area of implementation, monitoring, evaluation and utilization of research outputs, *requiring/ encouraging faculty members to conduct applied and operational researches in line with their fields of specialization* appeared as the best practice of the respondents.

This practice enables the researcher to contribute to the improvement of operations, teaching content and procedures in the discipline. Toquero (2003) explained that the area of specialization or field of interest is one of the most possible areas to discern broad topics of potential research problems. One research director explained that in the area of specialization, the researcher can easily spot the gaps of knowledge or phenomenon that needs information or explanation through scientific investigation. The researcher can easily identify and review related literature as basis in pursuing the study

Another interviewed college dean claimed that the practice of doing researches in line with the specialization is also a way of establishing the identity of a researcher as scholar in the field. He further elaborated it by justifying the rationale of verticalization in pursuing graduate studies from master's to doctorate: to acquire mastery and in-depth philosophy in a particular discipline. It is also implied in his statement that doing research in line with the specialization is the main contributory factor of the awards he received for their research outputs. This inference is supported by the examined profile and list of researches conducted by the respondents. It is evident that the researchers who received awards from prestigious award-giving body were recognized for the researches they conducted which are all concentrated to their field of interest or specialization. This may be attributed to the commitment they offer in the conduct of their studies. This is further explained by the claim of Mirza (2010) that specialists are so committed and get respect immediately.

In the aspect of publication and dissemination, *sending of faculty researchers to present their papers in regional and national presentation* revealed as best practice of the administrator respondents.

The examined profile documents of the top-level administrators show that they are doing well when it comes to presentation of research not only within but also outside the country. Most of these researches they presented are product of team research with faculty researchers in their institution. There are some administrators and teachers who have been presented research as lead researcher or co-researcher with researchers from other universities outside the country. These few administrators and teachers were all given the chance to study abroad for their master's and doctorate. While studying abroad they were able to establish their linkages and connections with their foreign classmates and with foreign research institutions. Through the internet, they sustain their research connections up to this time and are still doing research projects with them.

The vice presidents for research explained that administrative support and financial assistance for the researchers are stipulated in their research operation manual. The research manuals were perused by the researcher and indeed, incentives given to those who competed successfully in the research conferences were clearly stipulated. How the administrators encourage faculty researchers to present and publish their research can be seen in the following statement of one VP for research:

Researcher: *How do you encourage the faculty to become more aggressive to publish their output?*

VP for Research: *We are lucky that we have already an operation manual for research and even for extension. And we were able to get the approval of the board to give incentives. So it's the cash incentive for publication in* *international refereed journal so called ISI. For every publication is 50 thousand. But even more than that, if they will improve their credentials, their track records, they will also be benefited to a very fast forward promotion under the NBC 461. So you see, with just one research output, you can get a lot of benefit for yourself, for your professional growth, for your financial need, and then you are also helping the institution to improve its status and credibility.*

One Research Director opined that the teacher-researchers have to present in a forum or conferences whatever the results of their studies. He further explained that once the paper is presented before referees and found to be qualified, it will be selected for publication. He recognized the importance of presentation of research conducted. This is why they encourage faculty to present their researches in the agency in-house reviews as a starting point. He pronounced that failure to present and publish conducted research is a failure of the researcher. This is reflected in the following part of interview with one director for research.

Researcher: *Sir what is your unique practice in research publication and dissemination?*

University Research Director: *For me, the end-point of research conducted must be publication. So if you failed to publish, you failed in your research. By all means, you have to publish your research even in a simple journal. Or present it to in-house review, conferences because once presented to conferences, they will publish your paper especially if it's good. Just like when we went to Bangkok last January, all of our four papers were qualified for publication straightaway.*

Research areas needing Improvement

Along priorities and relevance, the administrators need to be strengthened in *encouraging/involving faculty in the formulation of research agenda.* This parallels the low self-rate of the teachers in this same indicator. This result of the survey reinforces the claimed of the interviewed teachers that they rarely involve or participate in the formulation of research agenda.

In the aspect of funding and other sources, respondents need to work on sustainable mechanism for them to *generate income from patents, licenses, and copyrights, and other research outputs.* This finding of this study corresponds with the previous generalization of Valdivia (as cited by Nicholson, 2014) that most universities struggle to generate any revenue from their research.

In the aspect of implementation, monitoring, evaluation and utilization of research outputs, the indicator that needs to improve is the *utilizing research results and outputs as inputs to institutional development, improvement of instructional processes and transfer of generated technology to the community* The low self-rate of the respondents in this area is corroborated by the scant evidence showing that the results of the researches conducted by the respondents are utilized in instruction and transferred to the community.

In the aspect of publication and dissemination, *assisting the faculty and student researchers to publish their research results in refereed journals* needs to be strengthened by the administrators. Despite of the research assistance, incentives and benefits given to researchers who will be able to publish in refereed journals, teachers claimed that they rarely asked for assistance from the college/university to publish research in refereed journals. This is proven by the examined document showing the very limited number of published researches of the teacher respondents in non-refereed and refereed journals.

CONCLUSIONS

Based on the analyzed results and findings, the following conclusions were derived.

1. The top-level administrators perceived they perform excellently in the entire aspects of research program while the middle-level administrators and teachers perceived they perform it *good.* The results of the survey are corroborated by the perused documents showing the numerous research activities and outputs of the top-level administrators and little evidence of research outputs of middle administrators and teachers.
2. Along priorities and relevance, the respondents' best practice is *establishing research center with capable personnel* while their weakness is *involving the faculty in the formulation of research agenda.*
3. In the aspect of funding and other sources, the respondents' best practice is *promoting the integration and collaboration on research with instruction, extension, training and entrepreneurial activities of the university* while they are weak in *generating income from patents, licenses, and copyrights, and other research outputs.*
4. In the implementation, monitoring, evaluation and utilization of research outputs, the best practice of the respondents is *requiring/encouraging faculty members to conduct applied and operational researches in line with their fields of specialization.* Their weakness is *utilizing research results and outputs as inputs to institutional development, improvement of instructional processes and transfer of generated technology to the community.*
5. The publication and dissemination best practice of the respondents is *sending faculty researchers to present their papers in regional and national presentation.* However, the revealed weakness is *assisting the faculty and student researchers to publish their research results in refereed journals* as proven by the very limited published researches by the teacher respondents.

RECOMMENDATIONS

This study suggests the following:

1. An inquiry of the factors that contributed to the relatively low level of performance of the middle-level administrators and teachers is recommended. The findings will provide HEIs empirical data to be used as basis in designing mechanisms to improve the research performance of the middle-level managers and teachers.

2. Workable and effective mechanisms have to be designed so that the exemplified strong research performance of the top-level administrators in the entire aspects of research program are to be spread to the middle-level managers and teachers who indicated much lower level of research performance.

Acknowledgment

My recognition and gratefulness goes to the following:

HEIs' University Presidents: Dr. Aleth Mamauag of ISU, Dr. Florentina Dumlao of NVSU, Dr. Samuel Benigno of QSU and Dr. Romeo Quilang of CSU;

HEIs' VP for R&D: Dr. William Medrano of ISU, Dr. Ma.Cecilia Salas of NVSU, Dr. Fredisminda Dalloran of QSU and Dr. Joseph de Guzman of CSU; and

Special thanks are extended to HEIs' Research Directors: Dr. Orlando Balderama and Dr. Jonathan Nayga of ISU, Dr. Nelia Cauilan of CSU, Dr. Wilfredo Dumale and his secretary Madam Zeny Tumaliuan of NVSU.

References

Baciles, R. (2014). Research productivity among selected state universities and colleges-teacher education institution in Central Luzon, Philippines. *International Journal of Innovative Research & Studies*. Vol. 3 Issue 6.

Cheetham, A. (2007). *Growing a research culture*. *Address to academic senate*. University of Western Sidney.

Hall, B. & Lerner, J. (2009). Forthcoming 2010 in Hall, B.H. and N. Rosenberg (eds.), Handbook of the Economics of Innovation, Elsevier-North Carolina. Retrieved from *https://eml.berkeley.edu/~bhhall/*

Fink, A. (2009). *How to conduct surveys: A step-by-step guide. 4th Edition*. Sage Publications, Inc.

Largo, D. (2011). Upgrading the quality of research outputs of heis and promoting a culture of scholarship among Filipino. *Philippine E-Journals (PEJ)*

Mirza, A. (2010). *Importance of specializing a certain field of design.* Retrieved at *www.smashingbuzz.com/2010/.../importance-of-specializing-*

NHERA-2 – (n.d.). *Commission on higher education*. Retrieved from www.ched.gov.ph/wp.../NHERA-2.pdf

Nicholson, Chris. 2014. Maximizing the ROI of Intellectual Property. University Business

Ramos, B.V. & Orden, M.V. (2005-2006). Learning strengths and styles of the college freshmen of Saint Mary's University along the perceptual, psychological, environmental, physiological, emotional and sociological element: A comparative analysis. *Saint Mary's University Research Journal* Vol. VII. SMU research center

Sulo, T., Kendagor, R., Kosgei D., Tuitock, D. & Chelangat, S. (2012). Factors affecting research productivity in public universities of Kenya: The case of Moi University, Eldoret. Scholarlink Research Institute Journals, (ISSN: 2141-7024) Retrieved from jetems.scholarlinkresearch.org

Toquero, E. (2003) Social science research guidelines. College of Teacher Education. Isabela State University.

Yan, J. (2006). values orientation, leadership styles and managerial practices of senior high school managers in Hubei Province China: Towards effective business mgmt. of education enterprise. (Unpublished doctoral dissertation). Saint Mary's University: Bayombong, Nueva Vizcaya.

Zaman, M. (2004). *Review of the academic evidence on the relationship between teaching and research in higher education.* Retrieved from www.dfes.go.uk/research

ANG DISKURSONG FILIPINO NA GINAMIT SA MGA PILING MAIKLING KWENTO NA NAGWAGI SA TIMPALAK PALANCA MULA 1990-2000: ISANG PAG-SUSURI

*****Raquel R. Alaman, PhD (*Units*)
Assistant Professor I
Departamento ng Wika at Komunikasyon
Pamantasan ng Silanganing Pilipinas
Pamantasang Bayan, Hilagang Samar
raquel_alaman@yahoo.com
09462579728

***Abstrak** – Ang mga kwentong pinaghanguan ng mga kombersasyong pasulat na siyang naging batayan sa diskursong pagsusuri ng wika ay kinalap mula sa mga kwentong nagwagi sa timpalak Palanca. Ang "Don Carlos Palanca Memorial Awards for Literature" na patuloy na nagbibigay ng karangalan sa mga manunulat upang parangalan ang mga piling paksa na makabuluhan at makatotohanan sa larangan ng pag-aaral at kawikaan ng mga Pilipino. Ito ay naglayong magsuri, tumukoy, at maglarawan ng diskursong Filipino na ginamit sa mga pasulat na anyo ng mga kombersasyon ng mga tauhan. Tinukoy at inilarawan ang barayti ng wika na ginamit ayon sa: gumagamit ng wika, ugnayang panlipunan ng mga nag-uusap, at wikang ginamit. Tinukoy ang mga tungkuling pangwika ng mga pasulat na anyo ng mga kombersasyon kung ito ay pang-instrumental, panregulatori, pang-interaksyunal, pangkaalaman, pang-imahinasyon, pampersonal, pangheuristiko, commissives, at deklarasyon; sinuri ang istruktura sa pasulat na anyo ng kombersasyon na nakapaloob sa mga episodo; tinukoy ang temang nakapaloob sa kwento.*

Gumamit ng kwalitatibong-palarawang pamamaraan gamit ang tekstwal na pagsusuri na tumuon sa diskursong pagsusuri ng wika sa pasulat na anyo ng mga kombersasyon sa lahat ng episodo ng maikling kwento. Inalam ang gamit ng wika sa loob ng usapan ng nagsasalita na nagbibigay diin sa relasyon ng nagsasalita at mga pahayag na ginamit sa partikular na okasyon.

Natuklasan na sa barayti ng wika na may kaugnayan sa gumagamit ng wika, nalaman kung may pinag-aralan, makapangyarihan ang nagsasalita ayon sa wikang ginamit, istilo at haba ng pagsasalita. Iba't ibang istilo ng pagsasalita ang ginamit ng mga tauhan sa iba't-ibang antas ng lipunan: kaswal, pormal, konsoltatib, inteymeyt, at prosen. Sa barayti na may kaugnayan sa ginamit na wika, ang mga tauhan ay gumamit ng apat na barayti ng wika: 1) dinamikong Filipino, 2) malalim na Filipino, 3) pinaghalong mga salita sa Filipino at mga salitang pangrehiyunal, and 4) ang halong-koda at palit-koda.

Sa siyam na malalaking tungkulin ng wika, lumitaw na ang tungkuling pangheuristiko ang pinakagamitin. Sa pag-uusap sa pasulat na anyo ng mga kombersasyon ay kalimitang gumagamit ng mga pangungusap na di-ganap. Gumamit din ng mga pangungusap na nasa iba't ibang kayarian. Ang usapan ay nasa di-karaniwan at karaniwang ayos. Sa bawat tema ng maikling kwento lumitaw na tatlo ay tumalakay sa kahirapan ng buhay, ang iba ay tungkol sa taimtim na pagsasakripisyo, ang pagiging simple, ang maling pamamaraan ng pagtuturo na nakapagdudulot ng pagkalihis sa kaisipan at pananaw ng mga kabataan/estudyante, ang pagpapahalaga sa pamilya/magkadugo, ang tunay na pagkakaibigan, pang-aabuso at pagmamaltrato at tungkol sa mapapait na karanasang dinanas ng tao sa buhay.

Batay sa kinalabasan ng pag-aaral, maibibigay ang konklusyon na sa barayti ng wika na may kaugnayan sa gumagamit ng wika, nakikilala ang pinanggalingan ng isang tao kung may pinag-aralan o wala, kung makapangyarihan batay sa uri ng wika o salitang ginagamit at gayundin sa paraan ng kaniyang pagsasalita at sa haba o ikli ng pagpapahayag. Sa barayti ng wika na may relasyon sa ugnayang panlipunan ng mga nag-uusap, isinasad na talagang hindi magkatulad ang paraan ng pagsasalita ng mga taong may mataas na posisyon kaysa sa mga taong nasa mababang antas ng lipunan. Sa tema, lumitaw na ilan sa mga maikling kwento ay naglalarawan sa kahirapan ng buhay.Ito ay nagsasaad lamang na kaakibat na ng tao ang dumanas ng kahirapan sa kabila ng pagpupunyagi at pagiging mapamaraan sa buhay.

***Keywords:** diskursong Filipino; maikling kwento; Timpalak Palanca; pagsusuri; kombersasyon*

INTRODUKSYON

Sa larangan ng edukasyon, ang pagtuturo ng wika ay isa sa pinakamahalagang salik na binibigyang pansin dahil sa ang kasanayan at kahusayan sa wika ang siyang susi sa pagkatuto at tagumpay sa pag-aaral ng lahat ng asignatura sa paaralan.

Nilalayon sa pagtuturo ng wika na malinang ang pangkalahatang kasanayan sa paggamit ng wika na makatutulong sa indibidwal para sa mabisa nitong pagpapahayag ng kaisipan, ang kasanayang umunawa sa mga salik personal at sosyal na kaligiran sa pakikipagtalastasan.

Bilang guro sa wika, tumuon ang interes na magsagawa ng isang pag-aaral na tumutuon sa diskursong pagsusuri ng wika na binigyang diin ang gamit ng wikang Filipino sa pasulat na anyo ng mga kombersasyon sa ilang piling maikling kwento na nagwagi sa Timpalak Palanca. Naudyok ang mananaliksik ng ganitong uri ng pag-aaral sapagkat batay sa kaniyang karanasan at obserbasyon napapansin na ang pagtuturo sa wika ay karaniwang nakatuon sa pagdulog na gramatikal. Sa pagdulog na ito, paulit-ulit na binibigyang katuturan at hiwa-hiwalay na pinag-aaralan ang mga bahagi ng panalita lalo na ang mga tuntunin sa pagbuo ng bawat isa. Ang mga linggwistikang anyo ng wika ang pinagtutuunan ng pansin, hindi ang mga makahulugang gamit ng wika. Kaugnay nito, hindi rin gaanong napagtutuunan ng pansin sa mga gawaing pangwika ang pagsusuri ng makahulugang palitan ng usapan ng mga tauhan sa maikling kwento tulad halimbawa kung paano nga ba tayong mga Pilipino nag-uusap, nagpapatuloy ng pag-uusap at nakikilahok sa pag-uusap? Para sa ibang guro, sapat na at pinakaimportante ang gramar. Ang indikasyon na mahusay ang mga mag-aaral sa Filipino ay kung natutukoy niya ang mga bahagi ng panalita at kung nagagamit niya ito sa pangungusap. Dahi dito, nagiging mahirap para sa mga mag-aaral ang wikang akademiko sapagkat karaniwang ginagamit ito ng wala sa konteksto, katulad ng pag-aaral ng mga hiwa-hiwalay na detalye o baha-bahaging impormasyon.

Kaugnay nito, inilahad ni Clemencia C. Espiritu sa kaniyang isinulat na artikulo taong 2001 na may pamagat na "Ang Wika sa Nagkakaisang Republika: Implikasyon sa Pagtuturo ng Filipino," na kulang sa *content* ang pagtuturo ng Filipino. Isa ito sa pangunahing dahilan sa pagrerebisa ng kurikulum sa Filipino sa antas sekundarya noong 1985. Ayon pa kay Espiritu, kailangan ang pagpapalawak at pagsasanib ng mga paksang may sosyal at kultural na kabuluhan, mga paksang magiging lunsaran sa paglinang ng higit na kritikal na mga kasanayang kognitibo tulad ng pagsusuri, pagsintesays at pag-ebalweyt.

Ayon sa mga ulat ng mga obserbasyon at pananaliksik sa klasrum pangwika, hindi tumataas sa mga batayang kasanayang interpersonal ang nililinang ng guro sa klase mula elementarya hanggang tersyarya. Panahon na para pabasahin at pasulatin ng iba't ibang uri at istilo ng diskurso ang mga mag-aaral upang malinang ang mga akademikong kasanayang pangwika na mahigpit nilang kailangan sa pag-aaral.

Sa kabilang dako, inihayag naman ng Department of Education National Education Testing and Research Center ang resuta ng National Achievement Test na nilahukan ng mga mag-aaral na nasa unang taon mula sa iba't ibang lugar ng rehiyong walo nang taong pasukan 2005-2006, makikita sa resulta ng pagsusulit na ang asignaturang Filipino ay may pinakamababang puntos mula sa limang asignaturang saklaw ng pambansang pagsusulit. Ang Hilagang Samar ay mayroon lamang 48.77 na puntos samantalang ang may pinakamababang puntos ay ang lungsod ng Tacloban na may 31 puntos.

Samantala, ayon naman sa resulta ng pag-aaral nina Sibayan at Gonzales (2003), isinasaad na kailangan ang sistematikong pagbabago sa sistema ng pagtuturo sa pamamagitan ng mga kagamitang humahamon sa kakayahan ng mga mag-aaral at ng higit na mabuting pagtuturo sa nilalaman sa tulong ng mga gurong nagtataglay ng tunay na kakayahan. Sa pagbabagong ito kailangan ding isunod ang pagbabago ng tuon ng pamamaraan ng pagtuturo ng wika upang makatugon sa mga pangangailangang pangwika ng mga mga-aaral. Mula sa tradisyunal na pamamaraang panggramatika na ang diin ay nasa pagpapakadalubhasa sa kayariang gramatika dapat ng ibaling ang tuon ng pagtuturo tungo sa paglinang ng kakayahang pangkomunikatibo ng mga mag-aaral. Sa pamamaraang ito magkakaroon ng magkatimbang na kahalagahan ang kayarian ng wika at gamit nito.

Inihayag naman ni Hymes na ang pagtuturo ng wika ay sumasaklaw sa pagtuturo sa relasyon ng istruktura ng wika sa istruktura ng pagsasalita.

Tunay na ang wika ay kailangang pag-aralan at pagtuunan ng pansin sapagkat ito ang daan upang ang bawat nilalang sa mundo ay magkaisa at magkaunawaan.

Sa mga inilahad tungkol sa mga suliranin/ kahinaang ito na may kinalaman sa pagtuturo ng wika ang nag-udyok sa mananaliksik upang magsuri ng ilang mga piling maikling kwento na nagwagi sa Timpalak Palanca mula 1990-2000 na naging lunsaran at batayan sa pagsusuri sa gamit ng wikang Filipino sa mga kombersasyong pasulat na nakapaloob sa mga piling maikling kwento.

Ang pananaliksik na ito ay naglalayong masuri,matukoy at mailarawan ang diskursong Filipino na ginamit sa mga pasulat na kombersasyon ng mga tauhan sa ilang piling maikling kwento.

MGA LAYUNIN NG PAG-AARAL

Ang pag-aaral na ito ay naglalayong matamo ang mga sumusunod:

1. Matukoy at mailarawan ang barayti ng wika na ginamit ayon sa a) gumagamit ng wika, b) ugnayang panlipunan ng mga nag-uusap, at c) wikang ginagamit;
2. Matukoy ang mga tungkuling pangwika ng mga pasulat na anyo ng kombersasyon (pang-instrumental, panregulatori, pang-interaksyunal, pangkaalaman, pang-imahinasyon, pampersonal, pangheuristiko, *commissives*, deklarasyon);
3. Masuri ang istruktura sa pasulat na anyo ng kombersasyon na nakapaloob sa mga episode; at
4. Matukoy ang temang nakapaloob sa mga maikling kwento.

METODOLOHIYA

Ang kwalitatibong palarawang pagsusuring tekstwal ang ginamit sa pananaliksik na tumuon sa diskursong pagsusuri ng wika sa pasulat na anyo ng mga kombersasyon sa lahat ng episodo ng maikling kwento. Sa pag-aaral na ito ginamit ang mga usapan na bumubuo sa lahat ng episodo mula sa maikling kwento bilang yunit ng pagsusuri. Inalam ng mananaliksik ang gamit ng wika sa loob ng usapan ng nagsasalita na nagbibigay empasis sa relasyon ng nagsasalita at mga pahayag na ginamit sa partikular na okasyon.

Upang mabigyan ng kasagutan ang mga tanong sa pag-aaral na ito, ang mananaliksik ay nagtungo sa Palanca Commission upang makopya ang orihinal na kopya ng maikling kwentong nagwagi sa Timpalak Palanca mula 1990-2000. Pagkatapos na ito ay makopya, ang mananaliksik ay personal na nagtungo sa Pamantasang Normal ng Pilipinas upang makipagkita sa tatlong manunulat na propesor na dalubhasa sa wika at panitikan at nakiusap na tulungan siya sa pagpili sa sampung (10) maikling kwentong gagamitin sa pag-aaral upang maging obhetibo ang nasabing pag-aaral.

Ang mga propesor na ito ay sina Dr. Lydia B. Liwanag, ang Dekana ng Pamantasang Normal ng Pilipinas, Dr. Paquito B. Badayos, at Dr. Patrocinio V. Villafuerte. Tinanggap ito nina Dr. Liwanag subalit nagbigay sila ng takdang panahon upang balikan at kunin ng mananaliksik ang kwentong napili. Kaugnay nito, silang tatlo ang napili na magrekomenda ng sampung maikling kwento na isinama sa pag-aaral sapagkat sila ay pumasa sa pamantayan upang magrekomenda.

Samantala, ang tatlong propesor na sina Dr. Lydia B. Liwanag, Dr. Paquito B. Badayos, at Dr. Patrocinio Villafuerte ay hindi magkakatulad sa ibang kwento na inirekomenda at isa pa hindi magkakatulad sa bilang kaya minabuti ng mananaliksik na idaan sa palabunutan ang pagpili sa sampung maikling kwento bilang sampol sa pag-aaral na ito.

Ang mga sumusunod ay ang sampung kwento na binunot ng mananaliksik na ginamit na mga sampol sa pag-aaral.

- ► Pula, Puti at Saka Blue at Marami Pang Korol ni Lav Indico Diaz (1990; Ika-2 Gantimpala)
- ► Marino ni Reynaldo A. Duque (1991; Karangalang Banggit Kasama sa Panalo)
- ► Si Regina at Ako ni Evelyn A. Sebastian (1992; Ika-2 Gantimpala)
- ► Rosal ni Mayette Bayuga (I993; Unang Gantimpala)
- ► Pinsan ni Eli Rueda Guieb III (1994 ; Ika-2 Gantimpala)
- ► Iba-Iba, Pare-Pareho ni Rebecca Anonuevo (1995 ; Ika-2 Gantimpala)
- ► Ang Baliw ni Mayette Bayuga (1997; Ika-2 Gantimpala)
- ► Anino sa Buhangin ni Gat Handiong (1998; Ika- 2 Gantimpala)
- ► Sinsil Boys ni Maraya Isagani (1999; Unang Gantimpala)
- ► Alyas Juan De la Cruz ni Amelia Fores (2000; Unang Gantimpala)

Ang bawat kwento ay masusing binasa at kinopya ang mga diyalogo kasama na ang nakapaloob na damdamin nito upang mas lalong maging malinaw ang gamit ng wika sa mga pasulat na kombersasyon. Pagkatapos makopya, ito ay nilagyan ng sunod-sunod na bilang ayon sa pagkakasunod-sunod ng mga episodo bilang yunit ng pagsusuri. Ito ay isinagawa upang masuri at mailarawan ang barayti ng wika ayon sa gumagamit ng wika, ugnayang panlipunan ng mga nag-uusap, at wikang ginamit gayundin ay masuri at matukoy ang mga tungkulin ng wika gaya ng kung ito ay pang-instrumental, panregulatori, pang-interaksyunal, pangkaalaman, pang-imahinasyon, pampersonal, pangheuristiko, *commissives*, at deklarasyon.

Sinuri rin ang istruktura sa pasulat na anyo ng mga kombersasyon upang matukoy kung ang mga pangungusap o pahayag na ginamit sa usapan ng mga tauhan sa ilang piling maikling kwento ay pangungusap na di-ganap, payak, tambalan, hugnayan o langkapang pangungusap at kung ito ay nasa karaniwang ayos o di-karaniwang ayos. Ang mga maikling kwento ay hahati-hatiin sa iba't ibang episodo na siyang pagbabatayan ng pagsusuri. Ang episodo ay tumutukoy sa yunit ng pagsusuri na maaaring tapusin at simulan kapag may pagpapalit ng usapan sa mga pangunahing tauhan, ang tungkulin ng nagsasalita, ang pokus ng usapan at ang kaugnayan nito patungo sa pokus ng usapan/nag-uusap.

Narito ang isang pakitang halimbawa.

Pula, puti at saka blu at marami pang korol

Halimbawa: Episodo I

#1 (Toto) "May nakita ba kayo?"

#2 (Dyong) "Bah, oo, andami na." (nagyayabang) "Dito na lang sa bilding na 'to andami."

#3 (Nenet) "Totoo, Dyong?"

#4 (Dyong) "Oo. Pag may nagpakita, ituturo ko sa inyo."

#5 (Nenet) "Umalis na lang tayo ditto."

#6 (Dyong) "Huwag. Hindi naman nang-aanu ang multo kapag hindi ka takot, e. Kailangang matapang ka para igalang ka nila. Marunong namang gumalang ang multo e, kaya kailangang matapang kayo para hindi tayo aalis dito."

#7 (Dodoy) "Pag nakasolben ka ba, Dyong, nakakakita ka ng multo?"

#8 (Dyong) "Solbent, hindi solben. Hindi. Walang multo kapag nakasolbent ka. Trip yun, e. Masarap, may bad trip siyempre pero hindi yun multo. Ang solbent, trip lang. Mga kolor, islomasyon, sawns, tsibog, ganun, mga kolor gaya sa elarti ba."

#9 (Dodoy) "E ano palang korol ng multo?"

#10 (Dyong) "Kolor, hindi korol. Ikaw talaga, Dodoy, siyam ka na, utal ka pa. Solbent, solben, kolor, korol. Wala kang kaasenso-asenso. Bungi kasi, bulol, tanga, may luga pa." (magtatawanan)

#11 (Dodoy) "Putsa!"

#12 (Dyon) "Ano!" (tutuhurin ni Dyong at babatukan ni Toto)

#13 (Nenet) "Si nanay mo hindi nagmumulto?"

#14 (Dodoy) "Hindi"

#15 (Toto) "Hala, ayan nang nanay mo!" (nagtakbuhan)

#16 (Dodoy) "Hindi si nanay yon, boses ni Nenet."

Samantala, kaswal ang salitaan nina Dyong, Dodoy, Toto at Nenet dahil na rin sa hindi nagkakalayo ang kanilang mga edad at sa paksa na rin na kanilang pinag-uusapan. Pinag-uusapan nila ang tungkol sa multo.

Sa ibaba ay makikita ang paghahati-hati ng mga episodo ng maikling kwento:

Episodo 1 – mula diyalogo 1-16
Episodo 2 – mula diyalogo 17-19
Episodo 3 – mula diyalogo 22-29
Episodo 4 – mula diyalogo 30-33
Episodo 5 – mula diyalogo 34-44
Episodo 6 – mula diyalogo 45-57
Episodo 7 – mula diyalogo 58-74

RESULTA NG PAG-AARAL

Natuklasan na sa barayti ng wika na may kaugnayan sa gumagamit ng wika, nalaman kung may pinag-aralan, makapangyarihan ang nagsasalita ayon sa wikang ginamit, istilo at haba ng pagsasalita. Iba't ibang istilo ng pagsasalita ang ginamit ng mga tauhan sa iba't ibang antas ng lipunan: kaswal, pormal, konsoltatib, inteymeyt, at prosen. Sa barayti na may kaugnayan sa ginamit na wika, ang mga tauhan ay gumamit ng apat na barayti ng wika: 1) dinamikong Filipino, 2) malalim na Filipino, 3) pinaghalong mga salita sa Filipino at mga salitang pangrehiyunal, at 4) ang halong-koda at palit-koda.

Sa siyam na malalaking tungkulin ng wika, lumitaw na ang tungkuling pangheuristiko ang pinakagamitin. Sa pag-uusap sa pasulat na anyo ng mga kombersasyon ay kalimitang gumagamit ng mga pangungusap na di-ganap. Gumamit din ng mga pangungusap na nasa iba't ibang kayarian. Ang usapan ay nasa di-karaniwan at karaniwang ayos. Sa bawat tema ng maikling kwento lumitaw na tatlo ay tumalakay sa kahirapan ng buhay, ang iba ay tungkol sa taimtim na pagsasakripisyo, ang pagiging simple, ang maling pamamaraan ng pagtuturo na nakapagdudulot ng pagkalihis sa kaisipan at pananaw ng mga kabataan/ estudyante, ang pagpapahalaga sa pamilya/magkadugo, ang tunay na pagkakaibigan, pang-aabuso at pagmamaltrato at tungkol sa mapapait na karanasang dinanas ng tao sa buhay.

KONKLUSYON

Batay sa kinalabasan ng pag-aaral, maibibigay ang konklusyon na sa barayti ng wika na may kaugnayan sa gumagamit ng wika, nakikilala ang pinanggalingan ng isang tao kung may pinag-aralan o wala, kung makapangyarihan batay sa uri ng wika o salitang ginagamit at gayundin sa paraan ng kaniyang pagsasalita at sa haba o ikli ng pagpapahayag. Sa barayti ng wika na may relasyon sa ugnayang panlipunan ng mga nag-uusap, isinasad na talagang hindi magkatulad ang paraan ng pagsasalita ng mga taong may mataas na posisyon kaysa sa mga taong nasa mababang antas ng lipunan. Sa tema, lumitaw na ilan sa mga maikling kwento ay naglalarawan sa kahirapan ng buhay.Ito ay nagsasaad lamang na kaakibat na ng tao ang dumanas ng kahirapan sa kabila ng pagpupunyagi at pagiging mapamaraan sa buhay.

REKOMENDASYON

Batay sa mga natuklasan at mga konklusyon ay iniharap ang mga sumusunod na rekomendasyon:

1. Dapat na pagtuunan ng pansin ng mga guro sa wika ang tungkol sa pag-aaral na may kinalaman sa pagsusuri ng wika maging ito man ay pasulat o pasalita upang maihanda ang mga mag-aaral sa wastong paggamit ng wika sa tamang kapaligiran.

2. Payamanin ang kakayahang pangwika ng mga mag-aaral sa pagsusuri sa mga tungkuling pangwika sa pamamagitan ng pagbibigay sa kanila ng mga gawaing masuri at matukoy ang mga ito.

3. Ang mga maikling kwentong nagwagi sa Timpalak Palanca ay gawing lunsaran sa pagsusuring pambalarila na ang tuon ay sa sintaksis o ang pag-aaral at pagsusuri sa kaayusan ng mga pangungusap.

4. Lubos na pagtalakay sa napapanahong tema ng maikling kwento na nagpapakita ng ating pang-araw-araw na pamumuhay at pakikibaka sa kahirapan ng buhay, pagbuhay sa kagandahang-asal, pagmamahal saa pamilya at sa kapwa, pagsasakripisyo para sa bayan at paggalang sa mga matatanda ay mabigyang diin upang mapanatili ang pagkakilanlan ng isang pamilya/lahing Pilipino.

5. Sa asignaturang Filipino III (Sining ng Pakikipagtalastasan), dapat na isama sa silabus ang mga tungkuling pangwika sapagkat ito ay naaangkop dahil sa ang asignaturang ito ay sumasaklaw sa pakikipagkomunikasyon.

PASASALAMAT

Nais iparating ng mananaliksik ang kanyang taospusong pasasalamat at pagtanaw ng utang na loob sa UEP at sa mga taong walang sawang sumuporta upang mabuo ang pag-aaral na ito.

TALAAKLATAN

[1] Beum, R. and Sire, J. W. 1970. Papers and Literature Models and Methods. USA: Holt, Reneherat, and Winston, Inc.

[2] DepEd NAT Result for School Year 2005-2006

[3] Gumperz, J. J. and Hymes, D. 1972. Directions in Sociolinguistics the Etnography of Communication. USA: Holt, Rinehart, and Winston, Inc.

[4] Peregrino, J. M. 1990. "Baratyi at Baryasyon sa Ppagtuturo ng Wikang Filipno". Philippine for Language Teaching. Volume XVIII (May).

[5] Ungria, V. V. 2002. "Varieties of Filipino Used in Selected Palanca Award Winning Short Stories Written from 1987-1996". Unpublished Dissertation. Philippines Normal University.

DEVELOPMENT AND ACCEPTABILITY OF INSTRUCTIONAL VISUAL AIDS ON BASIC FINGERPRINT SCIENCE

Gina L. Lacaben
Mountain Province State Polytechnic College

ABSTRACT

This study was conducted to develop, validate and accept simple illustrative visual aids as instructional material on Basic Fingerprint Science intended for easy teaching- learning processes in the Criminology Education. The descriptive method was used in the analysis of data and a questionnaire checklist as instrument in gathering data. Evaluations and acceptance made by the 230 respondents were tallied and analysed using weighted mean. The Weighted Mean Scale was used to quantify descriptive responses of respondents on the acceptability of the developed instructional material in terms of content and instructional characteristics, degree of accuracy, completeness and appropriateness. The respondents of this study are the Criminology Faculty members, alumni and students of BS Criminology of the Mountain Province State Polytechnic College. The use of illustrative visual aids as instructional material in teaching fingerprint subject is highly recommended for it has a great positive impact to both educators and students in teaching- learning processes.

Keywords: development, acceptability, illustrative instructional aids, qualitative method, Criminology Education, Mountain Province State Polytechnic College, Mountain Province

INTRODUCTION

Instructional visual aids are essential tools in the world of instruction. They supplement and reinforce the teaching – learning process. Teachers need instructional materials as background to every lesson they teach to their students. As the Commission on Higher Education mandates that teachers in Colleges and Universities should develop their own instructional materials for educators play a vital role in the production of printed materials which can enhance the learning process (Po-or : 2012).

As cited by Aguirre (2009), the development of adequate instructional materials will help facilitate learning process in the mastery of the basic skills and help strengthen critical thinking skill. Learning is also made more interesting because the attention – getting facts of the instructional materials keep learners alert. On the other hand, instructional materials facilitate teaching process by increasing the efficiency of the teachers.

In the study of Boyongan (2001), she found out that lack of learning facilities had always been a great problem to most teachers. They had always been hard up in imparting abstract part of the lessons to the learners due to non-availability of appropriate instructional visual aids to use. As a result, learners are left behind; they learn very limited concepts because they do not participate in the teaching learning process since they do not understand the lessons being presented. Sometimes their interest to learn deteriorates because they are not provided with appropriate learning instructions. In the end, they develop an inherent dislike for the subject.

Instructional visual aids on Fingerprint Science help the learners to develop a good conceptual understanding of the course content or the skills being taught. Visual aids such as pictures, drawings, and illustrations serve as supplements to the normal processes of instruction. Visual aids are of high value to Criminology educators for they find easy to create interest, import knowledge, promote academic performance and satisfy individual differences of students.

The Criminology Department of the Mountain Province State Polytechnic College really lacks fingerprint materials or equipment. Many students are not given chances to enhance their skills in fingerprinting. There are textbooks on Fingerprint Science at the school library but not so interesting and even confusing. As a result, Criminology students could hardly understand the lessons in Fingerprint Science. Thus, to reinforce easier understanding on the subject matter, the study seeks to develop a simple instructional visual aids on Basic Fingerprint Science.

Statement of Problems

This study aimed to develop, validate and accept simple illustrative visual aids on Basic Fingerprint Science for the Criminology Department of the Mountain Province State Polytechnic College and for other Criminal Justice Education schools.

Specially, this study tried to answer the following question:

1. How did the two groups of respondents validate the instructional visual aids on Basic Fingerprint Science as to content validity and instructional Characteristics?
2. What is the degree of acceptability by the groups of respondents on the developed instructional visual aids on Basic Fingerprint Science as to accuracy, completeness and appropriateness?

METHODOLOGY

The researcher requested for the approval from the Chairman of Criminology Department of the Mountain Province State College to conduct the study. After having sought the permission, the researcher developed the Instructional Visual Aids on Basic Fingerprint Science and presented the same to the Criminology Instructors and Criminology students who took the subject to evaluate for the validity and acceptability of the material for instruction purposes. There were 6 faculty members teaching the Fingerprint Science, 180 students and 44 alumni who are in the police force. A total of 230 respondents randomly selected.

The descriptive method was used in the analysis of data and a questionnaire checklist as instrument in gathering data. Evaluations made by the respondents were tallied and analysed using weighted mean.

The Table 1 shows the Weighted Mean Scale to quantify descriptive responses of respondents on the validation of the developed instructional material.as follows:

Table 1

Arbitrary value	Statistical range	Descriptive Equivalent
5	4.21 - 5	Strongly Agree (SA)
4	3.41 - 4.20	Agree (A)
3	2.61 – 3.40	Moderately Agree (MA)
2	1.81 – 2.60	Disagree (D)
1	1.00 – 1.80	Strongly Disagree (SD)

To quantify descriptive responses of respondents on the degree of respondents' acceptability on the developed instructional material in terms of accuracy, completeness and appropriateness, the scale on Table 2 was used as follows:

Table 2.

Arbitrary value	Statistical range	Descriptive Equivalent
5	4.21 - 5.00	Very High Acceptability(VAA)
4	3.41 - 4.20	High Acceptability(HA)
3	2.61 – 3.40	Moderately High Acceptability (MHA)
2	1.81 – 2.60	Low Acceptability (LA)
1	1.00 – 1.80	Very Low Acceptability(VLA)

Summary of Findings

Validation and Acceptability of the developed instructional visual aids on Basic Fingerprint Science

Table 3 presents the degree of validation of the instructional material in terms of content and instructional characteristics as evaluated by the respondents.

It is gleaned from the table that the weighted mean of content validity is 4.48 which garnered a descriptive equivalent of "strongly agree". This means that the developed instructional visual aid is arranged, informative, encourages and it suits the level of the intended learners. As cited by Lizardo (2010) that if the subject matter presented in the learning material is systematic and organized, this facilitates review of lesson and promotes retention of concepts.

The table also shows that the instructional characteristics have a weighted mean of 4.27 which garnered a descriptive equivalent of "strongly agree". This means that the instructional visual aid is chronological arranged and realistic, sparks the interest of learners. This coincide with Napanoy (2013) who cited that instructional material can be used to arouse interest, provide information, introduce students to different point view, provide illustrations, provide opportunities for practices, summarize information and provide for individual differences.

The total grand mean for content and instructional characteristics is 4.37 described as "strongly agree". This means that the evaluators strongly agreed with the validity of the developed instructional visual aid in terms of content and instructional characteristics.

Table 3. Content Validity and Instructional Characteristics

INDICATORS	MEAN	DE
A. CONTENT VALIDITY		
1. The content of the Instructional Visual Aids are arranged.	4.68	SA
2. The illustrations or drawings are informative.	4.67	SA
3. The conversation (textual) is in consonant to the pictures presented.	4.32	SA
4. The presentations have importance to the real life situation, thus encouraging clients to be interested in learning the concepts.	4.57	SA
5. The Instructional Visual Aids on Basic Fingerprint Science suit the level of the intended clients.	4.15	A
WEIGHTED MEAN	4.48	SA
B. INSTRUCTIONAL CHARACTERISTICS		
1. The learning objectives are clear and tangible.	4.18	A
2. The pictures and communication are arranged chronologically and realistic.	4.29	SA
3. The illustrations/drawings can spark the interest of the clients.	4.32	SA
4. The illustrations are very informative and easy to grasp.	4.20	A
5. The illustrations capture what are in the fingerprint hand-outs and internet are designed for self-learning.	4.36	SA
WEIGHTED MEAN	4.27	SA
GRAND MEAN	4.37	SA

Table 4 presents the result of the degree of acceptability as to accuracy, completeness, and appropriateness as perceived by the Criminology Instructors, Criminology Students and Criminology alumni.

It is gleaned from the table that the accuracy of the developed instructional visual aid has a weighted mean of 4.21 which garnered a descriptive equivalent of "Very High Acceptability". It also revealed that in terms of completeness of the developed instructional visual aid is rated "very high acceptability" as manifested by the total weighted mean of 4.26. The table also revealed that the appropriateness of the developed instructional visual aid has a weighted mean of 4.30 which has a descriptive equivalent of "very high".

In terms of accuracy, completeness and appropriateness of the developed instructional visual aid, it is evaluated as very high acceptability. This supported by the total grand mean of 4.26. This means that the evaluators found the developed instructional visual aid are highly acceptable and suited for classroom instruction.

Table 4. Degree of Acceptability as to Accuracy, Completeness and Appropriateness

INDICATORS	MEAN	DE
A. ACCURACY		
1. Explanation and presentation of contents	4.27	VHA
2. Practice of appropriate skills	4.08	HA
3. Diagnostic measurement	4.27	VHA
WEIGHTED MEAN	4.21	VHA
B. COMPLETENESS		
1. Perception on the concept	4.32	VHA
2. Visual Literacy and Design	4.35	VHA
3. Text design and Understanding	4.16	HA
4. Memory	4.27	VHA
5. Cognitive and Behavioural psychology	4.12	HA
6. Adult and General learning theory	4.34	VHA
WEIGHTED MEAN	4.26	VHA
C. APPROPRIATENESS		
1. Learner and student characteristic	4.18	HA
2. Settings resources and constraints	4.31	VHA
3. Analysis of job, tasks, and contents	4.33	VHA
4. Sequenced statements of objectives	4.31	VHA
5. Performance measurement	4.36	VHA
6. Instructional strategies	4.32	VHA
WEIGHTED MEAN	4.30	VHA
GRAND MEAN	4.26	VHA

The evaluator's responses revealed that the developed instructional visual aids on Basic Fingerprint Science is valid thus accepted in terms of content and instructional characteristics and its accuracy, completeness, and appropriateness are evaluated as very high acceptability, which could be used as instructional visual aids in teaching fingerprint subject.

Aguire (2009) mention in her study that the use of instructional material in teaching–learning process helps achieve quality education. The development of adequate instructional materials will help facilitate learning process in the mastery of basic skills and help strengthen critical thinking skills. She further stressed that learning is also made more interesting because the attention getting factor of instructional materials keeps learners alert.

Furthermore, Sokoken cited in his study that according to Ornstein, instructional materials affect students in the following ways: motivating them, contributing to their understanding, providing learning experiences, reinforcing learning, following for different interests, encouraging participation, and changing attitudes and feelings.

Conclusions

Based from the finding of the study the following conclusions were drawn:

- The developed instructional visual aids possessed the standards for instructional visual aids in term of content validity and instructional characteristics. Hence, it is valid and accepted by the respondents to be utilized as instructional material in teaching Basic Fingerprint Science.
- The developed instructional visual aids on Basic Fingerprint Science was evaluated and rated "very high acceptability", thus, accepted and found accurate, complete and appropriate as instructional visual aid in teaching the said subject.

Recommendations

Based from the findings and conclusions of the study the following recommendations are forwarded:

► The use of illustrative visual aids as instructional material in teaching fingerprint subject are highly recommended for it has a great positive impact to both educators and students in teaching- learning processes.

► It is recommended that developed instructional visual aids be utilized in teaching Fingerprint subject and other allied courses.

References:

Aguirre, Sandra B. (2009), *Effectiveness of the English 11 Workbook*, Mountain Province State Polytechnic College

Boyongan, Jufelyn C. (2001), *Teaching Aid for Grade 111, Mathematics in Tadian and Bauko Mountain Province Division*, Baguio City University

Cayagay, Glen C. (2012) *Development and Validation of Learning Package for Grade Seven Mathematics,* Mountain Province State Polytechnic College

Delos Santos, Noel (2003),*Instructional Package in General Statistics,* Mountain Province State Polytechnic College

Depayso, Veneranda (2009), Manual on Personal Identification with Practicum,

Lizardo, AgustineSapidda (2010), *Effectiveness of Number Theory Learning Modules,*
Mountain Province State Polytechnic College

Napanoy, Jay B., (2013), *Learning Modules in Differential Equation,* Mountain Province State Polytechnic College

Ngolab, Josephine D. (2015) *Instructional Materials Development by the Elementary School Teacher in the District of Bontoc,* Mountain Province State Polytechnic College

Mintas, Olivia K. (), *Workbook Using Realistic Mathematics for Grade IV Pupils,* Mountain Province State Polytechnic College

Montalban, Edwin Taganas (2010), Fingerprint (as a means of personal identification)

Po-or, Karyl A. (2009), *Development and Validation of Vocabulary Worksheet in Teaching Philippine Literature,* Mountain Province State Polytechnic College

Valdez, Gaudencio Jr. (1999) *Instructional Materials in Dactyloscopy*

http://nairaproject.com/projects/250.html
http://collections.infocollections.org/ukedu/uk/d/Jgtz017e/6.13.1.html#Jgtz017e.6.13.1

LEVEL OF PERSONAL FINANCIAL LITERACY OF THE PERSONNEL OF NORTH LUZON PHILIPPINES STATE COLLEGE

Author: Thelma R. Gacusana, CPA, MBA
Designation: College Accountant
Agency: North Luzon Philippines State College
San Nicolas, Candon City, Ilocos Sur

Abstract – ***The main purpose of this study was to determine and analyze the level of personal financial literacy of the personnel of North Luzon Philippines State College (NLPSC) in relation to some selected variables. The descriptive-correlational method of research was used with the questionnaire as the main data gathering tool. The respondents were the 113 employees of NLPSC. Frequency count and percentage, mean and Simple Linear Correlation Analysis were used in the statistical treatment of data. The researcher found out that the level of financial knowledge of the NLPSC employees affected the extent of their financial behavior and financial attitude, separately and as a whole. The researcher recommends the following: A training program or seminar-workshop on personal financial literacy shall be developed and be conducted to the NLPSC employees to enhance their awareness and capability of learning and appreciating the concepts of general finance, savings and investments, credit and borrowing, and insurance; and the effect of financial behavior and attitude to one's financial wellbeing. Licensed financial educators and financial planners may be invited to lecture/speak to facilitate the training or seminar-workshop. NLPSC shall encourage its employees to save in the employees' cooperative by signing an authorization form for the automatic salary deduction that will go into their emergency fund and/or as an integral part of their retirement plan. Initiatives shall be taken to influence them to cultivate advantageous financial behaviors and to adopt positive financial attitudes such as mentoring, posting of slogans/quotations, emphasizing the virtue of austerity, simplicity and judicious use of money and other resources. This may be done during meetings or informal discussions.***

Keywords: Financial Literacy, Financial Knowledge, Financial Behavior, Financial Attitude

I. INTRODUCTION

Most Filipinos do not know how to handle their money properly. That is why there are clichés such as "one-day-millionaire", "sky is the limit", and others that betray our lack of financial literacy.

The Organization for Economic Cooperation and Development International Network on Financial Education (OECD INFE) has defined financial literacy as "a combination of awareness, knowledge, skill, attitude and behavior necessary to make sound financial decisions and ultimately achieve individual financial wellbeing" (OECD INFE (2011) Measuring Financial Literacy: Core Questionnaire Measuring Financial Literacy). It empowers people to have a better control of their financial affairs so that they could face and surmount life's challenges like education, illness, job loss or retirement with less anxiety and difficulty. High financial literacy also helps achieve better outcomes for important political reforms such as the Conditional Cash Transfer Program or the 4P's, healthcare and pension reforms like the Philhealth and GSIS or SSS.

Statement of the Problem

This study determined and analyzed the level of personal financial literacy of the personnel of North Luzon Philippines State College in relation to some selected variables.

Specifically, it sought to answer the following questions:

1. What is the profile of the respondents in terms of age, sex, civil status, highest educational attainment, employment status, position/rank, average net monthly income, and salary grade?
2. What is the level of financial knowledge of the respondents along the areas of general finance, savings and investments, credit and borrowing, and insurance?
3. What is the extent of financial behavior of the respondents?
4. What is the extent of financial attitude of the respondents?
5. Is there a significant relationship between the level of financial knowledge, extent of financial behavior, and extent of financial attitude of the respondents and their personal profile?
6. Is there a significant relationship between their level of financial knowledge and their extent of financial behavior and financial attitude?

METHODOLOGY

The researcher made use of the descriptive correlational method of research with the 113 employees of North Luzon Philippines State College as of May, 2014 as respondents. A 3-part questionnaire was used as the data gathering tool. The first part collected data on the profile of the respondents. The second part was a 5-level Likert type questionnaire which collected data on the respondents' extent of financial behavior and financial attitude. The third part was also a 5-level Likert type questionnaire that gathered data on the level of financial knowledge of the respondents.

Data Gathering Procedures

The researcher, after securing the approval of the Officer-in-Charge of NLPSC, distributed the survey questionnaire to the respondents. During the distribution and retrieval, the researcher explained and clarified any uncertainties the respondents could have encountered. During the encoding, the responses to the negatively worded statements were reversed. The Statistical Package for Social Sciences (SPSS) was used to facilitate the computations.

Statistical Treatment of Data

The following statistical tools were used to treat the data:

Frequency Count and Percentage was used to describe the profile of the respondents.

Weighted Mean was used to determine the level of financial knowledge, extent of financial behavior and extent of financial attitude of the respondents.

Simple Linear Correlation Analysis was used to determine the relationship between the profile of the respondents and their level of financial knowledge, extent of financial behavior, and extent of financial attitude. This is also the statistical tool used to determine the relationship between the respondents' level of financial knowledge and their extent of financial behavior and extent of financial attitude, separately and as a whole.

To describe the level of financial knowledge, extent of financial behavior and extent of financial attitude of the respondents, the following norms were used:

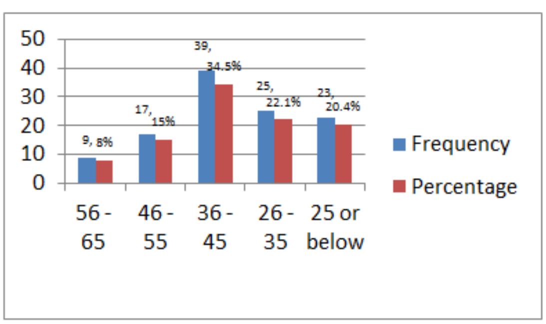
FINDINGS

Rating Scale	Weighted Mean Equivalent	Descriptive Rating
5	4.21 – 5.00	Very High(VH)
4	3.41 – 4.20	High (H)
3	2.61 – 3.40	Average (A)
2	1.81 – 2.60	Low (L)
1	1.00 – 1.80	Very Low (VL)

1. Profile of the Respondents

a. Age

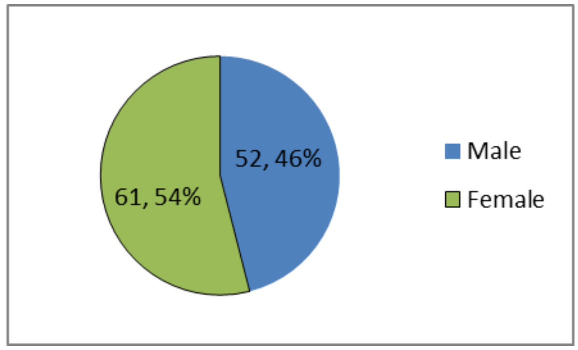
A large number (39 or 34.5%) of the respondents are 36-45 years old while only a few (9 or 8%) belong to the



age bracket 56-65 years old.

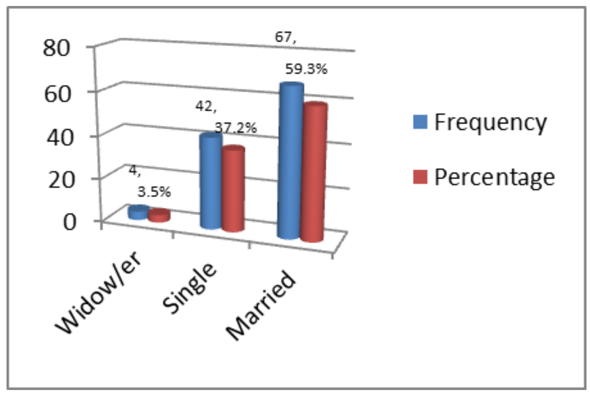
b. Sex

Females dominate the males in number with 61 or 54% female against 52 or 46.02%male respondents.



c. Civil Status

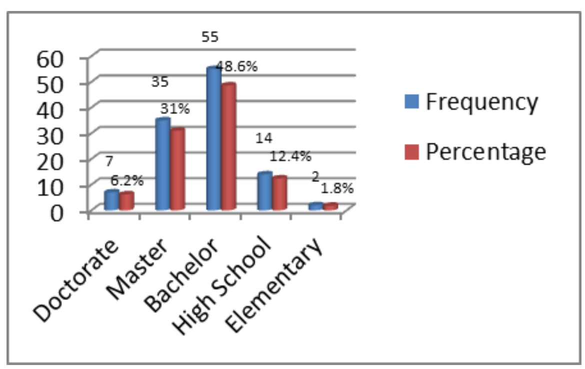
Majority (57 or 59.3%) are married while only a few (4 or 3.5%) are widows or widowers. The remaining 52 or



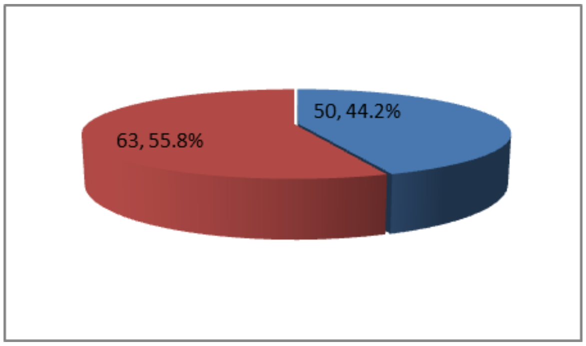
46.02% are single.

d. Highest Educational Attainment

There were 55 or 48.6% of the respondents who were Bachelor's Degree holders while 2 or 1.8% were elementary graduates.



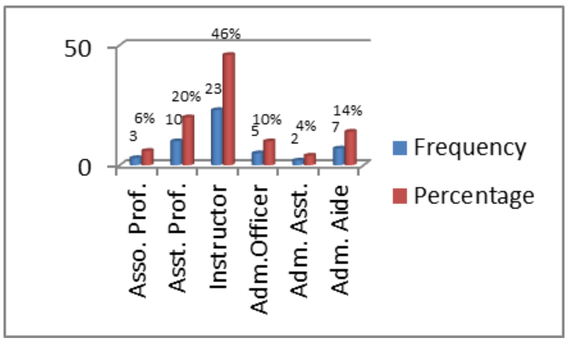
e. Employment Status



More than half (63 or 55.8%) of NLPSC employees are non-permanent while only 50 or 44.2% have permanent employment status.

f. Position/Rank

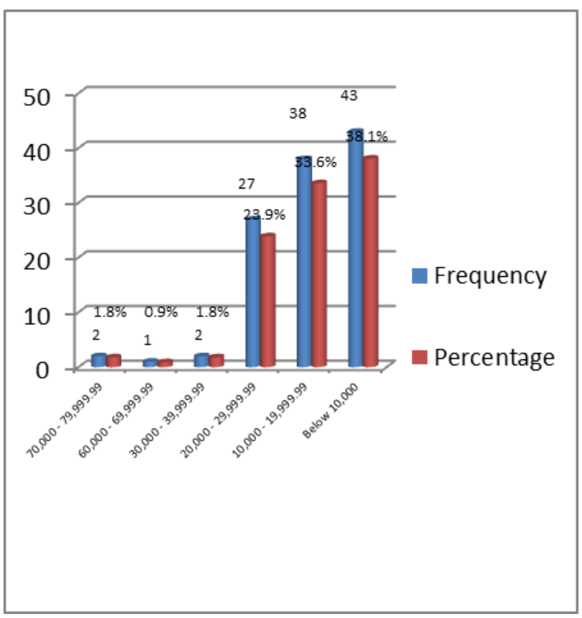
Among the permanent employees, a large number (23 or



46%) are occupying Instructor positions, while only three or 6% are occupying the highest rank of Associate Professor.

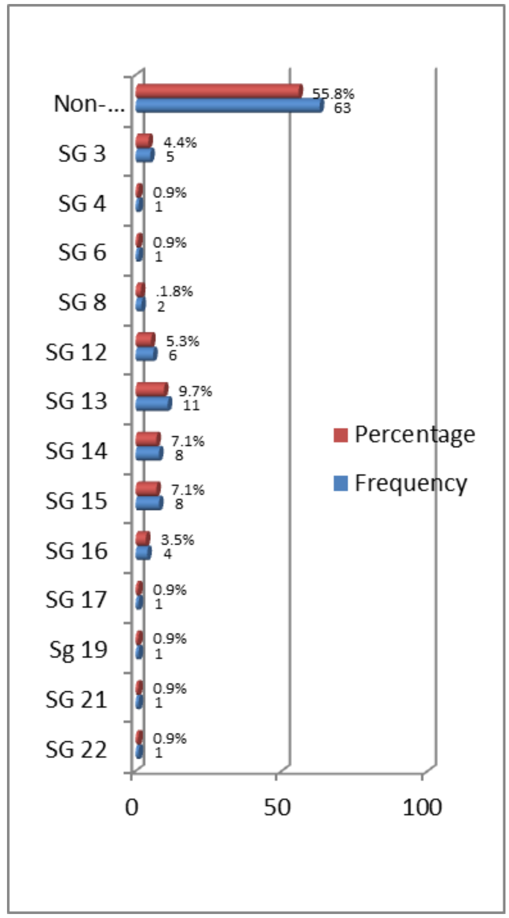
g. Average Net Monthly Income

The chart shows that a large number (43 or 38.1%) of the respondents are earning less than 10,000 pesos average net



monthly income, two each within the 70,000 to 79,999.99 and 30,000 to 39,999.99 bracket, while only one has a net monthly income within the 60,000 to 69,999.99 bracket.

h. Salary Grade



The chart shows that majority (63 or 55%) are non-permanent personnel with no salary grade, while those with salary grade 13 numbered 11 or 9.7%. There is only one employee in each of salary grades 22, 21, 19, 17, 6 and 4.

2. Level of Financial Knowledge of the Respondents

INDICATORS	$\bar{x}$	DR
A. General Finance		
1. Appreciation of financial planning	4.46	VHA
2. Discriminating asset as to liquidity	3.13	MA
3. Determination of net worth	3.58	HA
4. Knowledge of taxation	2.56	FA
5. Knowledge of effects of inflation	3.35	MA
6. Understanding the meaning of opportunity cost	2.99	MA
Overall	***3.35***	***A***

B. Savings and Investment		
7. Knowledge on deposit insurance	3.71	HA
8. Understanding the concept of compound interest	3.03	MA
9. Awareness of the cost averaging approach to investing	2.42	FA
10. Understanding the relationship of risk and return	3.29	MA
11. Knowledge of the similarities of mutual fund and unit investment trust fund	2.51	FA
12. Understanding the effects of fluctuations in foreign exchange rate	3.03	MA
Overall	*3.00*	*A*
C. Credit and Borrowing		
13. Knowledge of the five C's of credit	3.81	HA
14. Awareness of the consequences of loan co-signing	4.17	HA
15. Understanding the meaning and use of annual percentage rate	2.70	MA
16. Understanding credit card loan interest	3.29	MA
17. Knowing the nature of debit cards	3.39	MA
Overall	*3.47*	*H*
D. Insurance		
18. Knowledge about insurance	2.77	MA
19. Knowing the nature of term insurance	2.81	MA
20. Understanding the purpose of insurance	3.50	HA
Overall	*3.03*	*A*
Grand Mean	*3.17*	*A*

Legend:

Weighted Mean	*Item Descriptive Rating*	*Overall Descriptive Rating*
4.21-5.00	*Very Highly Aware (VHA)*	*Very High (VH)*
3.41-4.20	*Highly Aware (HA)*	*High (H)*
2.61-3.40	*Moderately Aware (MA)*	*Average (A)*
1.81-2.60	*Fairly Aware (FA)*	*Low (L)*
1.00-1.80	*Not Aware (NA)*	*Very Low (VL)*

Overall, the NLPSC employees have *average* (x=3.17) personal financial knowledge. They are *highly* (x=3.47) knowledgeable along the area of credit and borrowing, while *average* along the areas of general finance (x=3.35), saving and investment (x=3.00), and insurance (x=3.03).

3. Extent of Financial Behavior of the Respondents

Indicators of Financial Behavior	$\bar{x}$	DR
1. Engaging in financial planning/budgeting	4.20	SA
2. Keeping records	4.24	CA
3. Shopping and comparing products before buying	3.85	SA
4. Comparing and choosing products independently and objectively	2.72	U
5. Considering purchase before actually buying	4.75	CA
6. Paying bills on time	4.04	SA
7. Setting long-term financial goals	3.96	SA
8. Making ends meet	2.87	U
11. Saving actively	3.46	SA
12. Having sufficient emergency	2.82	U
13. Planning for retirement	3.34	U
Overall	**3.50**	H

Legend:

Weighted Mean	*Item Descriptive Rating*	*Overall Descriptive Rating*
4.21-5.00	*Completely Agree (CA)*	*Very High (VH)*
3.41-4.20	*Slightly Agree (SA)*	*High (H)*
2.61-3.40	*Undecided*	*Average (A)*
1.81-2.60	*Slightly Disagree (SD)*	*Low (L)*
1.00-1.80	*Completely Disagree(CD)*	*Very Low (VL)*

The extent of good financial behavior of the NLPSC employees is *High* (x=3.50). They have high financial behavior such that they take responsibility in managing their financial affairs through financial planning and budgeting. They also rated very high on keeping documents and records of important financial transactions and when considering the financial consequences of a purchase before actually buying. However, they are average in certain consumer behaviors as they only *slightly agree* on the statement "Whenever I need a financial product/service, I consider several companies and the various types offered by these companies", and they are also *undecided* on the statement "The last time I bought a financial product/service, my decision to buy that product or service was most influenced by the advertisements about that product/service".

The respondents are also uncertain as to the sufficiency of their emergency fund and may not have thoroughly thought of and planned for retirement.

4. Financial Attitude of the Respondents

Indicators of Financial Attitude	$\bar{x}$	DR
1. Prefer achieving long term goal over short term gratification	3.62	SA
2. More satisfied in saving than in spending	3.73	SA
3. Ready to take risk when investing	3.55	SA
4. Conscientious regard for money	2.73	U
5. At ease and comfortable in dealing with financial matters	3.38	U
6. Financially satisfied (being in control of financial affairs)	3.16	U
7. Financially confident (indicative of financial planning)	3.12	U
Overall	**3.33**	Nt

Weighted Mean	*Item Descriptive Rating*	*Overall Descriptive Rating*
4.21-5.00	*Completely Agree (CA)*	*Very Positive (VP)*
3.41-4.20	*Slightly Agree (SA)*	*Positive (P)*
2.61-3.40	*Undecided*	*Neutral (Nt)*
1.81-2.60	*Slightly Disagree (SD)*	*Negative (N)*
1.00-1.80	*Completely Disagree(CD)*	*Very Negative (VN)*

The financial attitude of the respondents is *neutral* (x=3.33). It implies that they are unsure or doubtful with their mental position and inclinations towards financial matters.

5. Correlation Coefficient between the Financial Knowledge of the Respondents and their Personal Profile

Profile	Financial Knowledge				
	General Finance	Savings and Investments	Credit and Borrowing	Insurance	As a Whole
Age	.204*	.106	.129	.066	.120
Sex	.085	.060	.129	-.062	.066
Civil Status	-.045	-.114	.049	-.066	-.052
Highest Educational Attainment	.296**	.237*	.324**	.138	.283**
Employment Status	.250**	.196*	.277**	.121	.239*
Position/Rank	.218*	.256**	.298**	.190*	.295**
Average Net Monthly Income	.115	.092	.127	.179	.144
Salary Grade	.216*	.236*	.308**	.176	.286**

Legend: **=*Correlation is significant at the 0.01 level.*
*= *Correlation is significant at the 0.05 level*

Age, highest educational attainment, employment status, position/rank, and salary grade are significantly related to the financial knowledge of the respondents along general finance. It means that employees who are older, highly educated, permanent with high position and salary grade have higher level of general finance knowledge.

Along the areas of saving and investing, and credit and borrowing, those with higher educational attainment, permanent, higher position and salary grade have better understanding of the concepts along these areas, while financial knowledge along insurance is affected by the position or rank of the employee.

As a whole, the overall personal financial knowledge of the NLPSC employees is affected by their educational attainment, employment status, position/rank, and salary grade. The higher their educational attainment, position/rank and salary grade, and of permanent employment status, the higher are their level of personal financial knowledge.

6. Correlation Coefficient between the Financial Behavior and Financial Attitude of the Respondents and their Personal Profile

Based on the table above, none among the profile of the respondents is significantly related to their financial behavior be-

Profile	Financial Behavior	Financial Attitude	As a Whole
Age	.054	.183	.140
Sex	.090	.115	.129
Civil Status	.137	.070	.138
Highest Education Attainment	.162	.125	.186*
Employment Status	.128	.287**	.251**
Position/Rank	.046	.239*	.164
Average Net Monthly Income	.141	.159	.190*
Salary Grade	.098	.240*	.203*

Legend:
**=*Correlation is significant at the 0.01 level*
*= *Correlation is significant at the 0.05 level*

cause the r-values are lower than the 0.01 and 0.05 level of significance. Hence the null hypothesis is accepted.

On the other hand, the profile of the respondents in terms of employment status, position/rank, and salary grade are found to be significantly related to the state of their financial attitude because the computed r-values are greater than the 0.01 and 0.05 level of significance. Hence the null hypothesis is rejected. This means that permanent employees who have higher position/rank and salary grade have more positive financial attitude.

As a whole, financial behavior and financial attitudes are significantly related to the respondents' highest educational attainment, employment status and average net monthly income.

7. Correlation Coefficient between the Financial Knowledge of the Respondents and their Financial Behavior and Financial Attitude

The preceding table shows that as a whole, the financial knowledge of the respondents is significantly related to their financial attitude and financial behavior whether

Indicators	Financial Knowledge				
	General Finance	Saving and Investment	Credit and Borrowing	Insurance	As a Whole
Financial Behavior	.112	.192*	.227*	.188*	.711**
Financial Attitude	.247**	.170	.300**	.149	.630**
As a Whole	.209*	.244**	.324**	.229*	.863**

Legend: **=*Correlation is significant at the 0.01 level.*
*= *Correlation is significant at the 0.05 level*

taken separately or combined. It implies that the higher a respondent's financial knowledge, the better he/she conducts his/her financial affairs because he/she has a more positive or optimistic financial outlook.

CONCLUSIONS

Based on the findings of the study, the following conclusions were drawn:

- ► Almost one half of the NLPSC employees were bachelor's degree holders, majority were female, married and held non-permanent positions that do not correspond to any particular salary grades. One out of three employees was approaching middle age and earning an average net monthly income of ten thousand (P10,000.00) pesos or less.
- ► The NLPSC employees are highly knowledgeable about credit and borrowing, but have normal awareness of the concepts of general finance, saving and investing, and insurance. Overall, their financial knowledge is average.
- ► The extent of efficiency or behavior by which the NLPSC employees conduct their financial affairs is high.

- Their mindset regarding financial matters is unclear.
- The level of financial knowledge of the NLPSC employees was directly influenced by their highest educational attainment, employment status, and average net monthly income.
- The extent of the financial behavior and attitude were directly influenced by their highest educational attainment, employment status, and average net monthly income.
- The level of financial knowledge of the respondents affected the extent of their financial behavior and financial attitudes separately and as a whole.

RECOMMENDATIONS

The following recommendations are forwarded:

- NLPSC shall not stop requesting for the funds to create additional plantilla positions for its much needed personnel. It shall continue its endeavor to increase enrolment rate to justify such request. It shall continue and intensify its school-to-school campaign, look into the possibility and feasibility of offering more courses, maintain or further improve its high performance rating in the board courses, and continually seek to improve all areas of its operations for a continuous leveling-up in accreditation.
- Training programs and seminar workshops shall be conducted to the employees to enhance their learning and appreciation of financial concepts.
- NLPSC shall encourage its personnel to adopt forced saving by applying for automatic salary deduction for savings.
- Initiatives shall be designed to influence the employees to improve their financial behavior and attitudes such as mentoring, poster and slogan making contests emphasizing the virtue of simplicity, austerity and judicious use of resources not only in the College but also in their personal affairs.
- Another survey shall be conducted to determine the area or topics in personal finance where the employees feel most inadequate/and or most interested in.
- Since educational attainment along with position/rank, salary grade and employment status positively influence financial literacy of the employees, NLPSC shall encourage them to pursue higher studies that could uplift their position/rank and salary grade.
- Similar study shall be conducted with NLPSC students as respondents to have an empirical basis on the possible integration of financial literacy topics in the curriculum.

ACKNOWLEDGEMENT

The researcher wishes to thank all the personnel of NLPSC who willingly participated in this research and the whole NLPSC Administration for their unflagging support.

REFERENCES

Atkinson, A. & Messy, F. (2012).*Measuring Financial Literacy: Results of the OECD/International Network on Financial Education (INFE) Pilot Study,* OECD working papers on finance, insurance and private pensions, No.15, OECD Publishing. Retrieved on August 10, 2011 from http://dx.doi.org/10.787/5k9csfs90fr4-en.

Bersales, L.G.S. & Mapa, D.S. (2006).*Patterns and Determinants of Household Saving.*Technical Paper. USAID, BSP-SES, EMERGE, and GRP-MTPDP.

Borden, L. M., et al. (2007). *Changing College Students' Financial Knowledge, Atitudes, and Behavior through Seminar Participation.*Journal of Family Economics Issues, 29, 1.Retrieved from http://www.s pringerlink3.metapress.com.

Chen, H. & Volpe, R. P. (1998).*An analysis of personal financial literacy among college students.*Financial Services Review, 7(2): 107-128. Retrieved from http://cgsnet.org.

Kapoor, J. R., Dlabay, L. R. & Hughes, R. J. (2007) **Personal Finance.** New York: McGraw-Hill/Irwin.

OECD INFE (2011). *Measuring financial literacy: core questionnaire in measuring financial literacy: questionnaire and guidance notes for conducting internationally comparable survey of financial literacy.* Paris: OECD. Retrieved September 9, 2012 from http://www.oecd.org.

EFFECTIVENESS OF LEARNING MODULES IN DIFFERENTIAL EQUATION

JAY BAGSAO NAPANOY
Mountain Province State Polytechnic College – Bontoc Campus
Bontoc, Mountain Province

Abstract

This study was conducted to determine the effectiveness of the learning modules in Differential Equation. The descriptive method of research was used in the study.

The study was conducted at the Mountain Province State Polytechnic College, Bontoc Campus. The respondents were the students in Differential Equation this Second Semester, SY 2014 – 2015.

After administering the pre-tests and posttests, the students' scores were subjected to statistical analysis. Findings showed that students' scores improved after taking the posttests. Statistical analysis using t-test reveals that the learning modules enhances the achievement scores of the students as shown in comparison of their pre-test and posttest scores. Aside from that, the attitudinal ratings of the students also changed. Statistical analysis also reveals that the learning modules helped or improved the attitudes of the students towards the subject from undecided to a positive attitude.

It is then recommended that the learning modules in Differential Equation be utilized. And lastly, the learning modules should be closely supervised so that students will be receptive to the subject.

Keywords: Differential Equation, effectiveness, learning modules, pre-test, posttest

Introduction

As Aristotle quoted, "for the things we have to learn before we can do them, we learn by doing them". This is also similar with John Dewey's "learning by doing". This shows that learning is best practice if there is manipulation or repetition of things being taught. If there is manipulation of objects, there is a tendency that learners will master the skill or another skill will be discovered. Repetition of learning leads not only to memorization but also to experiences. These experiences will give the learners the chance to recognize similar patterns and sequences to solve their own problems. As the saying goes, "experience is the best teacher".

In relation to mathematics education, learning is quite diversified. As known already, "no two individuals are alike". Learning for instance varies from person to person, from place to place and from time to time. Some tends to learn by doing it. Others learn by memorizing some patterns in mathematical formulas. Others also tend to learn mathematics via group dynamics and many more strategies. One of these strategies is the use of learning modules.

Learning modules are instructional materials used to facilitate the teaching – learning processes. These are designed to help the teacher and the students understand more a certain topic or a course. As Lizardo (2010) quoted, "learning modules serve as tools for assisting the delivery of instruction in any subjects". He also mentioned that these learning modules help everyone to acquire facts, skills and opinions for the development of cognitive processes.

These learning modules are very much needed tools in education today. These provide opportunities for learners to see if there is a progress in their own understanding. These learning modules will help them acquire knowledge by their own or if not, this will give them the chance to seek the help of other individuals aside from the teacher. With these, the learner is free to express his or her feelings regarding the course.

On the other hand, as mentioned by Lynn Resurrection (2008) the Philippines ranked third and fourth-to the last-among the countries which participated in the 1999 and 2003 Third International Mathematics and Science Study (TIMSS), respectively. Also, Ms. Chua (2012) in her article in the Educator 2012 emphasized that mathematics has a bad reputation in the Philippines. She reiterated that students cannot love mathematics because of their experiences in the past which led to a connection that mathematics is bad. But the statement of Ms. Chua is contradicted by Albastro (2008) as Resureccion interviewed that kids should learn the joy of math and not be afraid of mathematics; thus, there should be different strategies to use. One strategy is the use of learning modules.

Accordingly, mathematics is one of the most disciplines to teach and learn. Different strategies just like learning modules can change the way to teach and the way to understand mathematics. Differential Equation is one aspect of mathematics. This subject requires higher cognition because students enrolled on this are expected to master the basics in mathematics.

At MPSPC, Differential Equation is offered to students enrolled in Bachelor of Secondary Education specializing in Mathematics and students enrolled in Engineering Courses. For the education students, this subject is the last mathematics major subject that they will finish before enrolling their observation and practice teaching. This means that the students are expected to master Algebra, Trigonometry, Geometry and Calculus. This subject also entails students to switch to multiple demands in complex mathematical problems.

Differential Equation requires the students to have a better understanding and in depth knowledge of formulas, procedure and principles that will guide them to solve problems related to their specialization. They are obliged then to study more and comprehend the basic principles of mathematics and relate it to the different problems encountered in Differential Equation. The problem now arises when students are unable to recall and comprehend the basic skills and knowledge needed in Differential Equation. With these, most students fail on the said subject. Aside from that, most of the students took the subject for three times before passing it. As observed and manifested in their quiz and examination papers, the students lack the ability to relate formulas needed to solve a certain problem. Some are also slow in recalling facts or pursue procedures even though the instructor gave the examples beforehand and made it as part of a quiz. However, the researcher believes that if the teacher knows alternative methods to be used to teach this subject, then and only then will the students find meaning and relevance of the subject Differential Equation.

Aside from the aforementioned problems in Differential Equation, the school lack books on the said subject. The two books available at the library focused more or concentrated on Calculus and touch only the introductory part of Differential Equation. With these, the researcher believes that with the developed learning modules in Differential Equation, students may find the subject interesting and not as difficult as it seems.

Conceptual Framework

This study is anchored on John Dewey's theory on pragmatism "learning by doing". Learning is best caught by repetition. Doing it on a regular basis or repeating it leads to an improved learning. Improved learning leads to development and understanding. This is true with the use of learning modules. These Learning modules give the learners the chance to study the topics at their own pace. If they cannot still comprehend the topics at hand, they can just go back and study it again until they will understand the concepts behind the given problem.

Another concept is the learner – centered instruction. With the aid of learning modules, students become more aware of their own actions and capacities resulting to a more self – accepting. Once a learner becomes aware of his or her capabilities especially in computation and analysis of mathematical problems, he is already ready to educate himself or herself. As Delos Santos (2003) pointed out, child – centered learning experiences develop the interests of the learners. With the help of learning modules, a learner's interest can be aroused which leads to understanding the concepts, theorems, principles and computational skills needed to solve and understand mathematics in general.

It is then presumed that well organized and valid modules enhance motivation; thus, learning will take place. It is also believed that the developed learning modules in Differential Equation will help the students assimilate and comprehend the different knowledge needed in learning Differential Equation. Since learning modules are self – contained, this allows that students to study at their own pace and can adjust from concept to another.

Objectives

This study aims to determine the level of effectiveness of the Leaning Modules in Differential Equation at MPSPC. Specifically, it answered the following questions?

1. What is the effect of using the Learning Modules in Differential Equation on the achievement scores of Mathematics students?

1.1 Is there a significant difference on the achievement scores of mathematics students after taking the pre-test and posttest in Differential Equation?

2. What is the effect of using the Learning Modules in Differential Equation on the attitude of Mathematics students?

2.1 Is there a significant difference on the attitude of mathematics students before and after the conduct of the study in Differential Equation?

Scope and Delimitation

The primary aim of this study is to determine the effectiveness of the Learning Modules in Differential Equation at MPSPC – Bontoc Campus.

The study made use of pre-test and posttest to determine the effectiveness of the Learning Modules in Differential Equation.

Methodology

This study made use of the quasi-experimental method of research particularly the pre-test-posttest design. This was conducted at the Mountain Province State Polytechnic College in the SY 2014-2015. The pre-test and posttest of the different modules were used to determine the effectiveness of the said modules. For the attitudinal rating, the researcher made use of a questionnaire used by other researchers Lizardo (2010) and Mang-usan (2012).

Results and Discussion

On Effects of Learning Modules on the Achievement Scores

Achievement scores include the pre-test and posttest scores of the students enrolled in MM18 for the Second Semester, SY 2014 – 2015 of the Teacher Education Department at Mountain Province State Polytechnic College.

Pre-test and Posttest Scores of the Students

It can be gleaned from the table that there is a gradual increase of scores of the students after taking the posttests. As shown from the table, the mean rating of the students in the pre-test is 30.35 compared to their mean rating in the posttest of 79.59. There is a 49.24 increase of scores.

Still from the table, majority of the students got an increase of more than 40. As such, the scores of the students in the pre-test are below 35. In the posttest, the scores of the students were more than 35. This shows that the learning modules in Differential Equation affect the scores of the students.

Table 1. Pre-test and Posttest Scores of the Students in Differential Equation

STUDENT	PRE-TEST	POSTTEST	GAIN OF SCORES
1	28	78	50
2	34	100	66
3	33	102	69
4	28	74	46
5	27	73	46
6	31	67	36
7	31	73	42
8	30	75	45
9	32	75	43
10	29	73	44
11	30	76	46
12	32	85	53
13	34	92	58
14	30	74	44
15	31	97	66
16	29	73	44
17	27	66	39
Mean	**30.35**	**79.59**	**49.24**

This finding corroborates with the study of Acelajado (2005) that modular teaching has made a significant improvement in the achievement scores of the learners in mathematics. He further emphasized that modular teaching has positive effects on the respondents' achievement and confidence of the learners especially from the group of low ability.

Aside from that, Lizardo (2010) also affirmed in his study that learning modules enhances the academic performance of students as seen in his students' mean gain scores in Number Theory. He also reiterated that students who are exposed to learning modules became interested in the subject matter since they are provided with appropriate activities found in the modules. The study proved that teaching-learning processes are effective and improved when using learning modules.

Statistical analysis using t-test for correlated means reveals a significant finding. This implies that there is a significant difference on the pre-test and posttest scores of the students enrolled in Differential Equation. This proves that the learning modules in Differential Equation are effective.

Table 1.1 Comparison of the Mean Pre-test and Posttest Scores of the Students in Differential Equation

MODULES	MEAN PRE-TEST SCORES	MEAN POSTTEST SCORES	T-VALUE	P-VALUE	CRITICAL T-VALUE	FINDINGS
1	4.471	4.941	-1.992	.055	2.037	NOT SIGNIFICANT
2	7.882	8.647	-1.827	.077	2.037	NOT SIGNIFICANT
3	14.294	21.941	-4.314	< .05	2.037	SIGNIFICANT
4	10.765	12.882	-1.824	.078	2.037	NOT SIGNIFICANT
5	10.765	31.176	-23.038	< .05	2.037	SIGNIFICANT
OVERALL	**30.353**	**79.588**	**-17.636**	**<.05**	**2.037**	**SIGNIFICANT**

As gleaned from the table, the t-value of -17.636 implies a significant gain of scores in the posttest. The *p*-value is also seen as <.05.. On the same context, modules 3 and 5 were rated to be significant. As reflected in the table, the *p*-value in module 3 is <.05 which is also the same with module 5. On the other hand, the first module has a p-value of 0.055 which implies not significant. Module 2 also is rated to be non-significant as shown in the p-value of 0.077. Module 4 was also rated to be non-significant with a p-value of 0.078. Nonetheless, the overall impact of the learning modules is still effective as stipulated in the table.

The findings confirms the study of Garcia (2010) that the use of Knowledge Channel to teach students understand Mathematics leads to 88% of the respondents who were helped in studying mathematics. It is then concluded that through the use of instructional materials especially Knowledge Channel, there is an enhancement in the teaching – learning process. Not only that, it also enhances the achievement scores of students.

Anent to this, Sayog (1998) revealed in her study that instructional materials enhanced the learning concepts on the part of the students exposed to it. Further, the study also proved that instructional materials provided an opportunity for students to organize and reorganize their thinking skills regarding their observations in a demonstration and laboratory activity.

Aside from that, Caligtan (2000) found out that the use of DAMATH approach in mathematics significantly increase the computational skills of the students. Those who were exposed to DAMATH approach scored higher compared to their counterpart. This means that DAMATH approach as an instructional material in teaching mathematics help improve the achievement scores of students.

On Effects of Learning Modules on the Attitudinal Ratings of the Students

The attitudinal rating test was administered to the students before and after the conduct of the experiment.

It can be gleaned from the table that the grand mean is 3.43 described as agree. This implies that the students have a positive attitude towards Differential Equation. This is expected because the students were all mathematics majors. They also finished all the basic subjects in mathematics before enrolling in Differential Equation.

Table 2. Attitudinal Level of Students Enrolled in Differential Equation

STATEMENTS	MEAN	DE
1. I find Differential Equation interesting.	3.35	U
2. Differential Equation is one of the useful subjects.	3.68	A
3. The topics in Differential Equation challenge me to study more about the subject.	3.79	A
4. Differential Equation is useful in our lives.	3.21	U
5. I do not see any value in Differential Equation.	3.18	U
6. For me, Differential Equation is dry and boring.	3.21	U
7. I prefer to study Differential Equation than any other academic subject.	3.03	U
8. I need someone to help me with Differential Equation because it confuses me.	3.47	A
9. I feel I have a good foundation in Mathematics.	3.18	U
10. I come to my Differential Equation class prepared.	3.29	U
11. I really give up when I cannot solve Differential Equation problems.	3.29	U
12. I feel that I am being forced to study Differential Equation.	3.47	A
13. Differential Equation makes me nervous.	3.85	A
14. I find Differential Equation involves memorizing.	3.91	A
15. I solve Differential Equation problems even outside school.	3.47	A
GRAND MEAN	**3.43**	**A**

Anent to this, the statement "I find Differential Equation involves memorizing" was rated with the highest mean of 3.91 described as agree. This is clearly seen in all mathematics subjects that math involves the skill in memorizing patterns and formulas. Differential Equation on the other hand involves memorizing patterns and sequences. As such, solving equations involves rote memorization of formulas especially areas, volumes and many more.

"Differential Equation makes me nervous" was rated as "agree" with a mean of 3.85. This is due to the fact that it is the last mathematics subject that the students should finish before enrolling their observation. Aside from that, most of the students believed that the subject is very difficult so they feel nervous when taking up the subject.

On the other hand, the statement "I do not see any value in Differential Equation" was rated with the lowest mean of 3.18 described as undecided. As reflected in the different modules, the topics were purely on theorems and solving and applying these theorems to complicated problems. So it is expected that students will find the subject no to be of good value.

Table 2.1 Comparison of the Attitudinal Ratings of the Students Before and After the Conduct of the Experiment

STATEMENTS	PRE-TEST	DE	POST TEST	DE
1. I find Differential Equation interesting.	2.94	U	3.76	A
2. Differential Equation is one of the useful subjects.	3.12	U	4.24	FA
3. The topics in Differential Equation challenge me to study more about the subject.	3.12	U	4.47	FA
4. Differential Equation is useful in our lives.	2.65	U	3.76	A
5. I do not see any value in Differential Equation.	2.47	PD	3.88	A
6. For me, Differential Equation is dry and boring.	2.65	U	3.76	A
7. I prefer to study Differential Equation than any other academic subject.	2.59	PD	3.47	A
8. I need someone to help me with Differential Equation because it confuses me.	2.94	U	4.00	A
9. I feel I have a good foundation in Mathematics.	2.88	U	3.47	A
10. I come to my Differential Equation class prepared.	2.76	U	3.82	A
11. I really give up when I cannot solve Differential Equation problems.	2.65	U	3.94	A
12. I feel that I am being forced to study Differential Equation.	3.12	U	3.82	A
13. Differential Equation makes me nervous.	3.18	U	4.53	FA
14. I find Differential Equation involves memorizing.	3.18	U	4.65	FA
15. I solve Differential Equation problems even outside school.	3.18	U	3.76	A
WEIGHTED MEAN	**2.89**	**U**	**3.96**	**A**

$t-value = -9.209$ $p-value < .05$ SIGNIFICANT $CV = (0.05, df = 16) = 2.120$

Statistical analysis using t-test of correlated means reveals a significant result. This means that there is a significant difference on the attitudinal ratings of the students before and after the conduct of the study.

As gleaned from the table, the pre-attitudinal rating of the students is described as undecided with a mean of 2.89. After the experiment, their post attitudinal rating jump up to 3.96 described as "agree". This implies then that the modules in differential equation have an impact on the attitudes of the students. It changes from undecided to agree which is more of a positive attitude.

Still from the table, the attitudinal ratings of the students toward the subject changes. For instance, the statement "the topics in Differential Equation challenge me to study more about the subject" was rated as undecided with a mean of 3.12 before the modules were conducted. After the modules were delivered, this statement was rated as fully agree with a mean of 4.47. Aside from that, this statement "I come to my Differential Equation class prepared" was rated as undecided but after the conduct of the experiment, it was rated as agree. This shows that the learning modules in Differential Equation changed the attitudes of the students enrolled from neutral to positive.

The above findings confirms the study of Caligtan (2000) that DAMATH approach as an instructional aid just like the learning module positively changed the attitude of first years students towards mathematics I of Bangaan National High School. His finding also implies that a positive attitude towards mathematics do not necessarily mean high score in mathematics and a negative attitude indicate a low score in mathematics.

Conclusions

Based from the findings of this study, the following conclusions were drawn:

The use of learning modules in Differential Equation enhances the academic performances of the students, as evidenced by the students' mean gain scores.

The use of learning modules developed better attitude towards the subject.

Recommendations

In connection with the findings and conclusions, the researcher recommends that:

1. The learning modules should be utilized as an alternative and supplementary instructional material in Differential Equation;
2. Modular instruction should be closely supervised by the instructor to ensure and cultivate positive attitude towards the subject;
3. The learning modules should be digitalized.

References:

Aguirre, Sandra B. (2009). ***Effectiveness of the English II Workbook***. Mountain Province State Polytechnic College

Caligtan, Joseph B. (2000). ***DAMATH Approach: Effect on Students' Computation Skills, Participation and Attitude Towards Mathematics I.*** Mountain Province State Polytechnic College

Chua, Queena L. (2012). ***The Secrets to Success from Educator***. Metro Manila: MPR Pulications

De Duzman, Ana Perla B. (1998). ***Effectiveness of Assignments in Mathematics IV.*** Baguio Central University

Dominguez, Sayana M. (2000). ***The Teaching of Mathematics at Benguet National High School.*** Cordillera Career Development College

Ganotice, Bernardo Jr. L. (1996) ***Factors Affecting the Scholastic Performance of Students in Mathematics at the Dona Eufronia M. Puzon National High School.*** Cordillera Career Development College

Garcia, Arcely G. (2012). ***An Action Research on the Effectivity of Using the Knowledge Channel in Enhancing the teaching – Learning Process of Teachers and Pupils of Pandan Elementary School taken from The Modern Teacher Volume 61.*** Manila: In the Grade School Inc.

Lizardo, Agustine S. (2010). ***Effectiveness of Number Theory Learning Modules.*** Mountain Province State Polytechnic College

Malafo, Dolores K. (1998). ***Mathematics Attitudes and Competencies of the First Year Students of the Mountain Province General Comprehensive High School.*** Mountain Province State Polytechnic College

Mang-usan, Keith Kimson B. ***Relationship of Attitudes and Learning Styles of Math Majors to Their Academic Performance.*** Mountain Province State Polytechnic College

Morareng, Nestor A. (2004). ***Video-taped Lessons in Elementary Math: Effect on the Performance of Pupils in Combination Classes***. Mountain Province State Polytechnic College

Resurreccion, Lyn (2008) ***Filipinos' Math Skills Steadily Improving*** from http://www.abs-cbnnews.com/business/10/16/08/filipinos%E2%80%99-math-skills-%E2%80%98steadily-improving%E2%80%99

Sayog, Lilian F. (1998). ***Starter Experiment Approach: Its Effect on Students' Achievement and Laboratory Skills of Mankayan National High School***.

FESTIVALS OF PANGASINAN:
Its Origins and Implications

***CHERYL C. MENDOZA**
Instructor I
Pangasinan State University
Social Sciences Department
Bayambang Campus
Bayambang, Pangasinan
Quezon Blvd., Bayambang, Pangasinan
2423

Abstract

This study was conducted to understand Pangasinan festivals as a reflection of the people's norms and values; and as a tool for the promotion of the province's culture, arts and people's empowerment.

Data were gathered from the selected constituents of nine (9) local government units (LGUs) through the use of archival research and focus group discussion. The subjects that were used in this study are four (4) cities in Pangasinan, Alaminos, Dagupan, San Carlos and Urdaneta. The municipalities are Bayambang, Bani, Anda, Balungao, and Sto. Tomas.

The study found out that: 1) the LGUs conduct festivals even with smaller budget; 2) the constituents generally attend most of the festivals whether the activities are religious, economic/tourism or leisure/entertainment in nature; and 3) the community residents "strongly agree" to the implications of the festivals to the socio-cultural aspects of the community including its impact to the constituents' norms and values.

The study recommends that 1) the City/ Municipality Tourism Office should conduct an internal assessment or inward-looking evaluation of their programs/projects to assess whether they serve the purpose of the organization and that of the LGU as a whole; 2) sufficient fundings should be given by the national government to the local government in order to support festival celebration that reflect the different cultural values¸ traditions and traits of Pangasinenses; and 3) there should be a creation of an agency whose main task is to coordinate the activities of the different private and government sectors during festival celebration.

Key words: Festivals, Culture, Arts, Empowerment, Norms

Introduction

In the contemporary era, more and more towns and cities are increasingly staging festivals, fairs, caravans and other fascinating markets and events to lure visitors, investments and to improve the image of the place itself. Festivals and events are essential part of the people's life. They have a function of providing a good vehicle to exhibit cultural and social practices of people to stimulate urban development and boost local economy as a whole.

In order to boost the development of culture in every locality, Republic Act. No. 7356 (April 3, 1992) was created. This gave birth to the National Commission for Culture and the Arts (NCCA), that creates the culture and arts community which envisions the "Filipino culture as the wellspring of national and global well-being". It has the mandate to "develop and promote the Filipino national culture and arts and preserve Filipino cultural heritage". Likewise, this agency ensures the preservation and integration of traditional culture and its various creative expressions as a dynamic part of the cultural mainstream.

Inspired by this Republic Act 7356, the Philippines with an infinite variety of festivals that exist in every town and cities have their own way of showcase. Harvest and thanksgiving festivals are inheritance from ages in areas where agriculture and fishing was the primary livelihood. Fiestas, which are the manifestations of thanksgiving, are part and bundle of Filipino culture. Through good times and bad times the fiestas must go on to pay tribute to the patron saint for all the approbations extended to them. It is usually celebrated with all the display of colourful activities and people's enthusiasm to create a variety and meaningful experiences. Events and festivals have been one of the fastest growing sections of the world leisure industry, in the past couple of decades. Nowadays, events play a major role in shaping cultures and societies. Events are supported and promoted by governments, businesses, and corporations, which ease their marketing strategies, and image promotions. It can be observed that local government units do not only conduct festivals to promote their heritage but also tourism as well, thus the influx of local and foreign tourists in the locality contributes to the socio-economic development.

The Fiestas patronales ("patronage festivals" in English) are yearly celebrations held in countries influenced by Spanish culture. A fiesta patronal is usually dedicated to a saint or virgin, who is the patron of whichever city that holds the fiesta. Usually, town members adorn the town streets with colorful decorations and other things. In some larger cities, there may be several fiestas, usually about the patron saint for the local parish. Depending on the budget of the town, the fiestas patronales may run from one (the day of the saint being honoured) to nine days, called el novenario.

The fiesta tradition is one of the defining cultural practices of the Filipino people. Although prior to the Spanish era, when social structures across the archipelago were still divided by race, ethno-linguistic clustering, and tribal grouping, there already was the universality that animism and polytheism were ingrained in the belief systems of the people.

In Luzon, Visayas and Mindanao when Christianity spread during the Spanish colonial era, the ritual tradition of pre-Hispanic feasting eventually facilitated missionary efforts to teach Christianity by introducing the observance of the Holy Week, Corpus Christi and the feast of the local patron saints. These were the first religious fiestas observed by the people under Roman Catholic indoctrination through ritual enactments.

To attract the natives of the Philippines to their religion, one of the things that the Spanish friars did was to absorb the anitoistic or native practices of the people. This practice or policy of the Spaniards or the Christian religion is one of its proven ways in easily converting other groups of people to the Christian faith. Due to its proven effectiveness, the Spaniards absorbed the different anitoistic practices of the people in the country.

Over the years, the fiesta tradition expanded to include other religious inspirations and non-religious contemporary festival events. Because it was under the Catholic faith that the fiestas became an organized fixture in emergent Filipino culture, contemporary history credits the fiesta as one of the legacies of the Spanish period. Spanish missionaries, who documented the first encounter with the people of Pangasinan, noted that indigenous festivities were celebrated with merriment and the imbibing of alcohol. The context of the feast was linked to the practice of ritual offerings or thanksgiving to the long forgotten indigenous gods of Pangasinan.

Statement of the Problem

This study aimed to determine the Pangasinan festivals and events as a tool of attaining sustainable local economic development and the promotion of Pangasinan culture, arts and a medium of people's empowerment.

Specifically, this research addressed the following questions:

1. What is the profile of local government unit (LGU) in terms of:
1.1. land area;
1.2. population;
1.3. class level;
1.4. geographical location; and
1.5. nature and origin of the festival?
2. What are the activities in the municipality/cities' festival celebration under the following aspects:
3.1. religious;
.2. economic/tourism;
3.3. leisure/entertainment;
4. What is the implication of the festivals to the municipality/ cities' constituents in the following aspects:
4.1. socio-cultural;
4.2. economic; and
4.3. political?
5. What is the extent of the involvement of the constituents in the planning and implementation of the festival related activities?
6. What are the problems encountered by the constituents with regard to the celebration of their festivals?
7. Do the constituents still favor the conduct of such festivals?

Methodology

Data were gathered from the selected constituents of nine (9) local government units (LGU's) through the use of archival research and focus group discussion. The subjects of this study include five (5) municipalities, one (1) each from the five (5) class levels and the four (4) cities that celebrates festivals. Since there are only four (4) cities in Pangasinan, Alaminos, Dagupan, San Carlos and Urdaneta are all automatically included. However, in the case of municipalities, stratified random sampling method was used. After which, lottery method was used to determine objectively the municipalities which was included in this study, to wit: Bayambang from the 1st class municipality, Bani from the 2nd class, Anda from the 3rd class, Balungao from the 4th class and Sto. Tomas from the 5th class municipality.

Instrumentation and Validation

To obtain the primary sources of information, the interview schedule was used. In gathering the data, the researcher used the questionnaire-checklist as the main instrument. The said questionnaire was constructed by the researcher. Observations was likewise done to supplement the data which was gathered and was later subjected to content validation with the help of some experts, prior to its finalization. The draft of the questionnaire was presented to the researcher's adviser, critique reader, and panel members for their comments, and suggestions. After the necessary revisions, the draft of questionnaire was tested to ten (10) citizens who are not actual respondents of the study in order to determine the areas that are confusing to the respondents. The questionnaire was presented to a pool of experts for content-validation purposes. Their wise recommendations were considered in finalizing the questionnaire. Informal interviews were done to some respondents to gather additional data which were likewise conducted during the actual administration of the questionnaire.

Treatment of the Data

To obtain valid and reliable information from the data gathered, appropriate statistical tools was used in the study.

To answer Problem No.1, which focused on the profile of the LGUs, the nature and origin of their festivals, the different activities of the place in relation to their festivals was presented in a narrative form.

To answer Problem No. 2, frequency distribution was used. The socio-demographic attributes of the municipality/cities constituents was described based on the obtained frequency and corresponding percentage of the classes of the given variable.

Problem 3 and 6 was answered by ranking the classes of the variable based on their frequency. In this problem, the most and the least participated activities by the municipality/cities constituents and the most and least encountered problems in the celebration of the festivals were determined.

Problem 4 and 5 which is about the extent of involvement and the implications of the festivals to the municipality/cities constituents was determined using average weighted mean.

The range of values below was used to describe the extent of involvement and implication of the festival to the constituents

Range	Extent of Involvement Description	Implication Description
1 - 1.79	Not Involved (NI)	(SD)
1.80 – 2.59	Least Involved (LI)	(D)
2.60 – 3.39	Involved (I)	(N)
3.40 – 4. 19	More Involved (MI)	(A)
4.20 – 5.00	Highly Involved (HI)	(SA)

Pangasinan Festivals: A Glimpse of a Rich Heritage

Profile of Local Government Units

Each of the nine (9) cases is presented and described in the succeeding paragraphs, specifically on the profile of the local government units (LGUs), socio demographic attributes of the municipality/cities' constituents, the activities in relation to the festival celebration, the extent of the involvement of the contituents in the planning and implementation of the festival related activities, the implication of the festivals to the municipality/cities' constituents with regards to the socio-cultural, economic and political aspects, the problems encountered by the constituents with regard to the celebration of their festivals and whether they still favor the conduct of such festivals. Each municipality/city is presented with a brief history in order to make an attempt at looking into the provenance of their respective festivals.
The aforementioned LGUs belong to different class levels

Table 1
Profile of Local Government Units

Profile of LGU	ALA	DAG	SAN	URD	BAY	BAN	AND	BAL	STO
Land Area	16,426 ha; 39 brgys	37.2 sq.m; 31 brgys	188,816 ha; 86 brgys	12,100 ha; 34 brgys	16,800 ha; 77 brgys	20,911 ha; 27 brgys	8,380 ha; 18 brgys	7,325 ha; 20 brgys	1,429.32 ha; 10 brgys
Population	79,788	130,328	161,884	122,113	116,426	42,824	34,620	25,214	14,406
Class Level	5th class component city	1st class city	2nd class city	2nd class city	1st class mun	2nd class mun	3rd class mun	4th class mun	5th class mun
Geographical Location	Bounded by Sual, Bani, and Mabini	Bounded by the ff north-Lingayen Gulf; east-San Fabian ; south-Calasiao west-Binmaley	Bounded by the ff: north-Binmaley east-Malasiqui south-Basista west-Urbiztondo	Central part of northern Panga-sinan	Bounded by the ff: north-Malasqui south-Camiling east-Bautista west-Urbiz-tondo	Bounded by the ff: north-bolinao - east-anda south-alaminos west-west phil sea	only island town of Panga-sinan	southern part of Panga-sinan border-Ring the province of Nueva Ecija	lies along Agno river san-wiched between Rosales and Alcala
Nature and Origin of Festival	Hundred Islands Festival (March 16-21)	Bangus Festival (April)	Mango And Bamboo Festival (April)	Dumayo Festival (March 18-21)	Malangsi Fish-tival (1st week of April)	Pakwan Festival (February 6-9	Binungey Festival (April)	Goat Festival (March 16-21)	Corn Festival (3rd week of March)

thereby receiving different IRA (Internal Revenue Allotment) shares. Yet, all of them celebrate their respective festivals annually. The festival is celebrated either based on the "One Town, One Product Program (OTOP) by the government or based on the main source of the livelihood of the majority of the residents in the community. Predominantly, however, festivals are celebrated following Christian beliefs. The following are the descriptions of the festivals of the different towns and cities.

1.Alaminos

Alaminos is a fourth class city in the province of Pangasinan. According to the 2010 census, it has a population of 85, 025 people. It is bounded by the municipalities of Sual, Bani and Mabini with 16, 426 hectares of land are in 39 barangays. Alaminos used to be a part of Bolinao which was one of the nine towns in the northern most part of Zambales. It became a town independent of its mother town in 1747. The town got its name in 1872 in honor of Lieutenant Governor General Alaminos, the then Governor General of the Philippines. The town became a city in 2001 by virtue of Republic Act 9025, An Act Converting the Municipality of Alaminos, Province of Pangasinan into a Component City to be known as the City of Alaminos. Alaminos is the home to the Hundred Islands National Park, the very first national park in the Philippines. It is also the heart of Western Pangasinan; it is a center of commerce, finance, education, industry and services.

Photos: (www.pangasinan.gov.ph

The city celebrates the "Galila Hundred Islands Festivals"

which is held from March 16 to March 21 of every year. Galila means "come" in the vernacular. On its third year of festival celebration, the city adopted Hundred Islands Festival where Alaminos City being known for its majestic and world famous Hundred Islands National Park, also boosts of its unique lean meat product, longanisa. Alaminos' longanisa has long been an all-time favorite by the Pangasinenses. It is best served during breakfast and is currently regarded as one, if not, the tastiest native sausages in the country. With its distinctive salty and zesty taste, Alaminos longanisa gained its reputation as one of the best processed meat products in the country. Considered healthy and delicious, it uses all natural ingredients like garlic, black pepper, salt, achuete and other secret spices mixed with ground pork. Longanisas from Alaminos, Pangasinan are unique because of the toothpicks they use to divide the segments. Each length has six pieces and is hung using a buli grass string.

The City Government activities lined up for the event are Children's Day to feature the Far East Acrobat; Alaminos City Para sa Lahat (for all) Night; Miss Hundred Islands 2014 Pageant and Coronation; Longanisa Festival; Street dancing Competition; Shooting Competition; and Youth, Senior Citizens and Balikbayan Night. They also scheduled on the first day the launching of the First Western Pangasinan Tourism Travel and Agri-Trade Expo. Prior the festival, an ultra-marathon dubbed as 100 Islands Ultra Marathon was held.

2. Dagupan

The City of Dagupan is a first class city created by virtue of Republic Act 170, or the Charter City of Dagupan City. It is located on the northern part of Pangasinan with an area of 37.2 sq.km. comprising 31 barangays. The city is considered as the province's industrial hub. Although categorized as urban in its entirety, one third of the city's total barangays are still devoted into agricultural production and nine remain as fishing communities. About 26.2 percent (9.76.sq.km.) of the city's total land area in 2003 were used as fishponds for brackish water production such as for culturing milkfish, prawns, shrimps, crabs, and mussels.

Milkfish, popularly known as "bangus", abounds in Pangasinan. The province is the country's top producer of milkfish cultured in marine fish cage and marine fish pen. Dagupan is among the top producers of milkfish in the province. There are two kinds of milkfish cultured in the city. One kind is the Bonuan Bangus which is the more preferred kind because of its savory taste and palatability. This kind of milkfish has a short arched belly, fat, with fine and white shiny scales; short tailed and has small head. It is also soft-fleshed and juicy. It feeds on lablab or benthic blue algae, diatoms and planktons and is grown only in fishponds along the inland waters of Dagupan City. Each Bonuan Bangus cannot weigh heavier than 250 grams because of its dependence on natural food. Meanwhile, the other kind of milkfish, which is raised only in fish pens/cages, feeds on formulated feeds. It can be distinguished from the Bonuan Bangus with its long arched belly and long tail. To give focus on the local milkfish industry and to promote the city as the Bangus Capital of the World, the City Government of Dagupan conceptualized the Bangus Festival.
Photos: (www.dagupan.gov.ph)

The Bangus Festival, first celebrated in 2002 is an annual festivity in Dagupan City that kicks off every month of April. Initially a part of the thanksgiving festival Pista'y Dayat, Bangus Festival now developed into a two-week socio-economic program of activities that highlights the city's top produce. The festival commences with the lighting of 1,000 barbecue grills lined up to cook thousands of bangus, which stretches up to two kilometres. This also serves as a competition for hundreds of cooks, whose dishes are not only judged by the grilling but through whipping up the tastiest and most creative way of serving bangus. The contest was eventually called "101 Ways to Cook Bangus" and won for the city recognition in the Guinness Book of World Records for the longest barbeque in 2003. Aside from the grilling challenge, the festivity showcases a bangus eating contest, a search for the biggest and heaviest bangus, the Gilon-gilon dancing festival, the Pigar-pigar festival, the Halo-halo festival, and the Bangusan street party.

3. San Carlos

San Carlos City which is classified as a second class city in the province is politically subdivided into 86 barangays that covers a total land area of 188, 816 hectares and is primarily an agricultural city. The place now called San Carlos City was already a flourishing community since pre-colonial times. It was previously part of a former town called Binalatongan. Binalatongan was the capital of Luyag na Caboloan, an ancient kingdom (now comprised by the provinces of Tarlac, Zambales, Nueva Ecija, La Union, Pangasinan, and Benguet) ruled by King Ari Kasikis. The name of Binalatongan was derived from the abundance of mongo (mung bean) plants along the San Juan riverbanks. Caboloan is the name of the primitive Pangasinense dialect, of which its purest form was spoken by the natives of Binalatongan.

San Carlos City is among the liveliest places in the province of Pangasinan in terms of economic activity. It has the largest number of fruiting mango tress- their fruits are among the most delicious in the country- and a flourishing bamboo craft industry. San Carlos City is popular in bamboo industry, the city has its own bamboo market where produce from bamboo like nipa huts, baskets, lamp shades, furniture, cabinets, among others are on display and traded. Traders from other provinces come here to buy the produce and sell these to outside provinces. For such reasons, a festival promoting San Carlos City as major trading center of bamboo based products/furniture and best producer of "carabao" mangoes and other mango variety in the country has been created which is the Mango and Bamboo Festival and is usually celebrated in the month of April.

Photos:(http://www.asensopangasinan.com/mango-and b bamboo-festival-of-san-carlos-city/ and Bryann R. Gabis)

The Mango-Bamboo Festival is highlighted by street dancing. It also includes the following: Barangay Night; SK/Sangguniang Bayan Night; Balikbayan Night; Kiwanis/Lions Night; Agrarian Night; Drum and Lyre Competition; Parades; and Aerobics. It is a week-long of activities in this city that have commenced to promote its prime products-the bamboo and mango.

4. Urdaneta

Urdaneta City is located in the eastern part of Pangasinan

and is classified as a second class city with a land area of 12, 100 hectares. The first settlers of the area were Pangasinenses, followed by a migration of Ilocanos who settled in outlying areas. These settlers petitioned the Spanish government to allow them to form a separate pueblo for greater ties and stronger unity. Their petition was granted and Urdaneta was formally founded as a pueblo on January 8, 1858. It was named after the famous aide of Magellan, Father Simon de Urdaneta, a soldier, navigator, cosmographer and evangelist.
Photos: (http:// www.asensopangasinan.com)

Urdaneta City celebrates Dumayo Festival annually which is held on March 18-March 31 of each year. "Dumayo" is an Ilocano word which means "visit us" or "go there" in English. The Dumayo Festival showcases the varied cultures of the Cordillerans, Muslims and Batanguenos as well as the Chinese and Indian communities who have settled in the city and contributed to its cultural evolution and economic transformation through the decades.
The Dumayo Festival is only in its 3rd year of celebration. Urdaneta City celebrates Dumayo Festival annually to give thanks for the blessings that the city has received throughout the years. Highlighting the opening of the Dumayo Festival is the search of the "Most Attractive Carabao" which was participated in by the 34 barangays of the city that were clustered into ten districts. The carabaos were dressed in fashion together with their carts full of products from their districts. Further, street dancers from the city and street dancers (guest) from other municipality join the said festivities. Floats depicting the rich culture and people of these regional and international groups in the city are an added attraction. Other activities that gave meaning to the celebration were: Basbas ng Pag-iisang Dibdib (free mass wedding), bloodletting activity, tree planting for environment preservation, jobs fair and fun run for a cause. Some of the highlight of this event is the grand parade where carabaos adorned with various ornaments were featured. Further, street dancers from the city and street dancers (guest) from other municipality join the said festivities. Floats depecting the rich culture and people of these regional and international groups in the city are an added attraction.

5. Bayambang
The town of Bayambang is a first class municipality that lies in the central part of southern Pangasinan on the banks of the Agno River. It is composed of 77 barangays with a land area of 16, 800 hectares. Bayambang in the early days had a big territorial coverage. The municipalities of Bautista, Alcala, Sto. Tomas and Rosales were once part of the old Bayambang. Today, its size had been reduced after the aforementioned municipalities' attained municipal status. The then President Emilio Aguinaldo of the First Philippine Republic established his camp in Bayambang in November 13, 1899 when he was running away from the Americans. Aguinaldo disbands his regular army and they resorted to guerilla warfare. Further, it was in the town of Bautista, which was once a part of Bayambang where the lyrics of Lupang Hinirang, the Philippine national anthem were composed by Jose Palma.
Bayambang, just like the other municipalities, observed the celebration of fiesta foremost as a way of thanksgiving to God in gratitude to the year-round blessings bestowed upon the townspeople. On such occasion, the best known and outstanding products of the town are showcased and displayed exhibits as a manifestation of the progress and development attained by the locality. Bayambang, which is known for its fish products such as mudfish (dalag), catfish (pantat), gele-gele, siringan, alalo, gurami, and others which are sourced out from the town's Mangabul lake celebrates the "Malangsi Fish-tival" every 1st week of April. The word "Malangsi" is a reference to the variety of freshwater fishes that abound in the Mangabul Lake is a 2,000 hectare swath of land which has some dry as well as wet portions which is the habitat of the aforesaid malangsi fishes.
Photos: (www.pangasinan.gov.ph)
In 2014, the town of Bayambang was able to establish a new world record in barbeque grill when it holds its fifth Malangsi Fish-tival as a final activity of the 400th anniversary of their town. The town created more than seven-kilometer long grill that break the current six-kilometer record set by Turkey. Other events lined up for the celebration include the Search for the Most Distinguished Bayambangueno, 100 Ways to Cook Malangsi, street dancing, and Grand Float Competition and Civic Parade.
6. Bani
Bani, founded on March 18, 1767, used to be a part of the province of Zambales. In May 1903, it was transferred to Pangasinan together with the towns of Agno, Alaminos, Anda, Bolinao, Burgos, Dasol, Infanta and Mabini because the provincial capital then, Iba, was very far and transportaion was difficult. The original name of the town was San Simon. The town was later named Bani after the tree where the image of the Patroness, the Immaculate Conception, the Patron Saint of the town, was found. The territory is a 2nd class municipality and is divided into two regions by the tail of the Zambales.
Bani, the watermelon producer in Pangasinan had been known not only in the entire Northern Luzon, but also in the Philippines for its Pakwan. The watermelons of Bani are known far and wide to be the sweetest in the Philippines as they grow in farms with soil rich in limestone. It is believed that the limestones helps filter of the water that gets into the plant which explains the reason why the watermelon produced in their town is different from others. Some 100 to almost 200 hectares of farmlands in the town are devoted yearly for watermelon production. The watermelons from Bani come in green and yellow and are marketed to Manila, Clark, Subic, and Dagupan City. Aside from watermelons, the town also produces the round and yellow melon, cantaloupe and honey dew, all belong to the watermelon family.

As part of positioning Bani, Pangasinan as the “Watermelon Capital of the North”, the town hold its first ever Pakwan Festival last February 6 to 9, 2014. The Pakwan festival aims to boost tourism industry and to further address the importance of watermelon as the primary product of the town. The local government had lined-up several activities for the celebration of “Pakwan Festival” to promote their best tasting giant watermelons to tourists who come during the celebration.

It was said that during the Pakwan Festivals, there were almost a thousand dancers who take to the streets during those days and each group of dancers with a minimum of 15 participants performed for five minutes. Other exciting features of the festival are “Anibersaya” and “Human Pakwan” which was participated in by the fattest of men in the town whose body was painted with the color of watermelon.

Photos:(https://www.google.com.ph)

The local government unit (LGU) of Bani, Pangasinan will soon institutionalize its annual celebration of the “Pakwan” (Watermelon) Festival after the event’s initial success. Bouyed up by the success of the first festival, the second Pakwan Festival will be a month-long celebration between January and February in time for the harvest season.

7. Anda

Anda is a thrid class municipality with a land area of 8, 380 hectares, subdivided into 18 barangays. According to the latest census, it has a population of 34, 620. The town of Anda was inaugurated on July 1850 which was previously part of the Province of Zambales. Upon the enactment of Public Act No. 1004 dated November 30, 1903, Anda was ceded to the Province of Pangasinan. The Municipality of Anda is the only island town of Pangasinan. The town is now linked to the municipal mainland through a 400-meter long bridge across the Kakiputan Channel. Anda is rich in marine resources such as shrimp, crab, octopus, sea weeds, and various fishes perfect for seafood lovers. It also has productive lands, where they can harvest rice, corn and “malagkit” sticky rice.

Anda is celebrating a yearly festival called “Binungey Festival”. They selected Binungey Festival as their yearly festivity to promote the number one product of the town which is locally known as "Binungey". Binungey is a food made from the mixture of “malagkit” sticky rice, coconut milk, salt and placed inside the bamboo an cooked in a low fire. It is the number one product of Andanian’s which they used to prepare and offer for the visitors during fiestas, and special occasions. Eventually, the festival of the town was named after the number one delicacy of the town “Binungey”. Like other festivals celebrated in the province, Binungey Festival is full of enjoyable activities to entertain townspeople and visitors.

(photos:http://www.asensopangasinan.com/binungey-festival-anda-pangasinan/

8. Balungao

Balungao is a municipality located in the southeastern part of the Province of Pangasinan, bordering the province of Nueva Ecija to the south. According to the 2010 census, it has a population of 26, 678 people with a fourth class income classification. Balungao is predominantly rural community with an area of 7,325 hectares. The town of Balungao got its unique name from a young widowed , beautiful lass. People were fascinated by her beauty and soon named her “balun-ugaw” in the native dialect meaning “young widower”. So the place became famous on the tongues of many- whenever one goes to this place, they would call it “Balungao”, derevied from the word “balun-ugaw”. Balungao with its primary place of interest is an inactive/extinct volcano, Mount Balungao, is generally believed to be officially founded in the year 1815. The primary source of income is farming and raising of ruminants. Goat raising is a farming activity that requires low investment and low maintenance. Goat production of this town is recognized by national agencies especially on its technology transfer and receive several awards.

The celebration of the Goat Festival in the municipality was conceived through the concerted efforts of the Municipal Officials of Balungao headed by the then Municipal Mayor Jose G. Peralta, Jr., with the strong support of the well-organized Dangroo Goat Raisers Association of Balungao, Pangasinan chaired by Mr. Rodolfo Castillo and other stakeholders. As a result of a productive planning session, the first Goat Festival Celebration of Balungao was held on March 16-20, 2005. The momentous event served as the impetus for the municipal officials to declare “Goat” as the OTOP of the municipality through Resolution No. 137 on October 3, 2005. Consequently, it was also the time when the Integrated Goat Management (IGM) was concenceptualized and practiced by the Local Government for the study of goat. Because of the conceptualized management and technology, Balungao was awarded by the Department of Agriculture, University of the Philippines-Los Banos, PCCARD and DOST, a recognition among the participants coming from different parts of South East Asia. Since then, Balungao became famous as the goat capital of the Philippines.

The Goat Festival is usually opened with a grand street dancing and street parade, as the participants dress themselves in colorful and captivating goat-like costumes, and thereafter, the presentation of the different dance interpretation of every group. A beauty pageant and other activities like goat cooking contest is also held, which coincides with the town fiesta and in honor of the town's patron, St. Joseph the Carpenter.

Photos: (https://www.google.com.ph/search?q=goat+fest+in+balungao+pangasinan)

9. Sto. Tomas

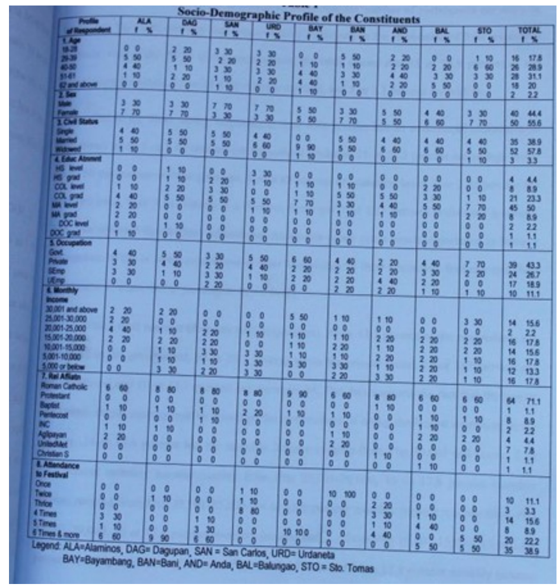
The municipality of Sto. Tomas which in the past, formed part of Alcala and at that time was called "Arrango". When the municipality was created in 1898, the name "Arrango" was changed to "Sto. Tomas". Sto. Tomas is a 5th class municipality and is located in the southern boundary of the Province of Pangasinan. It is considered as the smallest Pangasinan town in terms of land area with 1, 429.32 hectares. composed primarily of 10 barangays. Agriculture is the prime industry in the municipality, with rice and corn (yellow and white glutinous) as the major crops being cultivated. Apparently, Sto. Tomas is considered as one of the main producers of quality corn products. The Local Sanggunian created its leading legislative measures in agritrade where Sto. Tomas corn and its by-products are featured in their One-Town-One-Product (OTOP) industry. Sto. Tomas is also vastly productive for vegetable farming in addition to other major crops such a sugarcane and tobacco. They have modernized irrigation facilities, highly developed farm-to-market roads and proficient labor investment thus investment in agribusiness as well as agri industry is becoming a lucrative endeavor to its people.
Every 3rd week of March, Sto. Tomas celebrates its annual town fiesta. Simultaneous with the town's annual festivity is the celebration of fun filled and lively "Corn Festival" showcasing the town's organically farm produced Klasika Glutinous Corn in a world renowned longest corn barbeque event.

Photos: (https://www.google.com.)

Along with the spectacular street dancing parade that promotes the arts andculture of the town, Tomasians contend in their full of life and well-choreographed epic dances while clad in vibrant costumes made of corn materials to show the town's bountiful harvest and ingenuity. This annual event is highlighted with ecumenical services, colorful parades, alumni homecoming, grand ball, community night, street party and concert featuring local bands, agri trade fair and bazars, beauty pageant, singing contest, cultural shows, sportfest, carnival spectacle, "pinaka-mais sarap" cookfest and a lot more.

Table 2
Socio-Demographic Profile of the Constituents

Table 2 presents the frequency and percentage distribution of the re-



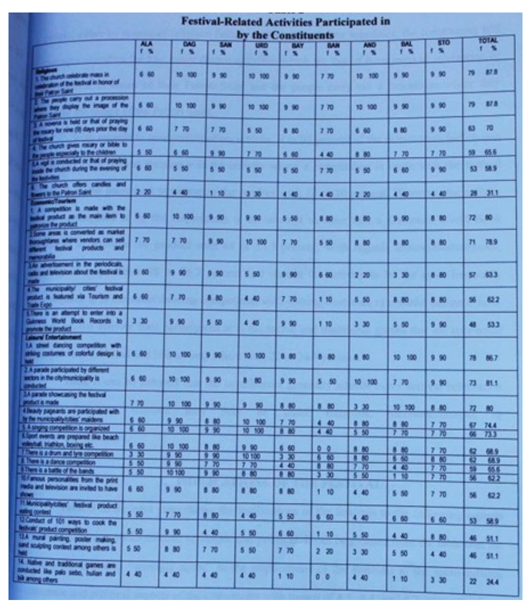
Socio-Demographic Profile of the Constituents

Profile of Respondent	ALA f	%	DAG f	%	SAN f	%	URD f	%	BAY f	%	BAN f	%	AND f	%	BAL f	%	STO f	%	TOTAL f	%
1. Age																				
18-28	0	0	2	20	3	30	3	30	0	0	5	50	2	20	0	0	1	10	16	17.8
29-39	5	50	5	50	2	20	2	20	1	10	1	10	2	20	2	20	6	60	26	28.9
40-50	4	40	1	10	3	30	3	30	4	40	3	30	4	40	3	30	3	30	28	31.1
51-61	1	10	2	20	1	10	2	20	4	40	1	10	2	20	5	50	0	0	18	20
62 and above	0	0	0	0	1	10	0	0	1	10	0	0	0	0	0	0	0	0	2	2.2
2. Sex																				
Male	3	30	3	30	7	70	7	70	5	50	3	30	5	50	4	40	3	30	40	44.4
Female	7	70	7	70	3	30	3	30	5	50	7	70	5	50	6	60	7	70	50	55.6
3. Civil Status																				
Single	4	40	5	50	5	50	4	40	0	0	5	50	4	40	4	40	4	40	35	38.9
Married	5	50	5	50	5	50	6	60	9	90	5	50	6	60	6	60	5	50	52	57.8
Widowed	1	10	0	0	0	0	0	0	1	10	0	0	0	0	0	0	1	10	3	3.3
4. Educ Atnmnt																				
HS level	0	0	1	10	0	0	3	30	0	0	0	0	0	0	0	0	0	0	4	4.4
HS grad	0	0	1	10	2	20	1	10	1	10	1	10	0	0	2	20	0	0	8	8.9
COL level	1	10	2	20	3	30	0	0	1	10	5	50	5	50	3	30	1	10	21	23.3
COL grad	4	40	5	50	5	50	5	50	7	70	3	30	4	40	5	50	7	70	45	50
MA level	2	20	0	0	0	0	1	10	1	10	1	10	1	10	0	0	2	20	8	8.9
MA grad	2	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2.2
DOC level	0	0	1	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1.1
DOC grad	1	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1.1
5. Occupation																				
Govt.	4	40	5	50	3	30	5	50	6	60	4	40	2	20	4	40	7	70	39	43.3
Private	3	30	4	40	2	20	4	40	2	20	2	20	2	20	3	30	2	20	24	26.7
SEmp	3	30	1	10	3	30	1	10	2	20	2	20	4	40	2	20	0	0	17	18.9
UEmp	0	0	0	0	2	20	0	0	0	0	2	20	2	20	1	10	1	10	10	11.1
6. Monthly Income																				
30,001 and above	2	20	2	20	0	0	0	0	5	50	1	10	1	10	0	0	3	30	14	15.6
25,001-30,000	2	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2.2
20,001-25,000	4	40	1	10	2	20	1	10	1	10	1	10	2	20	2	20	2	20	16	17.8
15,001-20,000	2	20	2	20	2	20	0	0	1	10	2	20	1	10	2	20	2	20	14	15.6
10,001-15,000	0	0	1	10	3	30	3	30	1	10	1	10	2	20	2	20	1	10	16	17.8
5,001-10,000	0	0	1	10	1	10	3	30	3	30	3	30	1	10	2	20	1	10	12	13.3
5,000 or below	0	0	3	30	2	20	3	30	0	0	2	20	3	30	2	20	1	10	16	17.8
7. Rel Affiliatn																				
Roman Catholic	6	60	8	80	8	80	8	80	9	90	6	60	8	80	6	60	6	60	64	71.1
Protestant	0	0	0	0	0	0	0	0	0	0	0	0	1	10	0	0	0	0	1	1.1
Baptist	1	10	1	10	1	10	2	20	1	10	1	10	0	0	1	10	1	10	8	8.9
Pentecost	0	0	0	0	1	10	0	0	0	0	0	0	0	0	1	10	0	0	2	2.2
INC	1	10	1	10	0	0	0	0	0	0	1	10	0	0	2	20	2	20	4	4.4
Aglipayan	2	20	0	0	0	0	0	0	0	0	2	20	0	0	0	0	0	0	7	7.8
UnitedMet	0	0	0	0	0	0	0	0	0	0	0	0	1	10	0	0	0	0	1	1.1
Christian S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	10	0	0	1	1.1
8. Attendance to Festival																				
Once	0	0	0	0	0	0	1	10	0	0	10	100	0	0	0	0	0	0	10	11.1
Twice	0	0	1	10	0	0	1	10	0	0	0	0	2	20	0	0	0	0	3	3.3
Thrice	0	0	0	0	0	0	8	80	0	0	0	0	3	30	1	10	0	0	14	15.6
4 Times	3	30	0	0	1	10	0	0	0	0	0	0	1	10	4	40	0	0	8	8.9
5 Times	1	10	0	0	3	30	0	0	10	100	0	0	4	40	0	0	5	50	20	22.2
6 Times & more	6	60	9	90	6	60	0	0	0	0	0	0	0	0	5	50	5	50	35	38.9

Legend: ALA=Alaminos, DAG= Dagupan, SAN = San Carlos, URD= Urdaneta
BAY=Bayambang, BAN=Bani, AND= Anda, BAL=Balungao, STO = Sto. Tomas

spondents across the variable categories considered in this study. The variables categories included in this study were age, age, civil status, educational attainment, occupation, monthly income, religious affilliation and frequency in attendance in their respective festival celebration.

Table 3
Festival-Related Activities Participated in by the Constituents



Festival-Related Activities Participated in by the Constituents

	ALA f	%	DAG f	%	SAN f	%	URD f	%	BAY f	%	BAN f	%	AND f	%	BAL f	%	STO f	%	TOTAL f	%
Religious																				
1. The church celebrate mass in celebration of the festival in honor of their Patron Saint	6	60	10	100	9	90	10	100	9	90	7	70	10	100	9	90	9	90	79	87.8
2. The people carry out a procession where they display the image of the Patron Saint	6	60	10	100	9	90	10	100	9	90	7	70	10	100	9	90	9	90	79	87.8
3. A novena is held or that of praying the rosary for nine (9) days prior the day of festival	6	60	7	70	7	70	5	50	8	80	7	70	6	60	8	80	9	90	63	70
4. The church gives rosary or bible to the people especially to the children	5	50	6	60	9	90	7	70	6	60	4	40	8	80	7	70	7	70	59	65.6
5.A vigil is conducted or that of praying inside the church during the evening of the festivities	6	60	5	50	5	50	5	50	5	50	7	70	5	50	6	60	9	90	53	58.9
6. The church offers candles and flowers to the Patron Saint	2	20	4	40	1	10	3	30	4	40	4	40	2	20	4	40	4	40	28	31.1
Economic/Tourism																				
1. A competition is made with the festival product as the main item to patronize the product	6	60	10	100	9	90	9	90	5	50	8	80	8	80	9	90	8	80	72	80
2.Some areas is converted as market thoroughfares where vendors can sell different festival products and memorabilia	7	70	7	70	9	90	10	100	7	70	5	50	8	80	8	80	8	80	71	78.9
3.An advertisement in the periodicals, radio and television about the festival is made	6	60	9	90	9	90	5	50	9	90	6	60	2	20	3	30	8	80	57	63.3
4.The municipality/ cities' festival product is featured via Tourism and Trade Expo	6	60	7	70	8	80	4	40	7	70	1	10	5	50	8	80	8	80	56	62.2
5.There is an attempt to enter into a Guinness World Book Records to promote the product	3	30	9	90	5	50	4	40	9	90	1	10	3	30	5	50	9	90	48	53.3
Leisure/ Entertainment																				
1.A street dancing competition with striking costumes of colorful design is held	6	60	10	100	9	90	10	100	8	80	8	80	8	80	10	100	9	90	78	86.7
2.A parade participated by different sectors in the city/municipality is conducted	6	60	10	100	9	90	8	80	9	90	5	50	10	100	7	70	9	90	73	81.1
3.A parade showcasing the festival product is made	7	70	10	100	9	90	9	90	8	80	8	80	3	30	10	100	8	80	72	80
4.Beauty pageants are participated with by the municipality/cities' maidens	6	60	9	90	8	80	10	100	7	70	4	40	8	80	8	80	7	70	67	74.4
5. A singing competition is organized	6	60	10	100	9	90	10	100	8	80	4	40	5	50	7	70	7	70	66	73.3
6.Sport events are prepared like beach volleyball, triathlon, boxing etc.	6	60	10	100	8	80	9	90	6	60	0	0	8	80	8	80	7	70	62	68.9
7.There is a drum and lyre competition	3	30	9	90	9	90	10	100	3	30	6	60	8	80	6	60	8	80	62	68.9
8. There is a dance competition	5	50	9	90	7	70	7	70	4	40	8	80	7	70	4	40	7	70	59	65.6
9.There is a battle of the bands	5	50	10	100	9	90	8	80	8	80	3	30	5	50	1	10	7	70	56	62.2
10.Famous personalities from the print media and television are invited to have shows	6	60	9	90	8	80	8	80	8	80	1	10	4	40	5	50	7	70	56	62.2
11.Municipality/cities' festival product eating contest	5	50	7	70	8	80	4	40	5	50	6	60	4	40	6	60	6	60	53	58.9
12.Conduct of 101 ways to cook the festivals' product competition	5	50	9	90	4	40	5	50	6	60	1	10	5	50	4	40	8	80	46	51.1
13.A mural painting, poster making, sand sculpting contest among others is held	5	50	8	80	7	70	5	50	7	70	2	20	3	30	5	50	4	40	46	51.1
14. Native and traditional games are conducted like palo sebo, hulian and tak among others	4	40	4	40	4	40	4	40	1	10	0	0	4	40	1	10	3	30	22	24.4

Table 3 shows the different festival-related activities participated in by municipality/cities constituents with respect to their festival.

Table 4
Implications of the Festival

Implications of the Festival
(a. Socio- Cultural Aspect)

	ALA N=10		DAG N=10		SAN N=10		URD N=10		BAY N=10		BAN N=10		AND N=10		BAL N=10		STO N=10		TOTAL Nt=90	
	WM	DE	WM	DE	WM	DE	WM	DE	WM	DE	WM	DE	WM	DE	WM	DE	WM	DE	AWM	DE
1.The festival illustrates our faith and strong belief in God through the conduct of some religious activities.	4.6	SA	4	A	4.7	SA	4.5	SA	4.3	SA	4.7	SA	4.5	SA	5	SA	4.7	SA	4.6	SA
2.The church personnel and the people actively participate in the festivals and support the different activities.	4.6	SA	3.8	A	4.7	SA	4.7	SA	4	A	4.4	SA	4.4	SA	4.5	SA	4.9	SA	4.4	SA
3. The festival is a reflection of the constituent's values and spirituality as shown the conduct of religious ceremonies or activities	4.7	SA	4.3	A	4.6	SA	4.2	SA	4.2	SA	4.4	SA	4.4	SA	4.7	SA	4.8	SA	4.5	SA
4. Other activities related to the festival are likewise being prepared by our church like participation in parade	4.5	SA	4.2	SA	4.5	SA	4.4	SA	3.8	A	4.4	SA	4.1	SA	4.3	SA	4.	SA	4.3	SA
5. The festival has depicted the traits and norms of behavior distinct in the locality. Example is cooperation and unity.	4.7	SA	4.1	A	4.6	SA	4.6	SA	4.6	SA	4.7	SA	4.6	SA	4.6	SA	5	SA	4.6	SA
6. The festival serves as a way of cultural renewal. It is a means through which the people showcase their cultural practices and traditions.	4.6	SA	4.3	SA	4.6	SA	4.7	SA	4.5	SA	4.7	SA	4.6	SA	4.4	SA	4.9	SA	4.6	SA
7. The festival attracts young people's interest in cultural and art activities. It serves as a medium through which the younger generations are able to express themselves using their creativity.	4.7	SA	4.3	A	4.6	SA	4.5	SA	4.6	SA	4.7	SA	4.4	SA	4.1	SA	4.9	SA	4.5	SA

Legend:
WM = weighted mean
N = number of respondents
DE = descriptive equivalent
Nt = total number of respondents
AWM= average weighted mean

Along socio economic aspect, Table 4 shows that the residents strongly believe that the festivals make their place become well known with the increasing number of tourist arrivals in their locality. The influx of tourist serves as the springboard for the opening of more business opportunities in their area and thereafter, the heightened revenue generated by the local government unit.

Table 5
Extent of Involvement

Table 5 is about the part of the analysis which refers to the finding out up to what extent the LGUs in Pangasinan involve the different stakeholders in the planning, implementation and assessment of the different activities and programs in line with the celebration of their town festival.

Table 6
Problems Encountered

Problems Encountered

PROBLEMS	RANK BY CITY/MUNICIPALITY									RANK BY TOTAL
	ALA	DAG	SAN	URD	BAY	BAN	AND	BAL	STO	
Waste disposal	1	1.5	6	13	2	1.5	1	2	2	1
Noise and visual pollution	2.5	6.5	6	7.5	1	5	4	4.5	2	2
Venue for political campaign	7	4	4	1	3	8.5	7.5	1	5	3
Crowding and inconvenience	7	6.5	2.5	11.5	5.5	5	2	4.5	9.5	4
Role confusion	2.5	9.5	8.5	3	4	5	10.5	9	5	5
Petty crimes	9.5	1.5	11.5	7.5	8.5	5	4	9	7.5	6.5
Lack of transparency	9.5	4	1	7.5	8.5	11	4	9	9.5	6.5
No active participation of constituents	4.5	13.5	11.5	3	11.5	1.5	7.5	4.5	7.5	8
High price of commodities	4.5	4	11.5	7.5	8.5	8.5	13	9	2	9
Lack of amenities	7	12	11.5	7.5	5.5	5	7.5	9	5	10
Realignment of funds	12.5	9.5	2.5	7.5	8.5	13	10.5	12.5	12.5	11.5
Alcohol abuse	12.5	9.5	8.5	11.5	11.5	11	7.5	4.5	12.5	11.5
Local IRA spent inappropriately	12.5	9.5	6	3	13.5	11	13	12.5	12.5	13
Failure to meet objectives of festival	12.5	13.5	14	14	13.5	14	13	14	12.5	14

Legend:
WM = weighted mean
DE = descriptive equivalent
AWM= average weighted mean
N = number of respondents
Nt = total number of respondents

This part of the chapter is about the problems encountered in the conduct of the festival activities. Table 6 shows the different problems encountered by the LGUs and their constituents in the holding of their various programs and activities in line with the celebration of their town festival which were ranked in order to identify the most common problem as rated by the respondents.

Table 7
Continuation of the Festival

This portion of the chapter is about finding out if the con-

Continuation of the Festival

Do you wish to continue the festival?	ALA N=10		DAG N=10		SAN N=10		URD N=10		BAY N=10		BAN N=10		AND N=10		BAL N=10		STO N=10		TOTAL Nt=90	
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%
Yes	10	100	10	100	10	100	8	80	10	100	10	100	7	70	10	100	10	100	85	94
No	0	0	0	0	0	0	2	20	0	0	0	0	3	30	0	0	0	0	5	6

stituents still wish to continue with the annual celebration of their town festival. Table 7 below presents the percentage of the respondents who wish to continue the celebration of the festival and those who do not.

Findings.

The data, gathered and analyzed, revealed the following

Extent of Involvement

AREA OF CONSULTATION	ALA N=10		DAG N=10		SAN N=10		URD N=10		BAY N=10		BAN N=10		AND N=10		BAL N=10		STO N=10		TOTAL Nt=90	
	WM	DE	WM	DE	WM	DE	WM	DE	WM	DE	WM	DE	WM	DE	WM	DE	WM	DE	AWM	DE
1. The constituents were asked whether they wanted to hold a festival in their city/municipality. As the direct beneficiaries of the festival, the consent of those governed is of paramount consideration.	4.5	HI	4.2	HI	4.4	HI	3.0	I	4.3	HI	3.3	I	4.0	MI	4.1	MI	4.8	HI	4.1	MI
2. The Punong Barangay called upon the residents for a meeting with festival celebration as the agendum. Such meeting primarily aims to achieve a consensus on the details of the festival	4.5	HI	4.1	MI	4.4	HI	3.5	MI	4.5	HI	2.8	I	3.8	MI	3.3	I	4.6	HI	3.8	MI
3. Experts in the different fields were called upon to determine the different activities for the festival celebration. The creation of special committees or technical working group is necessary especially if the event requires delicate and expert planning and preparation.	4.8	HI	4.5	HI	4.4	HI	4.0	MI	4.8	HI	2.7	I	3.6	MI	2.9	I	4.8	HI	4.1	MI
4. The constituents were encouraged to participate in the festival. This is because the success of the festival necessitates active participation of the constituents.	4.4	HI	4.3	HI	4.2	HI	4.4	HI	4.8	HI	3.5	MI	3.9	MI	3.6	MI	4.7	HI	4.2	HI
5. The constituents were asked as to as to what they are willing to do to help in the success of the celebration. The concept of division of labor can best be applied especially since festivals need the direct involvement and collaboration of the constituents.	4.4	HI	4.3	HI	4.5	HI	3.8	MI	4.6	HI	3.0	I	3.8	MI	3.2	I	4.6	HI	4.0	MI
6. The constituents were asked for any proposed activity for the festival. In this manner, the people feel empowered since their ideas and suggestions are considered in the planning process.	4.2	HI	4.3	HI	4.3	HI	3.8	MI	4.4	HI	2.5	LI	4.4	HI	3.1	I	4.6	HI	3.9	MI
7. The LGU conduct different meetings with the with the different stakeholders as to know their uptake as to the holding of the festival. This is based on the premise that the interest of the stakeholders should likewise be considered in the decision-making process.	4.6	HI	4.0	MI	4.6	HI	4.0	MI	4.8	HI	2.5	LI	4.3	HI	4.0	MI	4.9	HI	4.2	HI
8. A post conference is made with the attendance of the constituents in order to assess the outcome of the events and determine the areas where they failed/succeeded. The assessment shall serve as basis for the future planning of festivals activities.	4.2	HI	4.5	HI	4.5	HI	3.7	MI	4.3	HI	3.1	I	4.5	HI	3.0	I	4.6	HI	4.0	MI
AWM	4.5	HI	4.3	HI	4.4	HI	3.8	MI	4.6	HI	2.9	I	4.0	MI	3.4	MI	4.7	HI	4.1	MI

Legend:
WM = weighted mean
N = number of respondents
DE = descriptive equivalent
Nt = total number of respondents
AWM= average weighted mean

findings:

1. The 4 cities and 5 municipalities belongs to different class level thus receives different amount from their IRA shares. The amount of the IRA shares each city and municipality received is dependent from their respective class level category. Further all the subject city and municipality celebrates their respective festival annually. The festival is usually based on the OTOP or the one town, one product program by the government or based on the main source of the livelihood of the majority of the residents in the community.
2. Majority of the respondents, 28 or 31.1 percent belongs to the age bracket of 40-50 while only 2 or 2.22 percent belongs to the age bracket of 62 and above. There are 50 or 55.6 percent of the respondents are female. On the other hand, 40 or 44.5 percent are male. As to civil status there

are 35 or 38.9 percent of the respondents are single, 52 or 57.8 percent are married, and 3 or 3.3 percent are widow. Along educational attainment 90 or ninety respondents, 4 or 4.44 percent has an educational attainment of highschool level, 8 or 8.89 percent are highschool graduate, 21 or 23.3 percent are college level, 45 or 50 percent are college graduate, 8 or 8.89 percent are masteral level, 2 or 2.22 percent are masteral level, 1 or 1.11 percent is a doctoral level and 1 or 1.11 percent is doctoral graduate. In terms of employment, 39 or 43.3 percent of the respondents are employed in the government, 24 or 26.7 percent are in the private sector, 17 or 18.9 percent are self-employed and 10 or 11.1 percent are unemployed. As to the monthly income, there are 14 or 15.6 percent has the monthly income ranging from Php 30,001 and above, 2 or 2.22 percent monthly income ranging from Php 25,001-30,000, 16 or 17.8 percent monthly income ranging from Php 20,001-25,000, 14 or 15.6 percent monthly income ranging from Php 15,001-20,000, 16 or 17.8 percent monthly income ranging from Php 10,001-15,000, 12 or 13.3 percent monthly income ranging from Php 5,001-10,000, and 16 or 17.8 percent monthly income ranging from Php 5,000 or below. In the aspect of religion, majority of them belongs to the Roman Catholic religion such that there are 64 or 71.1 of them. 8 or 8.89 percent are Baptist, 7 or 7.78 percent are Aglipayan, 4 or 4.44 percent of them are Iglesia Ni Cristo, 2 or 2.22 percent is a Pentecost. There is 1 or 10 percent from each the following religions, to wit: Protestast, El Shaddai, United Methodist, Sisters of St. Ann, and Christian Spritist. Finally, the frequency of attendance to their respective festival¸ from the ninety (90) respondents¸ 35 or 38.9 percent of them had attended their festival 6 times and more.

3. As to the totality of all the activities, from the ninety (90) respondents from the four (4) cities and five (5) municipalities, 79 or 87.8 percent had chosen the following religious activities as the most frequently participated at, to wit: The church celebrates mass in celebration of the festival in honor of their Patron Saint and the people carry out a procession where they display the image of the Patron Saint. With regards to economic/tourism activity, 9 or 90 percent of the respondents had chosen with the most highest frequency of participation is the activity where a competition is made with the festival product as the main item to patronize the product with 72 or 80 percent. With regards leisure/entertainment, among all respondents 78 or 86.7 percent had chosen the activity to be the most frequently participated at is the street dancing competition with striking costumes of colorful design is held.

4. The community residents "strongly agree" to the implications of the festivals to the socio-cultural economic and political aspects of the community with means of 4.5¸ 4.4¸ and 4.2¸ respectively.

5. Out of the eight areas of consultation made by LGU to their constituents, the respondents rated as highly involved, with a weighted mean of 4.2, two areas, to wit: (a) the constituents were encouraged to participate in the festival and (b) The LGU conduct different meetings with the different stakeholders as to know their uptake as to the holding of the festival.

6. Out of the fourteen identified problems, the five most often encountered by the respondents are waste disposal being the most common, followed by noise and visual pollution, venue for political campaign, crowding and inconvenience, and role confusion.

7. Overall, 85 out of 90 respondents, or 94%, wish to continue the yearly celebration of their town festival while only 5, or 6%, signified otherwise.

Conclusions

Based on the findings of the study, the following conclusions are drawn:

1.The LGU regardless of their class level albeit being given a smaller IRA budget, has always been able to launch a full blown festival celebration with the unwavering attendance of its people thus a satisfactory result;

2.The respondents are predominantly middle-aged, female, married, college graduate, government employees, average income earners, Roman Catholic, and frequently attend festivals;

3.The constituents generally attends every festival celebration related activities whether they may be under religious, economic/tourism or leisure/entertainment in which they express their support and involvement;

4.The community residents "strongly agree" to the implications of the festivals to the socio-cultural, economic and political aspects of the community. Is a clear indication that the residents are supportive of the festivals' relevance and its effects to the various aspects of the community;

5.The constituents are consulted upon most of the time on matters regarding the planning, implementation, monitoring and evaluation of town fiesta-related activities. This is based on the premise that the interest of the stakeholders should likewise be considered in the decision-making process;

6.The problem which are often encountered by the respondents in relation to the conduct of the festivals are waste disposal, followed by noise and visual pollution, venue for political campaign, crowding and inconvenience, and role confusion;

7.Most of the respondent's still want to continue having their festival celebration.

Recommendations

The study recommends that

1) the City/Municipality Tourism Office should conduct an internal assessment or inward-looking evaluation of their programs/projects to assess whether they serve the purpose of the organization and that of the LGU as a whole;

2) sufficient fundings should be given by the national government to the local government in order to support festival celebration that reflect the different cultural *values, traditions and traits of Pangasinenses;*

3) the committee or office in charge of the celebration whould be able to coordinate the activities of the different private and government sectors during festival celebration to avoid experiencing the common problems. There is a need to identify the different activities that is worthy to maintain or be removed and examine whether there is a steady increase in the attendance of participants. This is to determine the possibility of growth or expansion as to a Pangasinan festival reaching the level of popularity of the well-known festivals in the Philippines (i.e. Sinulog, Ati-Atihan) which are well attended by both local and

foreign tourists;

4) the local government should encourage constituents for more active participation and involvement in the planning, implementation, monitoring and evaluation of the festival-related activities; and

5) LGU officials should come up with strategies in order that true and actual income is realized in succeeding festival celebrations.

Acknowledgment

The researcher would like to extend her wholehearted gratitude and sincerest appreciation to those special people who made this piece of work possible:

The members of the Social Sciences Department, Pangasinan State University, Bayambang Campus, for their unselfish ideas, untiring assistance and immeasurable effort and love extended to her which served as a giant push to pursue her dream of finishing this research task;

Mrs. Madlyn V. Tingco, for her valuable suggestions and for sharing her precious time and untiring effort for giving assistance to the researcher to improve her paper;

The respondents from different cities and municipalities, for whom the researcher is very much indebted, for giving their service and honest opinions during the interview and accomplishing the questionnaire despite their hectic schedule;

The City and Municipal Mayors of the different cities and municipalities, for allowing the researcher to conduct her research and administer the questionnaire to the selected respondents who are residents of their locality;

The Tourism Officers and their Staff of the different cities and municipalities, for giving the researcher the needed vital information pertaining to their respective festivals;

Her loving and patient husband, Ave, for his support, understanding and encouragement, that serves as her aide-mémoire to reach her dream that eventually become his dream too;

Her son Aviel Jared and daughter Cyrle Elisha who always has a ready smile for their mommy that serves as a catharsis when times get rough due to pressures of career and motherhood;

All her friend, students and mentors for their kind prodding;

Above all, the Almighty God, for His benediction and heavenly guidance throughout the preparation and conduct of this study.

References

Bowdin, G.A.J.; Allen, J.; O'toole, W.; Harris, R.; and McDonnell, I. Events Management. Second Edition. Great Britain : Elsevier. (2006).

Calimlim, Cheryl L. "A Case Study of Katarungang Pambarangay in the Third District of Pangasinan". MA Thesis. Pangasinan State University Graduate School, Urdaneta City, Pangasinan. 2011

Cortes, Ma. Rosario. "Pangasinan, 1901-1986 A Political, Socioeconomic and Cultural History. Quezon City, New Day Publishers, 1990, p.6

Garcia, Fe Casillan. Perla Samson-Nelmida on San Carlos City: A Celebration

Getz, Donald. Event Management and Event Tourism, Communication Corporation, Elmsford, NY. (2005)

Flores, Ma. Crisanta Nelmida. "Pangasinan: Isang Etnokultural na Pagmamapa". PhD. Dissertation in Philippine Studies, University of the Philippines, (2002)

Joven, Celestino Cesar D. "The Fiesta: Praxis in Social Transformation". Masteral Thesis. University of the Philippines Open University. (2012)

Rivera, Leslie Kay, Salcedo, Society, Buenavista, Jerry, Quibilan, Lorma. "Atang: Folk Christian Legacy of the Spanish Colonial Period. Masteral Thesis. Mariano Marcos State University. (2014)

Panopio, Isabel and Santico, Realidad. "Society and Culture: Introduction to Society and Culture". Katha Publishing Co. Inc. Third Revision. (2007)

Souvenir Book on the Quadricentennial Celebration of the Municipality of Bayambang 1614-2014. Municipality of Bayambang. (2014)

Electronic Sources

www.bayambang.gov.ph

http://www.pangasinan.gov.ph/2014/06

www.goggle.com

Sunstar.com.ph

www.sto.tomas.com

http://newsinfo.inquirer.net/570741

http://punch.dagupan.com/articles/news/2007/03/alaminos-longanisa

www.dagupan.gov.ph

http://www.philippinecountry.com/

THE EFFECTS OF USING REAPER MACHINE IN HARVESTING RICE CROP TO THE FARM LABORERS AND TO THE FARM OWNERS OF BARANGAY SAN MARCOS, SAN MATEO, ISABELA

GENEVIVE D. GARCIA
ISABELA STATE UNIVERSITY
College of Teacher Education Echague, Isabela
xerilegendatulgarcia27@yahoo.com
xerilegendatulgarcia27@gmail.com
09778041488

Abstract

This study examines the effects of using reaper machine in harvesting rice crop to the farm laborers and to the farm owners of Barangay San Marcos, San Mateo, Isabela. The respondents consists of 25 farm laborers and 25 owners. Two sets of questionnaires(one for the farm laborers and one for the farm owners) were utilized to gather data. The statistical used in this study was getting its means. Results of this study indicated that, the loss of income during reaping season was strongly agreed by the farm laborers of Barangay San Marcos, San Mateo, Isabela, due to the great effect of using reaper machine in harvesting rice crop. The reaping made harvesting rice crop easier and makes reaping of rice crop faster were greatly be the effect of using reaper machine in harvesting rice crop that was strongly agreed by the farm owners of Barangay San Marcos, San Mateo, Isabela. The study concludes that using reaper machine in harvesting rice crop has a great effect and brought change to the lives of the farmers especially those farm laborers of Barangay San Marcos, San Mateo Isabela. The other possible effects of using reaper machine in harvesting rice crop were loss of seasonal job during harvesting season, one cause of poverty, while the unstable job of the residents, unable to send their children to school, and unable to buy luxuries has also an impact to the lives and agreed by the farm laborers of Barangay San Marcos, San Mateo, Isabela. And enables the farmers to harvest large amount of income, less farm laborer required, and able to be used in all weather conditions, were also be the effects of using reaper machine in harvesting rice crop that also was agreed by the farm owners of Barangay San Marcos, San Mateo, Isabela. The study recommended that, those farm laborers should find another and stable job and also find a best remedy to prevent the presence of poverty in their families.

1- Introduction

Farming is one of the main sources of livelihood in the Philippines particularly in the province of Isabela, which is one of the leading contributors in terms of rice production. In Barangay San Marcos, San Mateo, Isabela, their main source of income is through farming specifically on planting rice.

A mechanical reaper or reaping machine is a mechanical, semi-automated device that harvests crops. Mechanical reapers are an important part of mechanized agriculture and a main feature of agricultural productivity.

Barangay San Marcos is one of the barangays in town of San Mateo, province of Isabela. It is bounded by Barangay Villa Fuerte,San Mateo, Isabela on the north, Barangay Oscariz,Ramon,Isabela on the south, Villa Beltran,Ramon, Isabela on the east and Barangay Sinamar Norte,San Mateo,Isabela on the west.The Barangay San Marcos,San Mateo,Isabela has a total population of 1,634 and a total land area of 263,927.3 hectares.

As time goes by, due to the advancement of science and technology, reaper machine was invented for farmers get ease of harvesting rice crop. But the problem strikes on the part of those farm laborers and take advantage to those farm owners.

And this study focused on the effects of using reaper machine in harvesting rice crop to the farm laborers and to the farm owners of Barangay San Marcos, San Mateo, Isabela.

II. Statement of the Problem

Identified those effects of using reaper machine in harvesting rice crop to the farm laborers and to the farm owners of Barangay San Marcos, San Mateo, Isabela.
The following questions are able to answer:

1. What are the possible effects of using reaper machine in harvesting rice crop to the farm laborers of Barangay San Marcos, San Mateo, Isabela?
2. What are the possible effects of using reaper machine in harvesting rice crop to the farm owners of Barangay San Marcos, San Mateo, Isabela?

III. Methodology

Identified the effects of using reaper machine in harvesting rice crops to the farm laborers and farm owners of Barangay San Marcos, San Mateo, Isabela, through the use of descriptive process.

The research method used in this study about the effects of reaper machine in harvesting rice crop to the farm laborers and to the farm owners of Barangay San Marcos, San Mateo, Isabela, was the survey-questionnaire method.

Questionnaire were labeled rated and answered by the 25 farm laborers and 25 farm owners of San Marcos, San Mateo, Isabela. Through answering the questionnaire, it will help us to know and identify the effects of using reaper machine in harvesting rice crop to the farm laborers and to the farm owners of San Marcos, San Mateo, Isabela.

IV. Findings

This chapter, stated, analyzed, gave descriptions and interpreted the data.

Table 1. The Effects of Using Reaper Machine in Harvesting Rice Crop to the Farm Laborers of Barangay San Marcos. San Mateo, Isabela

No.	EFFECTS TO THE FARM OWNERS	MEAN	DESCRIPTION
1	To reap rice crop efficiently	4.64	Strongly Agree
2	Makes reaping rice crop faster	4.52	Strongly Agree
3	Less farm laborer required	3.96	Agree
4	It enables the farmers to harvest large amount of rice crop	4.32	Agree
5	Able to be used in all weather conditions.	3.68	Agree

The loss of income during reaping season was strongly agreed by the farm laborers of Barangay San Marcos, San Mateo, Isabela, that it has a great effect of using reaper machine in harvesting rice crop

with the mean of 4.92 as well as the lost of seasonal job during harvesting season and one cause of poverty with the mean of 4.6; while the unstable job of the residents with the mean of 4.2; unable to send their children to school with the mean of 3.6; and unable to buy luxuries with the mean of 3.32 were also an effect and agreed by the farm laborers of Barangay San Marcos, San Mateo, Isabela.

It means that, the loss of income during reaping season be the great effect to the farm laborers of Barangay San Marcos, San Mateo, Isabela in using reaper machine in harvesting rice crop due to the loss of seasonal job during reaping season. It was an evidence to what was stated on the related literature that, ***"The increase i.n farmers buying this machine meant that less labor was required, meaning some people were at loss for jobs and were at lost of income during harvesting season. The widespread selling of machine meant some farmers and grain workers (who still worked traditionally) were put out of business…"*** and the unable to buy luxuries was agreed by the farm laborers of Barangay San Marcos, San Mateo, Isabela that it was also an effect of using reaper machine in harvesting rice crop.

Table 2.*Effects of Using Reaper Machine in Harvesting Rice Crops to the Farm Owners of Barangay San Marcos, San Mateo, Isabela.*

NO.	EFFECTS TO THE FARM LABORERS	MEAN	DESCRIPTION
1	Loss of income during reaping season	4.92	Strongly Agree
2	Loss of seasonal job during harvesting season	4.6	Strongly Agree
3	One cause of poverty	4.6	Strongly Agree
4	Unable to send their children to school	3.6	Agree
5	Unable to buy luxuries	3.32	Agree
6	Unstable job of the residents	4.2	Agree

V. Conclusion

In this chapter, shows the summary, conclusion, and recommendations of this study based on result of the data gathered that have been analyzed, interpreted and given descriptions.

The researcher identified those effects of using reaper machine in harvesting rice crop to the farm laborers and to the farm owners of Barangay San Marcos, San Mateo, Isabela. The following questions were answered: What are the possible effects of using reaper machine in harvesting rice crop to the farm laborers of Barangay San Marcos, San Mateo, Isabela? And what are the possible effects of using reaper machine in harvesting rice crop to the farm owners of Barangay San Marcos, San Mateo, Isabela?This study aimed to: identify the effects of using reaper machine in harvesting rice crop to the farm laborers of Barangay San Marcos, San Mateo, Isabela and assure the effects of using reaper machine in harvesting rice crop to the farm owners of Barangay San Marcos, San Mateo, Isabela.The importance of this study was to identify the different effects of using reaper machine in harvesting rice crop to the farm laborers and to the farm owners of Barangay San Marcos, San Mateo, Isabela.This study focused only on the effects of using reaper machine in harvesting rice crop to the farm laborers and to the farm owners of Barangay San Marcos, San Mateo, Isabela.

Identified the effects of using reaper machine in harvesting rice crop to the farm laborers and to the farm owners of Barangay San Marcos, San Mateo, Isabela, through the use of descriptive process. The research method used in this study, was the survey-questionnaire method. Questionnaires were given, labelled, rated and answered by the 25 farm laborers and 25 farm owners of San Marcos, San Mateo, Isabela. Through answering the questionnaire, it will help us to identify the effects of using reaper machine in harvesting rice crop to the farm laborers and to the farm owners of San Marcos, San Mateo, Isabela. The researcher therefore conclude that, the loss of income during reaping season be the great effect to the farm laborers of Barangay San Marcos, San Mateo, Isabela in using reaper machine in harvesting rice crop due to the loss of seasonal job during reaping season.

It was an evidence to what was stated on the related literature that, ***"The increase in farmers buying this machine meant that less labor was required, meaning some people were at loss for jobs and were at lost of income during harvesting season. The widespread selling of machine meant some farmers and grain workers (who still worked traditionally) were put out of business…"*** and the unable to buy luxuries was agreed by the farm laborers of Barangay San Marcos, San Mateo, Isabela that it was also an effect of using reaper machine in harvesting rice crop. And with the aid of reaper machine in harvesting rice crop,to reap rice crop easier be the greatly effect of using reaper machine in harvesting rice crop that was strongly agreed by the farm owners of Barangay San Marcos, San Mateo, Isabela. Because unlike the traditional and manual harvesting of rice crop that it was a long process unlike this reaper machine or the combine harvester that it is a short process and it was a proof to what was stated on the related literature that, "***A new modern invention, Combine Harvester, was invented in U.S. in 1834 by Hiram Moore. The machines that performs more quickly, efficiently and enables farmers to harvest larger amount of income and that is still used today."*** Able to be used in all weather conditions also be the effect of using reaper machine in harvesting rice crop that was agreed by the farm owners of Barangay San Marcos, San Mateo, Isabela.

VI. Recommendation

The researcher strongly recommend the following:

1. Those farm laborers should have or find a stable job for them to support well their families.
2. There should be and find a best remedy to solve the presence of poverty in the family.
3. Be contented to have a decent life.
4. Encourage children to pursue their studies.

VII. Acknowledgement

Grateful acknowledgement is due to her lovable husband Mr. Cerilo B. Garcia. My beloved parents and parents in law. Her two wonderful sons Xerile Anthony D. Garcia and Asher Gabriel D. Garcia and her siblings, for their words of encouragement and fervent prayers.

Most of all the Almighty Father who gave her the knowledge, skills, strength and perseverance, and for making the researcher believe that with Him everything is possible.

REFERENCES http://www.britannica.com/ topic/reaper -agriculture https:// prezi.com/rq-55lui9sfu/the-mec hanical-reaper/ http:// reapertakethe-wheel.blogspot.com /2013/03/impacts-of-invention.html

TREE DIVERSITY ASSESSMENT ALONG KATIBAO CREEK, DIMAPATOY WATERSHED FOREST RESERVED, DATU ODIN SINSUAT, MAGUINDANAO, SOUTHERN PHILIPPINES

Farida K. Dimalen, RF, MSF
Dean
College of Forestry, Cotabato City State Polytechnic College
MBRH, Sinsuat Avenue, Cotabato City

Abstract

Philippines is one of mega diverse countries. However, the fast growing population caused the mismanagement and unsustainable forest which resulted to biodiversity loss and climate change. The study aimed to identification and assessed tree diversity.

Descriptive survey was used and six stations established. Stratified and purposive sampling was used in the study. Shannon Weiner (H') index was used for the diversity of trees. All data gathered were photo documented.

There were twenty eight (28) individual different species with a total of one hundred fifty one (151) tree species with eighteen (18) different plant families. These were family Moraceae, Achariaceae, Fabaceae, Burseraceae, Dipterocarpaceae, Anonaceae, Combretaceae, Lauraceae, Sterculiaceae, Phyllantaceae, Liliaeae, Meliaceae and Rubiaceae. First station has the H' value of 1.65, second station H'value 1.3., third station H' value of 1.82, fourth station H'value 1.57, fifth station H'value 1.69 and the last station have the H'value of 1.9 and the Shannon Weiner (H') index value of tree diversity results was very low based on the scale of Fernando, 1998 category. The most frequent species was Kalingag.

The researcher concluded that illegal cutting and charcoal making caused the very low diversity result. Recommendations made were: remaining vegetations should be protected and conserved for these tree species serve as source of water in Katibao Creek. Application of Silvicultural practices is highly recommended to improve and sustain existing vegetation especially tree species. Lastly, Local Government of Maguindanao should be mandated to implement the watershed law of Dimapatoy Watershed Forest Reserved.

Introduction

The Philippines is one of the top mega diversity countries. However, the fast growing population caused the mismanagement of our forest due to continuous forest destruction which resulted to biodiversity loss and climate change.

Tree species diversity is the number of different tree species in a particular area weighted by some measure of abundance such as number of individuals.

Understanding relationship between environmental factors and plant diversity is a core research area in ecological studies. Ecological and environmental factors that affect plant diversity such as soil nutrient, elevation, topographic relief, aspect, terrain shape, slope, solar radiation and etc (cited by: Mohamad Redowan, 2015).

Tree diversity should be measured and understood in terms of diversity and evenness. These are two principal consideration terms to understood in studying biological diversity which are a) number of different species in a community and b) number of individual within each of these species in that community (Hamilton 2005). Several reviews published recently from both natural forests and plantations that biomass production and the delivery of their ecosystem services can improve with tree diversity and forest plantations that are diverse in genotypes, species, structure, and function, should be better able to adapt to changing environmental conditions than monocultures (cited by Verheyen et.al 2015).

Vegetation analysis of Mt. Maculot, Cuenca, Batangas, Philippines was done to determine the tree species composition, abundance and dominance because of its high diversity.

Forest plantations already provide up to 33% of the total industrial roundwood volume harvested annually in the world, and are projected to make up as much 50% of the global industrial roundwood production by 2040 (Kanninen 2010). Moreover, when incorporated into integrated landscape management, plantations can play a large role in achieving biodiversity conservation objectives by offsetting the need to extract resources from natural forests (Pacquette and Messier 2010).

A combination of direct and indirect approaches is proposed, with four selected key indicators of diversity that can be derived from Earth observation data: productivity, disturbance, topography, and land cover (Duro, et al. 2007).

Generally, the study aims to assessed the tree diversity along Katibao Creek, Dimapatoy Watershed Forest Reserved and specifically, aims to determine a.)the identification, b.) conservation status based on the International Union for Conservation Nature (IUCN) System and determine tree diversity.

The output of this study will served as basis or formulation of local policy for protection and conservation of the area. The researcher conducted this study to have a data as an information to the community for proper protection conservation and management of the entire vegetation

Review of Related Literature

Although the global forest area declined by ca. 13 million ha per year between 2000 to 2010, the forest plantation area actually increased annually by ca. 5 million ha in the same time period, representing ca. 7%, i.e. 264 million ha, of the global forest are in 2010 (FAO 2000).

Several reviews published recently provide evidence, from both natural forests and plantations that biomass production and the delivery of other ecosystem services can improve with tree diversity (Nadrowski et al 2010; Scherer-Lorenzen 2014).

Forest plantations that are diverse in genotypes, species, structure and function should be better able to adapt to changing environmental conditions than monocultures (Hensbergen 2006; Bauhus et al, 2010).

Five transects consisting of 198 tree individuals were classified into 28 families, 51 genera and 61 species. The data proved higher diversity since in 1-hectare plot in tropical forest, the number of species would range from 140 to 300 species (Pipoly and Madulid 1997). The size of the plot was less than 1-hectare so it can be implied that Mt. Maculot presents a high species richness. The most represented family was Moraceae consisting of 7 species belonging to 3 genera. Ficus was the most represented genus with 5 species followed by Euphorbiaceae, Lauraceae, Malvaceae, Meliaceae and Sapindaceae with species each (Arsenio et al, 2011).

The area of forest plantations is increasing worldwide helping to meet timber demand and protect natural forests. However, with global change, monospecific plantations are increasingly vulnerable to abiotic and biotic disturbances. As an adaption measure we need to move to plantations that are more diverse in genotypes, species and structure, with a design underprinted by science (Verheyen et al, 2015).

Biodiversity is a multifaceted concept that often eludes simple operational definitions. As a result, a variety of definitions have been proposed each with varying levels of complexity and scope. While different definitions of biodiversity exist, the basic unit of measurement for the vast majority of studies is conducted at the species level. Traditional approaches to measuring species richness provide useful, yet spatially constrained information. Remote sensing offers the opportunity for large area characterizations of biodiversity in a systematic, repeatable, and spatially exhaustive manner. Based on this review we examine the potential for a national biodiversity monitoring system for Canada driven by remote sensing, a country approaching 1 billion ha in area, with the aim of producing recommendations that are transferable for regional or continental applications. A combination of direct and indirect approaches is proposed, with four selected key indicators of diversity that can be derived from Earth observation data: productivity, disturbance, topography, and land cover. Monitoring these indicators through time at an ecosystem level has the potential to provide a national early warning system, indicating where areas of potential biodiversity change may be occurring. We believe the large area biodiversity monitoring system as outlined would provide an initial stratification of key areas where regional and local scale analysis can be focused, while also providing context-specific information for species collection data (Duro et al., 2007).

Methodology

Locale of the Study

The study was conducted along Katibao Creek, Dimapatoy Watershed Forest Reserved (DWFR).

Dimapatoy Watershed Forest Reserved is located in the southwest of Datu Odin Sinsuat Municipality and Northwest of North Upi Municipality covering and approximate area of 3,765 hectares.

Dimapatoy River of Dimapatoy Watershed Forest Reserved covering an approximate area of Three thousand Seven Hundred Sixty Five hectares (3, 765) in the Southwest of North Upi Municipality.

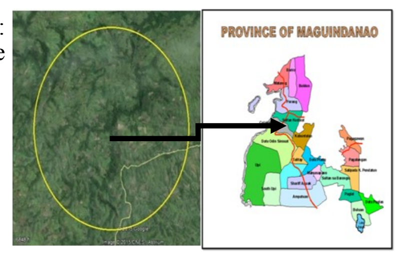


Figure 1: Location of the Study Area

Research Design

Descriptive survey was used. This includes the description, identification and assessment of tree diversity in the study area.

Materials & Instrument

Record notes, pencil, ball pen, measuring tape, bolo, GPS and camera DSLR

Sampling Procedure

The six stations established were strategic and purposively selected.

Diversity Index. All tree species found within the established station were describe as to book description, identified according to its common, scientific and family names. Each species were assessed based on its conservation status using the Red List of IUCN, 2013. Shannon-Weiner index (H') of diversity was assessed, analyzed and computed using this formula:

$$H' = \sum_{1}^{N} pi(\ln pi)$$

Where: pi = Proportion of total sample belonging to ith species

ln = log based n

The diversity values for Shannon-Weiner were classified based on the scale developed by Fernando (1998).

Relative Values	H' Values
Very High	>3.5000
High	3.0000 – 3.4999
Moderate	2.5000 – 2.9999
Low	2.0000 – 2.4999
Very Low	<1.9999

Data analysis

All data was analyzed using descriptive statistic

RESULTS AND DISCUSSION

The trees found in Katibao Creek, Dimapatoy Watershed Forest Reserved are presented in Table 1. Scientific names, common names and conservation status are indicated.

Table 1. List of trees in Katibao Creek, Dimapatoy Watershed Forest Reserved

Family Name	Scientific Name	Common Name	Conversation Status
Achariaceae	*Pangium edule* Rein.	Pañgi	None
Anonaceae	*Polyahtia longifolia*	Indian Tree	None
Apocynaceae	*Alstonia macrophylla* Wallich.	Batino	Least Concern
Apocynaceae	*Alstonia scholars* (L.) R.Br.	Dita	Least Concern
Apocynaceae	*Wrightia pubescens* R. Br.	Lanite	None
Araliaceae	*Polyscias nodosa* (Blume) Seemann	Malapapaya	None
Bignoniaceae	*Spathodea campanulata* P.Beauv.	African Tulip	None
Burseraceae	*Garuda Floribonda* Decne.	Bogo	None
Calophyllaceae	*Calophylum inophyllum* (Bl.)	Bitaog	None
Combretaceae	*Terminalia microcarpa* Decne.	Kalumpit	None
Dipterocarpaceae	Dipterocarpus grandiflorus Blanco.	Apitong	Critically Endangered
Dipterocarpaceae	*Hopea malibato* Foxw.	Yakal Kaliot	Critically Endangered
Dipterocarpaceae	*Shorea almon* Foxw.	Almon	Critically Endangered
Dipterocapaceae	*Shorea contorta*	White Lauan	Critically Endangered
Dipterocarpaceae	*Vatica mangachapoi*	Mangachapoi	Endangered
Fabaceae	*Leucaena leucocephala* Lam.	Ipil-ipil	None
Fabaceae	*Pterocarpus indicus* Wild.	Prickly Narra	Vulnerabl e
Lauraceae	*Cinnamomum mercadoi* Vidal	Kalingag	Vulnerable
Meliaceae	*Swietenia macrophylla* King.	Large leaf Mahogany	Vulnerable
Moraceae	*Artocarpus blancoi (Elm.)* Merr.	Antipolo	Vulnerable
Moraceae	*Alleaenthus luzonicus* (Blanco) F. Vill.	Himbabao	None
Moraceae	*Ficus elastica* Roxb.	Balete	None
Moraceae	*Ficus minahassae* Mig.	Hagimit	None
Moraceae	*Ficus variegate* Blume.	Tangisang Bayawak	None
Phyllantaceae	*Bridelia minutiflora* Hook.F.	Subiang	None
Rubiaceae	*Nauclea orientalis Linn.*	Bangkal	None
Sterculiaceae	*Pterospermum obliquum* Blanco	Kulatingan	None
Verbenaceae	*G'melina arborea* Roxb.	Yemane	None

Table 2. Number of Tree species in the study area

Common name	Scientific Name	Station							Total No. of Individual Tree
		1	2	3	4	5	6	7	
African tulip	*Spathodea campanulata*					1			1
Almon	*Shorea almon*						10		10
Antipolo	*Artocarpus blancoi*	1			2	1	3		7
Apitong	Dipterocarpus grandiflorus				1				1
Balete	*Ficus elastica*	1		1					2
Bangkal	*Nauclea orientalis*					1			1
Bitaog	*Calophylum inophyllum*						1		1
Bogo	*Garuda Floribonda*					1	1		2
Dita	*Alstonia scholaris*			1					1
Hagimit	*Ficus minahassae*		1						1
Himbabao	*Alleaenthus luzonicus*						1		1
Indian tree	*Polyahtia longifolia*						1		1
Ipil-ipil	*Leucaena leucocephala*		1	4	1	1			7
Kalingag	*Cinnamomum mercadoi*	4	1	10	10	8			33
Kalumpit	*Terminalia microcarpa*		3				1		4
Kulatingan	*Pterospermum obliquum*				1		1		2
Lanete	*Wrightia pubescens*						1		1
Large leaf Mahogany	*Swietenia macrophylla*			10			10		20
Malapapaya	*Polyscias nodosa*					1			1
Manga chapoi	*Vatica mangachapoi*		1						1
Pangi	*Pangium edule*	2					1		3
Prickly Narra	*Pterocarpus indicus*	2			6		1		9
Subiang	*Bridelia minutiflora*				1		1		2
Tangisang Bayawak	*Ficus variegate*				1				1
White Lauan	*Shorea contorta*	1					1		2
Yakal Kaliot	*Hopea malibato*		10	10	4	1	10		35
Yemane	*G'melina arborea*			1					1

Table 3. Total Value of Diversity per station

Station	Coordinates	No. of tree species	Total No. of individuals	Diversity Indices (H'values)	Relative values
1	N: 07˚04.976' E: 124˚10.211'	11	11	1.65	Very low
2	N: 07˚05.053' E: 124˚10.280'	17	27	1.3	Very low
3	N: 07˚05.102' E: 124˚10.337'	45	35	1.82	Very low
4	N: 07˚O6.360' E: 124˚10.780'	20	20	1.57	Very low
5	N: 07˚06.547' E: 124˚10.708'	17	17	1.69	Very low
6	N: 07˚06.183' E: 124˚10.842'	41	41	1.9	Low

There were twenty eight (28) individual different species with a total of one hundred fifty one (151) tree species with eighteen (18) different plant families. These were family Moraceae, Achariaceae, Fabaceae, Burseraceae, Dipterocarpaceae, Anonaceae, Combretaceae, Lauraceae, Sterculiaceae, Phyllantaceae, Liliaeae, Meliaceae and Rubiaceae. First station has the H' value of 1.65, second station H'value 1.3., third station H' value of 1.82, fourth station H'value 1.57, fifth station H'value 1.69 and except the last station have low H'value of 1.9 and the Shannon Weiner (H') index value of tree diversity results was very low based on the scale of Fernando, 1998 category. The most frequent species was Kalingag.

Findings

The study was "Tree Diversity Assessment along Katibao Creek, Dimapatoy Watershed Forest Reserved, Datu Odin Sinsuat, Southern Philippines" and it was conducted on the last quarter of school year 2015. Generally, the researcher aimed to identification, assessed the conservation status and computed the tree diversity using Shannon-Weiner Index (H').

For identification was referred to books, websites and other references. As for the conservation status, it was referred based on the Red List of IUCN System 2013. Tree diversity was assessed and computed using Shannon-Weiner index (H') diversity formula.

The researcher found out that there twenty eight (28) individual species with eighteen different families. All the results on diversity have a very low value based on the categories scaled by Fernando (1998).

Conclusion

Based on the result of the study, the researcher concluded that the study area was illegally logged and trees were cut down for charcoal making and the remaining vegetations along Katibao creek must be protected, conserved and maintained because it is the main source of water that supplies the Dimapatoy Watershed Forest Reserved.

In addition, the researchers concluded that the results have a very low value in terms of tree diversity due to illegal activities of a man. Therefore, the remaining tree species must be protected and conserved in order to attain sustainable water supply in Katibao Creek.

Recommendation

After thorough observation of the researcher on the vegetation of the area, particularly on tree species as well as the topographic relief on the area, the researcher come up the following recommendations;

The remaining vegetation especially tree species should be protected, maintain and conserved, this trees serve as source of water of Katibao Creek.

Application of silvicultural practice is highly recommended by the researcher to improve and sustain existing vegetation especially tree species.

The Local Government of Maguindanao should mandated to implement the watershed laws at Dimapatoy Watershed Forest Reserved

Acknowledgement

My sincerest thanks of gratitude to the tour guides Datu Leon Datuwata, Pastor Alige and Manong Alex for the untiring support and guidance along the conduction of the study and the entire faculty of the College of Forestry who extended their assistant in attaining this research. I am very thankful to my family who is always there to pray for the success of this activity. Above all to Almighty Allah who always keep me safe.

Cited Literature

Aresenio, J., Medecilo, M., Mercado, E., Salibay, E. Jr. & Valera, F.A. (2011). *Vegetation Analysis of Mt. Maculot, Cuenca, Batangas, Philippines.* Retrieved from http://www.ipcbee.com/vol12/49-C30017.pdf

Danbury, J.A. (2008). *Important and value of trees.* Retrieved from http://www.savatree.com/whytrees.html

Duro, D.C., Coops, N.C., Wulder, M.A. & Han T. (2007). *Development of a large area biodiversity monitoring system driven by remote sensing.* Retrieved from http://ppg.sagepub.com/content/31/3/235.abstract

Oliva, R.V. (2007). *Philippine forest and wildlife law enforcement.* Retrieved from http://pdf.usaid.gov/pdf_docs/Pnadl681.pdf

Redowan, M. (2015). *Spatial pattern of tree diversity and evenness across forest types in majella national park, italy*. Retrieved from https://forestecosyst.springeropen.com/articles/10.1186/s40663-015-0048-1

Tacio, H. (2013). *Biodiversity: Philippine forests are rapidly disappearing*. Retrieved from http://environews.ph/biodiversity/philippine-forests-are-rapidly-disappearing/

Verheyen, K., Vanhellemont, K., Auge, H., Baeten, L., Baraloto, C. Barsoum, N., Bilodeau-Gauthier, S., Bruelheide, H., Castagneyrol, B., Godbold, D., Haase, J., Hector, A., Jactel, H., Koricheva, J., Loreau, M., Mereu, S., Messier, C., Muys, B., Nolet, P., Paquette, A. Parker, J., Perring, M., Quentin P., Potvin, C., Reich, P., Smith, A., Weih, M. & Scherer-Lorenzen, M. (2011). *Contributions of a global network of tree diversity experiments to sustainable forest plantations*. Retrieved from http://www.treedivnet.ugent.be/literatuur/Verheyen_etal_2016_AMBIO.pdf

Watson, H.R. (2013). *Biodiversity: Philippine forests are rapidly disappearing.* Retrieved from http://environews.ph/biodiversity/philippine-forests-are-rapidly-disappearing/

SULIRANING KINAKAHARAP NG MGA MAG-AARAL NA CRIMINOLOGY SA PAGSASALITA NG WIKANG FILIPINO

JANE VERAFLOR-MORENO
Faculty, Criminal Justice Education
North Luzon, Philippines State College
Candon, City, Ilocos Sur

ABSTRAK

Ang tuon ng pananaliksik na io ay pagtukoy ng mga suliraning kinakaharap ng mga mag-aaral na Criminology sa pagsasalita ng wikang Filipino, epekto ng mga suliraning ito sa pag-aaral ng mga Criminology sa mga asignaturang Filipino, at mga solusyon at mga paraan upang matugunan ang mga suliraning ito.

Palarawan o deskriptiv ang disenyong ginamit sa pananaliksik.

Ang tatlong pangunahing konklusyong natuklasan ng mananaliksik: Ang pagpapalit-palit ng ilan sa mga tunog na nagagamit sa wikang Filipino at pagdala ng mga Criminology sa intonasyon, diin at tono ng kanilang unang wikas a pagsasalita ng Filipino; Kawalan ng interes na pag-aralan ang wikang Filipino at hindi gaanong pagsasalita sa klase dahil natatakot na magkamali at mapagtawanan ng mga kaklase; at Mas maagang pagtuturo ng Palatunugan o Ponolohiya ng wikang Filipino sa mga mag-aaral at pagpapaigting ng binibigay na motibasyon ng guro sa kanyang mga mag-aaral upang patuloy na pag-aralan ang wikang Filipino nang sa ganitong paraan ay hindi mawala ang interes ng mga bata. Inirerekomenda ang mga sumusunod: Dapat nakasentro sa paraan ng pagtuturo at pagkatuto ng wika upang mahimok ang interes ng mga mag-aaral. Kinakailangan ng guro ang maging mapagmasid sa mga mag-aaral upang mabigyan ng kaukulang pansin ang mga mag-aaral na may kahirapan sa Filipino. Mas paigtingin ang collaborative learning upang mas makasunod ang mga mag-aaral at hikayatin ang mga mag-aaral na ipahayag ang kanilang nararamdaman. Anumang pagkakamaling magawa ng mag-aaral ay dapat ituring na likas at bahagi ng pagkatuto, at Suriin din ng guro ang ibang kasanayang makrong tulad ng pagbasa, pagsulat, pakikinig at pagsasalita ng mga mag-aaral upang matugunan ang suliraning kinakaharap.

INTRODAKSYON

Ang wika ay batay sa kultura. Ito'y pagkakakilalan sa lahing kinabibilangan ng isang gumagamit ng wika. Ang anumang pag-uugali at kinagawian sa unang wika ay taglay sa pang-aaral ng pangalawang wika. Hindi rin maiiwasan na naaapektuhan sa ating pagsasalita dahil sa impluwensya ng unang wika sa pangalawang wika gaya ng kamalian sa tono, pagbigkas ng tunog at kabuuang gramatika ng wika.

Halimbawa na lamang ay ang isang Bisaya o isang Ilokano na nagsasalita ng Tagalog, hindi ba't kapuna-puna ang kaibhan ng kanilang pagsasalita kumpara sa isang taal na tagapagsalita ng Tagalog? Mapapansin natin ang kanilang napagpapalit na pagbigkas sa /e/ at /i/ o kaya naman ay sa /o/ at /u/. May mga pagkakataon din naman na ang isang salita ay may iba't ibang kahulugan. Tulad na lamang ng "langgam" at "bukid" ng mga Bisaya. Kung isang taal na Bisaya ang gagamit nito, ang kahulugan ng mga salitang nabanggit ay "ibon" at "bundok", samantala, sa Tagalog naman ay nangangahulugan ito ng "ant" at "farm" sa Ingles (Abesamis, 2006).

Batay sa pag-aaral ni Ocampo (2002), kanyang inilahad na ang bawat wika ay may mahigit sa isang varayti, lalo na sa pananalita. Kanyang sinuri at pinag-aralan ang varayti ng Filipino sa Palawan at sa kanilang paggamit at pagpapakita ng varayti ng Filipino ay pinatutunayan nila ang pagiging buhay at dinamiko ng wikang pambansa.

Samantala, nagsagawa rin ng pag-aaral si Perigrino (2002) hinggil sa ambag ng Waray sa Pambansang Lingua Franca o ang Filipino. Kanyang binigyang-diin na dapat tayong maging mulat sa katotohanang ang wikang Filipino ay nabuo mula sa iba't ibang wikang umiiral sa bansa at sa pamamagitan nito'y maipapakita ang pagkapantay-pantay ng mga wika sa bansa.

Batay sa sensus na kinalap ng National Statics Office noong 2000, mahigit kumulang 10 sa 171 na buhay na wika sa Pilipinas ang itinuturing na pangunahing wika kung saan ang pangunahing wika ay nangangahulugang may mahigit sa isang milyon ang nagsasalita o gumagamit nito. Ayon din sa datos ng nabanggit na sensus, ang tatlong pangunahing wika, batay sa bilang ng nagsasalita ay Tagalog (21.5 milyong katutubong ngsasalita o 28.15% ng kabuuang populasyon ng mga Filipino), Sebwano (20 milyong katutubong nagsasalita o 26.1% ng kabuuang populasyon), at Ilokano (7.7 milyong katutubong nagsasalita o 10.1% ng kabuuang populasyon). Itinuturing din na rehiyonal na lingua franca ang tatlong wikang ito na, ang Ilokano ay ginagamit ng mga rehyon sa hilagang bahagi ng Luzon, ang Tagalog sa gitna at timog na bahagi ng Luzon, at ang Sebwano-Bisaya sa isla ng Visayas at ilang bahagi na batay sa Espanyol ang pinagmulan ng Abakada, ang alpabetong Filipino na itinakda ng unang Balarilang Wikang Pambansa na ginamit ng mga pampublikong paaralan na siyang ipinaglaban ni Lope K. Santos at ianprobahan sa pmamagitan ng

Kautusang Pangkagawaran Blg 1, s. 1940 ng Pampublikong Instruksiyon. (journals.upd.edu.ph>Home> Vol.18 No 1- 2 (2012)Ilao)

May 60% sa mga estudyante ng North Luzon Philippines State College, Candon City ay gumamit ng wikang Iloko, Itneg at Kanka-ey. Sila ay nanggagaling sa pangalawang distrito ng Ilocos Sur mula sa mga bayan na nasa upland /interior tulad ng Alilem, Banayoyo, Cervantes, Galimuyod, Gregorio del Pilar, Lidlidda, Quirino, Salcedo, San Emilio, Sigay.

Ayon kina Selinker & Douglas (1985) sa kanilang Interlanguage Theory, sa pagkatuto at pagsasalita ng pangalawang wika ay malaki ang nagiging epekto ng unang wika ng mag-aaral sapagkat nadadala nila ang mga katangian ng kanilang unang wika. Sa pagkatuto ng pangalawang wika kadalasan nagmumula an mga kamalian sa pagbigkas.

Ito ang nag-udyok ng mananaliksik na magsagawa ng pananaliksik upang bigyan ng kalutasan at maibsan ang kahinaan sa wastong pagbigkas ng mga salita.

PAGPAPAHAYAG NG SULIRANIN

Ang pag-aaral na ito ay nakapokus sa pagtukoy ng mga suliraning kinakaharap ng mga mag-aaral na Criminology sa pagsasalita ng Wikang Filipino.

Pinagsumikapang masagot ang mga sumusunod:

1. Anu-ano ang mga suliraning kinakaharap ng mga Criminology sa pagsasalita ng wikang Filipino?
2. Anu-ano ang mga epekto ng mga suliraning ito sa pag-aaral ng mga Criminology sa mga asignaturang Filipino?
3. Anu-ano ang mga solusyon at mga paraan upang matugunan ang mga suliraning ito?

METODOLOHIYA

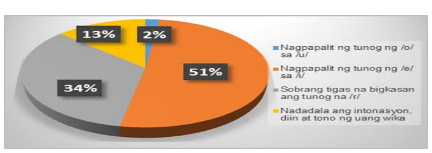
Palarawan o deskrptiv ang disenyong ginamit sa pananaliksik sapagkat nilalayon ng pag-aaral na ilarawan ang mga iba't ibang suliraning kinakaharap ng mga mag-aaral sa Criminology sa pagsasalita ng wikang Filipino, epekto at solusyon upang matugunan ang mga suliraning natukoy sap ag-aaral. Ang mga respondent ng pananaliksik ay 100 mag-aaral na Criminology na ang unang wika ay Itneg.

Purposive Random Sampling ang ginamit sa pag-aaral. Ranking at Percentage ang ginamit sa pgsusuring istatistikal upang mabigyan ng interpretasyon ang mga nakalap na datos a pamamagitanng talatanungan.

RESULTA AT PAGPAPAKAHULUGANNG MGA DATOS

Mga suliraning kinakaharap ng mga Criminology sa pagsasalita ng wikang Filipino batay sa mga sagot ng mga respondent.

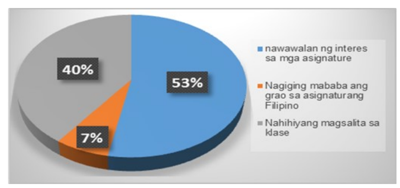
Makikita sa pagbabahagdan, nangunguna ang 51% sa mga suliraning kinakaharap ng mga Criminology sa pagsasalita ng wikang Filipino ang napagpapalit nila ang tunog ng /e/ sa /i/. Samantala, 34% sa kabuuan ng nakalap na sagot ang nagsasabing sobrang tigas silang bigkasin ang tunog na /r/. Pumapangatlo sa 13% ang suliraning nadadala nila ang intonasyon, diin at tono ng kanilang unang wika. Mapapansin na 2% lamang nagsabing napagpapalit nila ang tunog ng /o/ sa /u/.



Ayon sa ginawang pag-aaral ni Taeza (2012) na ang mga suliraning kinakaharap ng mga Kalinga sa pagsasalita ng wikang Filipino ay may 51% madalas napagpapalit ang tunog /e/ sa /i/, 34% nagsasabing nahihirapan silang bigkasin ang tunog na /r/, 13% naman nadadala ang intonasyon, diin at tono ng kanilang unang wika, at mapapansin na 2% lamang nagsasabing napagpapalit nila ang tunog na /o/ sa /u/.

Malaki ang nagiging epekto ng unang wika sa pagkatuto at pagsasalita ng ikalawang wika lalong-lali na kung magkaiba ang Palatunugan o Ponolohiya ng dalawang wika. May kaugnayan ang resultang ito sa nabanggit ni Odlin (1989) na makapangyarihan ang impluwensiyang ponetiko at ponolohiya sa pagbigkas ng pangalawang wika.

Mga epekto ng mga suliraning kinakaharap ng mga criminology sa pag-aaral ng mga asignaturang Filipino.



Batay sa resulta ng mga nakalap na sagot ng mga respondente, 53% ng kabuuan ng mga nakalap na sagot ang nagsasabing ang epekto ng mga suliraning kinakaharap ng mga Criminology sa pag-aaral ng mga asignaturang Filipino ay ang pagkawala ng interes sa mga asignaturang Filipino. Pangalawa ang epektong nahihiya silang magsalita sa klase na bumubuo ng 40%. Samantalang, 7% lamang ang nagsabing bumababa ang kanilang grado sa asignaturang Filipino nangangahulugan na ang hindi lamang nakatuon ang asignaturang Filipino sa pagsasalita bagkus nabibigyang-diin din ang iba pang makrong kasanayan tulad ng pagsulat, pakikinig, pagsulat at pagbasa.

Sa pag-aaral ni Munawwiroh (2013), natuklasan ang epekto ng sense of inferiority sa kakayahang magsalita na nagdudulot ng pakiramdam nanababahala, inilalayo ang sarili, nag-aalala, at mababang pagtingin sa sarili. Ito ay naiimpluwensiyahan ang kanilang mga puntos sa pagsasalita upnag maging mababa.

Mga solusyon o mga mga solusyon at mga paraan upang matugunan ang mga suliraning natukoy sa pag-aaral.

Ayon sa ginawang pagbabahagdan ng mananaliksik, ang nangunang solusyon o paraan upang maituwid ang mga mga suliraning ito wikang ay sa pamamagitan ng mas maagang pagtuturo sa Palatunugan o Ponolohiya ng wikang Filipino na bumubuo sa 51% ng kabuuan ng mga nakalap na sagot, 26% naman ng kabuuang sagot na nakalap ang nagsasaad na sa pamamagitan ng pagbibigay ng karagdagang konsiderasyon ang mga mag-aaral na nahihirapan sa pagsasalita ng wikang Filipino , at 23% gawing Filipino ang pangunahing midyum sa pagtuturo lalo na sa mababang lebel ng edukasyon.

Ayon sa Critical Period Hypothesis (CPH) ni Lenneberg (1967), may panahon na kung saan ang pagkatuto sa isang wika ay mas nagiging matagumpay sa pagitan ng 12 – 18 taong gulang at mas kilala bilang *puberty stage* sa mundo ng Agham, sa kritikal na papahong ito natutunan ang Sistema ng Ponolohiya at indayugna bagong wika inumpirma din sap ag-aaral nina Pallier, Bosch, at Sebastian (1997) na ang matatanda ay lubhang nahihirapan sa pagkatuto ng ikalawang wika lalo na sa Palatunugan at Intonasyon ng wika. Naging isang teorya din ni Scovel (1981), na may *crirical period* na itinuturing na *neurological* o naasalalay sa utak ng tao at iniugnay ito sa interbensyo ng isang nerve sa katawan ng tao.

Natuklasan ni Taeza (2012) sa kanyang pag-aaral, na sa pamamagitan ng mas maagang pagtuturo ng wikang Filipino ay maaaring masolusyunan ang suliranin sa pagsasalita ng wikang Filipino at malaki din ang gampanin ng gurosa pagbibigay-motibasyon sa mga mag-aaral upang hindi tuluyang mawala ang kanilang interes na pag-aaralan ang Filipino.

KONKLUSYON

Batay sa mga nakalap at nabigyang interpretasyon ng mga datos, narito ang tatlong pangunahing konklusyon ng mananaliksik:

1. Ang pagpapalit-palit ng ilan sa mga tunog na nagagamit sa wikang Filipino at pagdala ng mga Criminology sa intonasyon, diin at tono ng kanilang unang wikas a pagsasalita ng Filipino.
2. Kawalan ng interes na pag-aralan ang wikang Filipino at hindi gaanong pagsasalita sa klase dahil natatakot na magkamali at mapagtawanan ng mga kaklase.
3. Mas maagang pagtuturo ng Palatunugan o Ponolohiya ng wikang Filipino sa mga mag-aaral at pagpapaigting ng binibigay na motibasyon ng guro sa kanyang mga mag-aaral upang patuloy na pag-aralan ang wikang Filipino nang sa ganitong paraan ay hindi mawala ang interes ng mga bata.

REKOMENDASYON

Inirerekomenda ang mga sumusunod:

1. Dapat nakasentro sa paraan ng pagtuturo at pagkatuto ng wika upang mahimok ang interes ng mga mag -aaral.
2. Kinakailangan ng guro ang maging mapagmasid sa mga mag-aaral upang mabigyan ng kaukulang pansin ang mga mag-aaral na may kahirapan sa Filipino.
3. Mas paigtingin ang collaborative learning upang mas makasunod ang mga mag-aaral at hikayatin ang mga mag-aaral na ipahayag ang kanilang nararamdaman. Anumang pagkakamaling magawa ng mag-aaral ay dapat ituring na likas at bahagi ng pagkatuto.
4. Suriin din ng guro ang ibang kasanayang makrong tulad ng pagbasa, pagsulat, pakikinig at pagsasalita ng mga mag-aaral upang matugunan ang suliraning kinakaharap.

Inirerekomenda ang mga sumusunod: Dapat nakasentro sa paraan ng pagtuturo at pagkatuto ng wika upang mahimok ang interes ng mga mag-aaral. Kinakailangan ng guro ang maging mapagmasid sa mga mag-aaral upang mabigyan ng kaukulang pansin ang mga mag-aaral na may kahirapan sa Filipino. Mas paigtingin ang collaborative learning upang mas makasunod ang mga mag-aaral at hikayatin ang mga mag-aaral na ipahayag ang kanilang nararamdaman. Anumang pagkakamaling magawa ng mag-aaral ay dapat ituring na likas at bahagi ng pagkatuto, at Suriin din ng guro ang ibang kasanayang makrong tulad ng pagbasa, pagsulat, pakikinig at pagsasalita ng mga mag-aaral upang matugunan ang suliraning kinakaharap.

Pagkilala

Ang mananaliksik ay taos-pusong ngpapaabot ng kanyang pasasalamat sa mga taong nagkaraoon ng malaking tulong sa ikatatagumpay ng pananaliksikna ito.
Dr. Elizabeth M. Gacusana, Pangulo ng North Luzon Philippines State College; Ms. Jannah T. Aromin, Department Chair, Criminal Justice Education;Mga Mag-aaral ng Criminology at Kaguro sa Criminal Justice Education para sa kanilang suporta at higt sa lahat ang POONG MAYKAPAL sa walang sawang pagmamahal, pmamatnubay at pagbibigay ng sapat na lakas, talino at kalusugan sa araw-araw.

BIBLIOGRAPIYA

Mga Aklat

Abesamis, N.R., Angeles, C. I.,Babasoro, P.R., Bulaong, C.J., Salvador, J.S. et al. Komunikasyon sa Akademikong Filipino (Filipino I sa Kolehiyo). (2006). Valenzuela City: Mutya Publishing House, Inc.

Alcaraz, C.V., ocson, M.O. at Villafuerte, P.V. (2005). Filipino I Komunikasyon sa Akademikong Filipino.Quezon City: Lorimar Publishing Co, Inc.

Baltazar, N. A. (1977) Pagtuturo ng Filipino sa mga di-Tagalog. Manila: Rex Book Store.

Inocencio, E. T. (1988). Ang Sining ng Pakikipagtalastasan sa Kolehiyo. Manila: National Book Store

Ocampo, N.. (2012). "Mga Varayti ng Wika." Nasa *Salindaw: Varayti at Baryasyon ng Filipino*. Lungsod Quezon: Sentro ng Wikang Filipino – UP Diliman. mp. 18-39.

Odlin, T. (1989). Language Transfer: Cross-linguistics influence in language learning. Cambridge: Cambridge University Press

Peregrino, J. (2012). "Wika at relihiyon."nasa *Salindaw: Varayti at Baryasyon ng Filipino*. Lungsod Quezon: Sentro ng Wikang Filipino – UP Diliman. mp. 223 - 233.

Santiago, A. O. (1981). Panimulang Linggwistika. Manila: National Book Store

Santiago, A. O. at Tiangco, N. G. (2003). Makabagong Balarilang Filipino Binagong Edisyon . Manila: National Book Store

Santiago, E. M. (1982). Ang Sining ng Pakikipagtalastasan sa Kolehiyo. Manila: National Book Store

Santos, L. K. (1980) Balarilang Pandalubhasaan II. Manila Philippine Book Company

Tiangco, N. G. (1991). Makabagong Balarilang Pilipino. Manila: Rex Book Store

Mga Dyornal

Cook, V.J. (1992): Evidence for multi-competence. *Language Learning*, 42-44,557-591

Kenny, L.A. (2011). *Doing Students Justice: How First Language Acquisition Influences Second Language Acquisition*. Vol. 39, No. 41, 6-41

Krashen, S.D. and Terrell, T.D. (200). *The Natural Approach: Language Acquisition in the Classroom.* London: Prentice Hall Europe

Lenneberg, E. (1967). *Biological Foundations of Language*. New York: John Wiley & Sons

Maminta, R.E. (2001). *In Focus, Selected Writings in Applied Linguistics*. The Philippine Association for Language Teaching, Inc., 11-35, 69-119

Townsend, D. (2009). *Building Academic Vocabulary in After-School Settings: Games for Growth with Middle School English-Language Learners*. Journal of Adolescent & Adult Literacy, 53, 242-251

Internet Websites

Bautista, F. Komparatibong Presentasyon ng Dalawang Pag-aaral sa Ponemik/Ponetik: Isang Prajek para sa Ortograpiya. Retrieved on June 25, 2015 from www.academia.edu/2193102/

Ilao, J.P, Santos, TI.D. at Guevarra, RC. L. (2012). Komparatibong Analisis ng Aktuwal na Gamit ng Wika at mga Piling Pamantayan sa Gramatika at Ortograpiya sa Filipino, Sebwano-Bisaya at Ilokano: Lapit Batay sa Korpus. Daluyan: Journal ng Wikang Filipino Vol. 18 Retrieved on July 1, 2015 from journals.upd.edu.ph<Home>

Lartec, J,K., Dotimas, S.D., Maraño, CM R., Pitas, MA. P,, Polido, J.L. at Senio,K.L. Ang Paggamit ng Inklusibong Wika sa Filipino tungo sa Pagtamo ng Inklusibong Edukasyon. Retrieved on June 25, 2015 from //larc-su.edu/images/larc

Munawwiroh, A. (2013). The Effect Of Inferiority on Speaking Ability; A Case Study Conducted to the Fourth Semester Students at English Department of Academic Year 2012/2013.Scripta Pendidikan Bahasa Inggris Vol 1(3). Retrieved on June 25,2015fromhttp://ejournal.umpwr.ac.id/index.php/scripta/article/view/1342

Pronounciation Trainers. Retrieved on July 18, 2016 from fluent-foreve.com/tl/learning-pronounciation trainers.

rizalcollegeoflaguna.blogspot.com/.../kabanata-1-sulir. Retrieved from November 5, 2015

wastong pagbigkas. Paaralan ukol sa minesteryo. Retrieved on July 1, 2015 from wol.jw.org/en/wol/d/r27/lp-tg/1102001072

Taeza, J.T. (2012). Mga Suliraning Kinakaharap ng mga Kalinga sa Pagsasalita ng Wikang Filipino. Retrieved on June 25, 2015 from www.academia.edu/2193102/

PREDICTORS OF EMPLOYABILITY OF THE BUSINESS ADMINISTRATION GRADUATES OF NORTH LUZON PHILIPPINES STATE COLLEGE

By: **RODOLFO C. MORENO, Ph.D.**
Faculty, College of Business Education, North Luzon Philippines State College
Candon City, Ilocos Sur

ABSTRACT

The purpose of this paper determined the predictors of employability of the BS Business Administration graduates of NLPSC, Candon City, Ilocos Sur from school year 2011-2012 and 2012-201. The respondents were 123 BSBA graduates from school year 2011-2012 and 2012-2013; and the stratified random sampling was utilized. A survey-checklist instrument was used in gathering data consisted of 23 items divided into five sections. The frequency count & percentages, mean and regression analysis were used in the treatment of data. The IBM SPSS Statistics Version 2.0 was used to facilitate computation.

Results reveal that there are more female graduate respondents than male, normal age, single, and very few possess eligibility and who attended trainings, conferences, seminar-workshops related to their job. They possess an acceptable abilities to work effectively as part of a team to achieve a group result; build a positive working relationship; and work well with colleagues to reach its full potential to get results; they have the necessary competencies to correct and analyze the situation, understand tradeoffs and could offer appropriate recommendations to the problems; they have easy access to information regarding job opportunities upon graduation through advertisement posted in the college premises, school's job placement program conducted every year as well as information from friends and relatives. The respondents enrolled BSBA program due to the influence of parents; the prospect of immediate employment after graduation, and the prospect of career advancement; most of them were employed in the public and/or in the private sector; below half were regular/permanent; they took less than six months in landing their first job after graduation; and almost all found a BSBA degree relevant to their current job. The age, civil status, eligibility, problem-solving skills, teamwork skills, critical thinking and decision making skills served as perfect predictors of employability of the BSBA graduates.

The respondents are encouraged to take government examinations like the civil service, examination or national competency from TESDA; and participate and/or undertake trainings, seminar-workshops, conferences, and graduates studies by providing assistance, incentives and staff development. The college may consider the continuous provision of relevant program and activities that will enhance further the competencies of the graduates; build-up more the job placement program through the conduct of a job fair; the Office of the Alumni Relations and Linkages is encouraged to develop a Graduate Tracer Study as feedback mechanisms for the graduates in all courses.

Keywords: *employability status, predictors, competencies, mode of job search*

INTRODUCTION

Investment in people are necessary for they are the agents and the beneficiaries of growth. It is a force capable of not only transforming illiteracy into the countless competencies required for development of society. It could not be denied that education has a close and meaningful relationship with the development of all aspects of the human personality.

The goal of the government is to win the battle against poverty within the decade and bring prosperity within the reach of every Filipino in the late 21st century. It is crucial for government efforts carry a social bias as a balance of economic growth. This requires a significant reform to increase human investments, especially in education.

According to the U.S. Bureau of Labor Statistics, between 1995 and 2005, the United States lost 3 million manufacturing jobs. In that same 10-year period, 17 million service-sector jobs were created (Partnership for 21st Century Skills, 2008). Many of the fastest-growing jobs in the service sector are high-end occupations, including doctors, lawyers, engineers, and sales and marketing professionals. More than three-quarters of all jobs in the United States are in the service economy, yet many policymakers view them as low-skill, low wage options (Council on Competitiveness, 2008).

According to the Commission on Population (POPCOM) of the Philippines, the estimated total population of the Philippines as of January 13, 2016 is 102,467,483 and since the success of the nation relies mainly from its large manpower resources. It endeavors to educate its people in order to develop internally within their current roles.

The professionals or graduates are the manpower potentials of the nation for development and growth. It is therefore necessary for the public and private institutions to offer job opportunities for the graduates to enhance their professional growth. In order to keep them relevant and competent in their fields as a matter of professional obligation to render quality service for their present and future employment of their career, the manager must know the competencies of fresh graduates and young job seekers. Relatedly, innovative learning, teaching and assessment methods which promote students' understanding and help them to engage in 'deep' learning will also enhance their employability.

The program objectives of the Bachelor of Science in Business Administration (BSBA) major in Financial Management are to prepare the graduates with complete understanding of the concepts, principle and the theories of Financial Management; help them to seek employment and assume entry-level jobs or positions of responsibility as financial analyst, financial manager, or executive; and prepare them to pursue a teaching career or graduate studies in business. On the other hand, the BSBA major in Human Resource Development Management is to prepare the graduates with complete understanding of the concepts, principles theories, and philosophies in Human Resource; assist them to seek employment and facilitate the integration process in the corporate environment so they can be immediately productive once employed; and assist them in appreciating the HR role in the organization and how they can make meaningful contributions as a strategic partner in building the organization to become globally competitive.

The BSBA graduates could extensively integrate all their learning experiences and technical working knowledge of the business environment by exposing them to actual work situations through the Practicum Program where they work for a minimum of 200 hours in a company qualified and approved by the college.

Statistics showed that during the first commencement exercises of North Luzon Philippines State College (NLPSC), the first batch of graduates in the School Year 2011-2012, 307 graduates of which 30.29 percent were BSBA graduates whereas during the school year 2012-2013, number of BSBA graduates declined to 87 (21.27%) from the 409 total number of graduates. The succeeding years, there was an increase in the number of BSBA graduates.

Observation showed that BSBA graduates usually employed in the sales/marketing companies as salesladies, clerk, cashiers, merchandisers, sales representatives among others. Although, some of them are underemployed, these graduates still accepts the job when instead they can be information service managers, product analyst, financial auditors, human resource administrators among others.

Hence, this study was conceptualized to determine the predictors of employability of the BSBA graduates of NLPSC for the school year 2011-2012 and 2012-2013.

STATEMENT OF THE PROBLEM

This study determined the predictors of employability of the BS Business Administration graduates of NLPSC, Candon City, Ilocos Sur. Specifically, it sought answers the following research questions:

1. What is the graduate-related factors of the respondents in terms of age, sex, civil status, eligibility, and trainings attended?
2. To what extent is the level of competencies of the respondents along communication skills, problem solving skills, teamwork, intercultural adaptive skills, office management skills, business management skills, information technology skills, and decision making skills?
3. What are the modes of job search availed by the respondents?
4. What are the reasons of the respondents pursuing their BSBA degree?
5. What is the employability status of the respondents with regards to type of employment, status of employment, job search time, and relevance of BSBA to the job?
6. What are the predictors of employability of graduates?

METHODOLOGY

The descriptive method of research was used in this study with the purpose to analyze the BS Business Administration graduate-related factors; level of competencies; modes of job search availed; reasons for pursuing their degrees; employability status; and the best predictors of their employability. This study utilized 123 BSBA graduates from school year 2011-2012 and 2012-2013; and the stratified random sampling was utilized. A survey-checklist instrument was used in gathering data consisted of 23 items divided into five sections. The frequency count & percentages, mean and regression analysis were used in the treatment of data. The IBM SPSS Statistics Version 2.0 was used to facilitate computation.

RESULTS AND DISCUSSION

The graduate-related factors of the respondents. Results reveal that there are more female than male, average age of 23, single, very few possesses eligibility, and only few attended trainings, conferences, seminar-workshops related to their job.

The level of competencies of the respondents. Table 1 reveals the summary table at the level of competencies of the BS Business Administration graduates.

As gleaned in the table, there is a" very satisfactory" ($\bar{x}$ = 3.91) competencies of the BS Business Administration graduates wherein teamwork, and critical thinking and decision-making skills were found to be the most useful

Table 1. Summary Table on the Level of Competencies of the Respondents

Competencies	$\bar{x}$	DL
1. Communication Skills	3.86	VS
2. Problem-Solving Skills	3.93	VS
3. Teamwork	4.13	VS
4. Intercultural Adaptive Skills	3.78	VS
5. Office Management Skills	3.94	VS
6. Business Management Skills	3.80	VS
7. Information Technology Skills	3.84	VS
8. Critical thinking & Decision-Making Skills	4.02	VS
GRAND MEAN	**3.91**	**VS**

skills needed in their job. It could be implied that the respondents possess an acceptable abilities to work effectively as part of a team to achieve a group result; they build a positive working relationship; and able to work well with colleagues to reach its full potential to get results. It indicates further that the respondent's adequate critical thinking and decision making skills are necessary components in their current employment triumph. They have the ability to correct and analyze the situation, understand tradeoffs and could offer appropriate recommendations to the problems.

According to Rod Adams, United Stated recruiting leader at Pricewaterhouse Cooper, critical thinking and problem solving skills are necessary components of workplace success. Reflection, analysis and planning all drive achievement skills are necessary at all levels. Other competencies seems important to the respondent's employment are their skills in office management, problems-solving, communication, information technology, business management, and intercultural adaptive.

The modes of job search availed by the respondents. It reveals that the respondents came to know about the job opportunity through advertisement (39.84%) posted in the college premises, school's job placement (23.58%) program conducted every year, information from friends and relatives (20.33%) among others. It could be implied further that the respondent has easy access to information regarding job opportunities upon graduation.

The reasons in pursuing BSBA Program. The data reveal that the respondents enrolled BSBA program mainly due to the influence of parents (51.22%); the prospect of immediate employment (36.59%) after graduation, prospect of career advancement (29.27%) among others. It could be explained further that NLPSC is a state college wherein it offer a minimal tuition fee and miscellaneous fee, and it might be the expectation of parents and relatives that SUCs provide quality education and competitive graduates. It happened that relatives and friends of these graduates enrolled BSBA program alike.

The employability status of the respondents. Most (86.17%) of the respondents are employed in the public/government sector and/or in the private sector while the others are self-employed and overseas Filipino workers. Below half (45.53%) are regular/permanent in their job; 23.58 percent casual; 14.63 percent contractual and the others temporary, co-terminus job order basis probationary and part-time. The respondents took 1 – 6 months (71.54%) to land on their first job after graduation; 17.07 percent took 7 – 12 months while the others took more than years. Almost all (94.31%) the respondents found their BSBA degree they had finished relevant to their current job.

The predictors of employability of the respondents. The result of analysis as shown in Table 2 reveals that the effect of the age of the BSBA graduates was found to be 44.1%. However, the inclusion of civil status gave a combined effect of 30.1%. Moreover, the combined effect of age, civil status and eligibility was 21.5%. Likewise, when the level of competencies along problem-solving skills combined with the variables came out to be predictors yielded an effect of 42.0%. The inclusion of teamwork skills gave an effect of 35.6%. Moreover, when office management skills were combined it has an effect of 8.6% and the presence of critical thinking ad decision making skills gave an effect of 38.8%.

Table 2. Predictors of Employability of the Respondents

Variables	B	R	R^2	F-value	Prob.
Age	2.10	.664	44.1	12.958	.000
Civil Status	-46.8	.549	30.1	17.114	.000
Eligibility	25.3	.463	21.5	16.398	.000
Problem-Solving Skills	-7.20	.648	42.0	14.000	.000
Teamwork Skills	-24.0	.597	35.6	16.324	.000
Office Management Skills	-22.5	.293	8.6	11.332	.000
Critical thinking & Decision Making Skills	14.9	.623	38.8	14.806	.000

This is an indication that these independent variables age, civil status, eligibility, problem-solving skills, teamwork skills, critical thing and decision making skills entered for regression analysis served as perfect predictors of employability of the BSBA graduates. As an evidence of having a probability value of 0.00 yielded to be highly significant.

It is found out that age appeared to be one of the best predictors in the employability of the graduates by contributing around 2.10 percent of the variance. It implies that the younger the BSBA graduates, the more their chances to be employed after graduation. The average age of the respondents which is 23 is supported by the Almazan (2001) that in the selection of the right employee for the job, a useful tip to consider is the age which must be within the range prescribed by the job specification and the company policy. Preferences are given to a younger employee because they are easier to train, to develop proper work, and they can work faster.

Likewise, the civil status became best predictor in the employability of the BSBA graduates causative variance of 16.8 percent. It implies that unmarried BSBA graduates are more preferred to be hired after graduation rather than those who are married. The conclusion in the study of Gacusana (2006) supported these findings since unmarried graduates have greater chances for employment because they are not hampered by familial obligations. In addition, wage effects of married individuals' shows that the marital status of women has no detrimental effect on their earnings, but it has a positive effect for married women. Workers with greater financial responsibilities to their families have higher earnings than unmarried workers with lesser financial responsibilities. Balloon (2007) supported the current findings that age and civil status predict the employability of graduates in the TIP, Quezon City.

On the other hand, the eligibility possess by the BSBA graduates turn out to be the best predictor of their employability. It indicates that the respondents who possesses eligibility have better chances to be employed in the public sector for those working in the government, especially those who gained the permanent/regular position enjoy receiving several fringe benefits from the government.

Moreover, some of the competencies of the BSBA graduate appeared to have great influence to their employability like problem-solving skills contributed around 7.20 percent of the variance, teamwork skills at around 24.0 percent of the variance; office management skills with an estimated 22.5 percent of the variance; and critical thinking and decision making skills at round 14.9 percent of the variance. It implies that the higher the level of competencies of the respondents along problem-solving, teamwork, office management and critical thinking and decision making skills the greater is their chances to be employed after graduation.

Academe-Industry Linkages, People Management Association of the Philippines (PMAP) 40 percent of fresh graduates do not immediately get hired because of the deficiencies in soft competencies, job seekers must possess to get hired like critical thinking, initiative, and effective communication skills. Each industry, would have some sort of minimum standard. Not having met that is proof that the students do not meet that standard.

In addition, Alcasid described critical thinking as the ability to solve actual workplace problems usually in multi-tasking situations and priority challenges; initiative is being able to not wait to be told what to do, while effective communication as competence in the language of business. People managers look for indicators like involvement in extra-curricular activities and involvement in situations where students get to develop their soft competencies.

Accordingly, the things employers generally value in new graduates are things that most teachers in higher education generally value (Harvey & Knight, 2003). Involving employers in the educational experience through placements, case studies, delivery of guest lectures, can help students appreciate the relevance of their course and learn how to apply theory and knowledge in practical ways in the workplace.

Although a student's experience of higher education cannot guarantee a 'graduate level job', the nature of that experience influences the chances of success. A focus on employability can encourage student motivation, leading to better results and higher positions in national subject league tables (Yorke, 2003).

The Strategic Plan 2012-2016 of the University of Edinburgh aimed to produce graduates fully equipped to achieve the highest personal and professional standards. The work focuses on embedding graduate attributes and employability in all our curricula, and equip our students to compete in the global marketplace; producing graduates with socially and economically valuable attributes and expertise; increasing student satisfaction with the opportunities and support for developing their graduate attributes and employability; equipping the graduates with the expertise and graduate attributes they need to achieve their full potential within the global community; and brokering strategic partnerships between academics, industry, specialists and other institutions to enhance the development of graduate attributes in all students.

CONCLUSIONS

1. There are more female graduate respondents than male, normal age, single, and very few possess eligibility and who attended trainings, conferences, seminar-workshops related to their job. 2. The respondents possess an acceptable abilities to work effectively as part of a team to achieve a group result; build a positive working relationship; and work well with colleagues to reach its full potential to get results; they have the necessary competencies to correct and analyze the situation, understand tradeoffs and could offer appropriate recommendations to the problems. 3. The respondents have easy access to information regarding job opportunities upon graduation through advertisement posted in the college premises, school's job placement program conducted every year as well as information from friends and relatives. 4. The respondents enrolled BSBA program due to the influence of parents; the prospect of immediate employment after graduation, and the prospect of career advancement. 5. Most of the respondents were employed in the public and/or in the private sector; below half were regular/ permanent; they took less than six months in landing their first job after graduation; and almost all found a BSBA degree relevant to their current job. 6. The age, civil status, eligibility, problem-solving skills, teamwork skills, critical thinking and decision making skills served as perfect predictors of employability of the BSBA graduates.

RECOMMENDATIONS

1.The BS Business Administration graduates are encouraged to take government examinations like the civil service, examination or national competency from TESDA; and participate and/or undertake trainings, seminar-workshops, conferences, and graduates studies by providing assistance, incentives and staff development. 2. The college may consider the continuous provision of relevant program and activities that will enhance further the competencies of the BS Business Administration graduates. 3. The college may build-up more the job placement program through the conduct of a job fair that benefits the BS Business Administration graduates and other course graduates of the college. 4. The college, through the Office of the Alumni Relations and Linkages is encouraged to develop a Graduate Tracer Study as feedback mechanisms for the graduates in all courses.

References:

Almazan, M. L. (2001). Employment Characteristics of BSBA Computer Management Graduates of the National College of Business. Thesis. DMMMSU-MLUC, La Union.

Ballon, A. E. (2007). Predictors of Employability of the Graduates of Technological Institute of the Philippines Quezon City. *TIP Research Journal Quezon City*, *4*(1), 1-1. Accessed on May 25, 2016 from ejournals.ph/issue.php?id=801.

Gacusana, B. G. (2006). Predictors of Career Motivation of BSBA Graduates of the University of Northern Philippines-Candon Campus, Thesis. DMMMSU-MLUC, La Union,.

Total Population of the Philippines 2016-The Philippine Government 3004. Accessed at http://www.affordablecebu.com/.

THE EFFECTS OF USING REAPER MACHINE IN HARVESTING RICE CROP TO THE FARM LABORERS AND TO THE FARM OWNERS OF BARANGAY SAN MARCOS, SAN MATEO, ISABELA

GENEVIVE D. GARCIA
ISABELA STATE UNIVERSITY
College of Teacher Education
Echague, Isabela
xerilegendatulgarcia27@yahoo.com
xerilegendatulgarcia27@gmail.com
09778041488

Abstract

This study examines the effects of using reaper machine in harvesting rice crop to the farm laborers and to the farm owners of Barangay San Marcos, San Mateo, Isabela. The respondents consists of 25 farm laborers and 25 owners. Two sets of questionnaires(one for the farm laborers and one for the farm owners) were utilized to gather data. The statistical used in this study was getting its means. Results of this study indicated that, the loss of income during reaping season was strongly agreed by the farm laborers of Barangay San Marcos, San Mateo, Isabela, due to the great effect of using reaper machine in harvesting rice crop. The reaping made harvesting rice crop easier and makes reaping of rice crop faster were greatly be the effect of using reaper machine in harvesting rice crop that was strongly agreed by the farm owners of Barangay San Marcos, San Mateo, Isabela. The study concludes that using reaper machine in harvesting rice crop has a great effect and brought change to the lives of the farmers especially those farm laborers of Barangay San Marcos, San Mateo Isabela. The other possible effects of using reaper machine in harvesting rice crop were loss of seasonal job during harvesting season, one cause of poverty, while the unstable job of the residents, unable to send their children to school, and unable to buy luxuries has also an impact to the lives and agreed by the farm laborers of Barangay San Marcos, San Mateo, Isabela. And enables the farmers to harvest large amount of income, less farm laborer required, and able to be used in all weather conditions, were also be the effects of using reaper machine in harvesting rice crop that also was agreed by the farm owners of Barangay San Marcos, San Mateo, Isabela. The study recommended that, those farm laborers should find another and stable job and also find a best remedy to prevent the presence of poverty in their families.

1- Introduction

Farming is one of the main sources of livelihood in the Philippines particularly in the province of Isabela, which is one of the leading contributors in terms of rice production. In Barangay San Marcos, San Mateo, Isabela, their main source of income is through farming specifically on planting rice.
A mechanical reaper or reaping machine is a mechanical, semi-automated device that harvests crops. Mechanical reapers are an important part of mechanized agriculture and a main feature of agricultural productivity.

Barangay San Marcos is one of the barangays in town of San Mateo, province of Isabela. It is bounded by Barangay Villa Fuerte,San Mateo, Isabela on the north, Barangay Oscariz,Ramon,Isabela on the south, Villa Beltran,Ramon, Isabela on the east and Barangay Sinamar Norte,San Mateo,Isabela on the west.The Barangay San Marcos,San Mateo,Isabela has a total population of 1,634 and a total land area of 263,927.3 hectares.

As time goes by, due to the advancement of science and technology, reaper machine was invented for farmers get ease of harvesting rice crop. But the problem strikes on the part of those farm laborers and take advantage to those farm owners.

And this study focused on the effects of using reaper machine in harvesting rice crop to the farm laborers and to the farm owners of Barangay San Marcos, San Mateo, Isabela.

II. Statement of the Problem

Identified those effects of using reaper machine in harvesting rice crop to the farm laborers and to the farm owners of Barangay San Marcos, San Mateo, Isabela.

The following questions are able to answer:

1. What are the possible effects of using reaper machine in harvesting rice crop to the farm laborers of Barangay San Marcos, San Mateo, Isabela?
2. What are the possible effects of using reaper machine in harvesting rice crop to the farm owners of Barangay San Marcos, San Mateo, Isabela?

Methodology

Identified the effects of using reaper machine in harvesting rice crops to the farm laborers and farm owners of Barangay San Marcos, San Mateo, Isabela, through the use of descriptive process.

The research method used in this study about the effects of reaper machine in harvesting rice crop to the farm laborers and to the farm owners of Barangay San Marcos, San Mateo, Isabela, was the survey-questionnaire method.

Questionnaire were labeled rated and answered by the 25 farm laborers and 25 farm owners of San Marcos, San Mateo, Isabela. Through answering the questionnaire, it will help us to know and identify the effects of using reaper machine in harvesting rice crop to the farm laborers and to the farm owners of San Marcos, San Mateo, Isabela.

IV. Findings

This chapter, stated, analyzed, gave descriptions and interpreted the data.

Table 1. The Effects of Using Reaper Machine in Harvesting Rice Crop to the Farm Laborers of Barangay San Marcos. San Mateo, Isabela

No.	EFFECTS TO THE FARM OWNERS	MEAN	DESCRIPTION
1	To reap rice crop efficiently	4.64	Strongly Agree
2	Makes reaping rice crop faster	4.52	Strongly Agree
3	Less farm laborer required	3.96	Agree
4	It enables the farmers to harvest large amount of rice crop	4.32	Agree
5	Able to be used in all weather conditions.	3.68	Agree

The loss of income during reaping season was strongly agreed by the farm laborers of Barangay San Marcos, San Mateo, Isabela, that it has a great effect of using reaper machine in harvesting rice crop with the mean of 4.92 as well as the lost of seasonal job during harvesting season and one cause of poverty with the mean of 4.6; while the unstable job of the residents with the mean of 4.2; unable to send their children to school with the mean of 3.6; and unable to buy luxuries with the mean of 3.32 were also an effect and agreed by the farm laborers of Barangay San Marcos, San Mateo, Isabela.

It means that, the loss of income during reaping season be the great effect to the farm laborers of Barangay San Marcos, San Mateo, Isabela in using reaper machine in harvesting rice crop due to the loss of seasonal job during reaping season. It was an evidence to what was stated on the related literature that, ***"The increase i.n farmers buying this machine meant that less labor was required, meaning some people were at loss for jobs and were at lost of income during harvesting season. The widespread selling of machine meant some farmers and grain workers (who still worked traditionally) were put out of business…"*** and the unable to buy luxuries was agreed by the farm laborers of Barangay San Marcos, San Mateo, Isabela that it was also an effect of using reaper machine in harvesting rice crop.

Table 2.*Effects of Using Reaper Machine in Harvesting Rice Crops to the Farm Owners of Barangay San Marcos, San Mateo, Isabela.*

NO.	EFFECTS TO THE FARM LABORERS	MEAN	DESCRIPTION
1	Loss of income during reaping season	4.92	Strongly Agree
2	Loss of seasonal job during harvesting season	4.6	Strongly Agree
3	One cause of poverty	4.6	Strongly Agree
4	Unable to send their children to school	3.6	Agree
5	Unable to buy luxuries	3.32	Agree
6	Unstable job of the residents	4.2	Agree

To reap rice crop efficiently with the mean of 4.64 and makes reaping of rice crop faster with the mean of 4.52 were greatly be the effect of using reaper machine in harvesting rice crop that was strongly agreed by the farm owners of Barangay San Marcos, San Mateo, Isabela; it enables the farmers to harvest large amount of income with the mean of 4.32; less farm laborer required with the mean of 3.96; and able to be used in all weather conditions with the mean of 3.68, were also be the effects of using reaper machine in harvesting rice crop and it was agreed by the farm owners of Barangay San Marcos, San Mateo, Isabela.

It means that to reap rice crop efficiently be the greatl effect of using reaper machine in harvesting rice crop that was strongly agreed by the farm owners of Barangay San Marcos, San Mateo, Isabela. Because unlike the traditional and manual harvesting of rice crop that it was a long process, this reaper machine or the combine harvester makes short process in harvesting rice crop and it was a proof to what was stated on the related literature that, "***A new modern invention,***

Combine Harvester, was invented in U.S. in 1834 by Hiram Moore. The machines that performs more quickly, efficiently and enables farmers to harvest larger amount of income and that is still used today."And the able to be used in all weather conditions also be the effect of using reaper machine in harvesting rice crop that was agreed by the farm owners of Barangay San Marcos, San Mateo, Isabela.

V. Conclusion

In this chapter, shows the summary, conclusion, and recommendations of this study based on result of the data gathered that have been analyzed, interpreted and given descriptions.

The researcher identified those effects of using reaper machine in harvesting rice crop to the farm laborers and to the farm owners of Barangay San Marcos, San Mateo, Isabela. The following questions were answered: What are the possible effects of using reaper machine in harvesting rice crop to the farm laborers of Barangay San Marcos, San Mateo, Isabela? And what are the possible effects of using reaper machine in harvesting rice crop to the farm owners of Barangay San Marcos, San Mateo, Isabela?This study aimed to: identify the effects of using reaper machine in harvesting rice crop to the farm laborers of Barangay San Marcos, San Mateo, Isabela and assure the effects of using reaper machine in harvesting rice crop to the farm owners of Barangay San Marcos, San Mateo, Isabela.The importance of this study was to identify the different effects of using reaper machine in harvesting rice crop to the farm laborers and to the farm owners of Barangay San Marcos, San Mateo, Isabela.This study focused only on the effects of using reaper machine in harvesting rice crop to the farm laborers and to the farm owners of Barangay San Marcos, San Mateo, Isabela.

Identified the effects of using reaper machine in harvesting rice crop to the farm laborers and to the farm owners of Barangay San Marcos, San Mateo, Isabela, through the use of descriptive process. The research method used in this study, was the survey-questionnaire method. Questionnaires were given, labelled, rated and answered by the 25 farm laborers and 25 farm owners of San Marcos, San Mateo, Isabela. Through answering the questionnaire, it will help us to identify the effects of using reaper machine in harvesting rice crop to the farm laborers and to the farm owners of San Marcos, San Mateo, Isabela. The researcher therefore conclude that, the loss of income during reaping season be the great effect to the farm laborers of Barangay San Marcos, San Mateo, Isabela in using reaper machine in harvesting rice crop due to the loss of seasonal job during reaping season .

It was an evidence to what was stated on the related literature that, ***"The increase in farmers buying this machine meant that less labor was required, meaning some people were at loss for jobs and were at lost of income during harvesting season. The widespread selling of machine meant some farmers and grain workers (who still worked traditionally) were put out of business…"*** and the unable to buy luxuries was agreed by the farm laborers of Barangay San Marcos, San Mateo, Isabela that it was also an effect of using reaper machine in harvesting rice crop. And with the aid of reaper machine in harvesting rice crop,to reap rice crop easier be the greatly effect of using reaper machine in harvesting rice crop that was strongly agreed by the farm owners of Barangay San Marcos, San Mateo, Isabela. Because unlike the traditional and manual harvesting of rice crop that it was a long process unlike this reaper machine or the combine harvester that it is a short process and it was a proof to what was stated on the related literature that, "***A new modern invention, Combine Harvester, was invented in U.S. in 1834 by Hiram Moore. The machines that performs more quickly, efficiently and enables farmers to harvest larger amount of income and that is still used today."***Able to be used in all weather conditions also be the effect of using reaper machine in harvesting rice crop that was agreed by the farm owners of Barangay San Marcos, San Mateo, Isabela.

VI. Recommendation

The researcher strongly recommend the following:

1. Those farm laborers should have or find a stable job for them to support well their families.
2.
3. There should be and find a best remedy to solve the presence of poverty in the family.
4. Be contented to have a decent life.
5. 4Encourage children to pursue their studies.

VII. Acknowledgement

Grateful acknowledgement is due to her lovable husband Mr. Cerilo B. Garcia. My beloved parents and parents in law. Her two wonderful sons Xerile Anthony D. Garcia and Asher Gabriel D. Garcia and her siblings, for their words of encouragement and fervent prayers.

Most of all the Almighty Father who gave her the knowledge, skills, strength and perseverance, and for making the researcher believe that with Him everything is possible.

REFERENCES

http://www.britannica.com/topic/reaper - agriculture https://prezi.com/rq-55lui9sfu/the-mec hanical-reaper/ http://reapertakethewheel.blogspot.com /2013/03/ impacts-of-invention.html

MULTIPLE INTELLIGENCES OF STUDENTS IN RELATION TO OCCUPATIONAL PREFERENCES

VIRGILIA D. TEJADA, MAg.Dev.
RDE Director, Bohol Island State University Balilihan Campus
Campus Director, Bohol Island State University Balilihan Campus
BOHOL ISLAND STATE UNIVERSITY
Balilihan Campus
Magsija, Balilihan, Bohol

ABSTRACT

Work is one of the characteristics that distinguish man from the rest of the creatures. The best way to avoid undue stress in one's chosen field is to select an environment in line with one's innate preferences, and an activity which he likes and respects, and which is within his talents. The study was designed to identify the multiple intelligences of fourth year students of Carmel Academy High School in relation to their occupational preferences. Specifically, the study intended to determine the preference of the students in the different occupational fields and the significant degree of correlation between the occupational preference and the multiple intelligences of the students. The respondents of this study were the entire population of the senior students with 44 males and 63 females, a total of 107 students. There were two types of instruments used to gather the needed data. The Multiple Intelligence Survey adapted from Walker McKenzie and The Brainard Occupational Preference Inventory (BOPI). The findings revealed that the respondents gave similar ratings to the seven fields of occupational preferences although at varying degrees. The study revealed that among the seven fields, the professional field got the highest aggregate weighted mean and there was a significant degree of relationship between students' multiple intelligences and occupational preferences. This study concluded that knowing the multiple intelligences of the students help to predict their occupational preferences. Thus, the results demonstrated that students' multiple intelligence was closely related with their occupational preferences.

Keywords **–** Multiple intelligence, occupational preference, descriptive method, Bohol, Philippines

INTRODUCTION

Nothing prospers without labor. Man needs to toil in order to earn his keep. Man must earn his daily bread and contribute to the continual advances of science and technology. Thus, work bears a particular dignity of humanity, the mark of a person operating within a community of persons. While it is true that man eats the bread produced by the work of his hands, it is not only the daily bread by which his body keeps alive but also the bread of science and progress, civilization and culture.

Work is one of the characteristics that distinguish man from the rest of the creatures. Man should not avoid work but to find the kind of job that suits him best. The best way to avoid undue stress in one's chosen field of endeavor is to select an environment in line with one's innate preferences, and an activity which he likes and respects, and which is within his talents. Thus spurts the application of multiple intelligences since it has a strong implication on learning and development. It gives a whole new way to look at himself, to examine his potentials that he left behind in his childhood but now have the opportunity to develop through choosing the appropriate course or other programs for self- development (Garcia, 2011).

One of the most disturbing concerns of the country today is the influx of unemployed graduates every year. It is disheartening to see graduates join the ranks of jobless and underemployed professionals. It may be true that there are limited opportunities that abound for the qualified, the competent, the proficient and the efficient graduates.

The choice of a vocation is one of the problems that beset fourth year high school students. Careful planning, analysis and proper guidance and counseling are necessary to lead the students to the best choice. Since career selection is a complex process, it needs maturation and knowledge of the self and the environment in order to form an integrated occupationally relevant behavior (Kahayon, 2012).

In view thereof, the researchers believes that through a study of students' multiple intelligence and their occupational preference and through proper vocational guidance, career dislocation would not be experienced by the young people of today. It is her contention that the good teamwork among the school authorities, teachers, students and parents of Carmel Academy High School would shed light on the youth to arrive at an effective and sound – decision making in career selection.

REVIEW OF RELATED LITERATURE AND STUDIES

Campbell (2011) mentioned that MI offers insight into human minds; MI provides a language or vocabulary to perceive and articulate a broader array of students' talents; MI enables teachers to demonstrate their learners' learning in a variety of ways; MI not only make a positive in the educational programs, it improves the lives of the students and MI significantly influence students to create positive self-fulfilling prophesies.

It is imperative that for a person to attain his full potentials as a human being his capabilities and unique abilities should be identified first. Knowledge of what he can do best will help him profitably in the choice of his career. It will also prelude the possibility of wasteful selection of the course, thus, making a profitable use of the individual's time, money and effort.

Carven (2013) also mentioned in his book that one must be aware of career categories when considering one's career inclinations. Career can be roughly classified into four broad categories, namely: careers that require working with people, careers that revolve things or objects. These career categories may also be identified according to the seven fields of interest in the occupational preferences of the students.

In career preparation, it is also advisable to consider one's interest or potential. Dr. Gardner takes a view that is very different from the IQ theory. According to him, people do not have one general intelligence, but are characterized by a range of intelligences instead. So, rather than being globally intelligent, one may be particularly strong in another area. This idea argues that intelligence, as it is traditionally defined, does not adequately encompass the wide variety of abilities of human display.

On the other hand, the following relevant studies are being presented to give more emphasis in the discussion of the topic under study.

Apat's (2012) study on Determinant Factors that Affect Course Choices of Selected College Students of Bohol Institute of Technology- Tagbilaran formulated the following recommendations: First, the school must be aware and oriented of the college career guidance program. Hence, the program must be given full support to make it fully effective and functional. She likewise suggested that students shall be made to take career guidance test upon enrolment for them to know their direction, ambition and career preferences. They are also advised to undergo career tracking so that the chosen occupation would be easier. The ability to do career tracking is definitely the same as planning and tracking the promotions and advancement in the chosen profession.

Meanwhile, an interesting study of Jensen (2012) on multiple intelligences emphasized that it is good to work in a job which one like and respect and within one's talents and abilities. The students should be aware of this so that all their energies and interest will be fully developed and can help them prepare for the next level. The implementation of this proposed career guidance program enables graduates to carry and transmit its procedural know how upon graduation. This scenario will become a reality when these graduates will perform with their work/ profession within the framework of this program and will serve as a model to the new generation.

OBJECTIVES

This study was designed to identify the multiple intelligences of students in relation to the occupational preferences of fourth year students of Carmel Academy High School for the school year 2014-2015.

Specifically, this study sought to answer the following questions:

1. What is the preference of the students in terms of the following occupational fields:
   - 1.1 Personal Services
   - 1.2 Commercial
   - 1.3 Agriculture
   - 1.4 Aesthetic
   - 1.5 Mechanical
   - 1.6 Professional
   - 1.7 Scientific?
2. How are the students classified in terms of the following multiple intelligences:
   - 2.1 Logical/Mathematical
   - 2.2 Verbal/Linguistic
   - 2.3 Visual/Spatial
   - 2.4 Musical/Rhythmic
   - 2.5 Bodily/Kinesthetic
   - 2.6 Interpersonal
   - 2.7 Intrapersonal
   - 2.8 Naturalistic?
3. Is there a significant degree of correlation between the occupational preference and the multiple intelligences of the students?
4. What Career Guidance Program could be developed to utilize the findings of the study?

METHODOLOGY

Design

The correlational research design with the aid of a questionnaire as data gathering tool was utilized in this study. The descriptive method is the most appropriate method because it is used to obtain information concerning the current status of the phenomena to describe "what exist" with respect to variables or conditions in a situation. A descriptive research is directed towards the ascertainment of revealing conditions and involves essentially a quantitative description of the general characteristics of a group.

Environment

The locale of this study is Carmel Academy High School, situated at a 1.8 hectare lot at the Poblacion Balilihan, Bohol. Carmel Academy High School is a private school with 1 director, 1 principal and eleven (11) employees and teachers. The school has a population of three hundred seventy – nine (379) students from first year to fourth year high school.

Respondents

The participants of this study were the senior students with forty – four (44) males and sixty – three (63) females, a total of one hundred seven (107) respondents.

Instrument

There were two types of instruments used to gather the needed data. The Multiple Intelligence Survey adapted from Walter McKenzie, 1999 of Surf Aquarium and the Brainard Occupational Preference Inventory (BOPI).

The Multiple Intelligence Survey was used to measure the multiple intelligences of the respondents. It consists of eighty (80) items, using a 5 point scale with responses of **Always (5), Frequently (4), Sometimes (3), Seldom (2) and Never (1).**

A questionnaire patterned after a standardized instrument, the Brainard Occupation Preference Inventory (BOPI) was designed to measure the students' occupational indication. It is being categorized into 6 occupational fields. It is a 5 point scale questionnaire with responses of **Always (5), Frequently (4), Sometimes (3), Seldom (2) and Never (1).**

Procedure

The researchers asked permission to conduct the study from the Director and the Principal of Carmel Academy High School. Given the approval, the researcher administered the questionnaires.

With the permission of the adviser, the researchers personally met with the fourth year high school students in their classroom during their vacant time to distribute and administer the questionnaire. After administration, the questionnaires were retrieved. The data were collected and tabulated for analysis and interpretation.

Statistical Treatment

The response data were subjected to Chi – square test on Contingency Tables to determine the degree of correlation on the responses of the respondents. The formula used was the:

$$X^2 = \sum(fO - fe)^2 / fe$$

Where :

fo = Obtained frequency

fe = expected frequency

Results and Discussions

Table 1

Consolidated Results on the Occupational Preference of Students

Item	Aggregate Weighted Mean	Description	Rank
Personal Services	1.95	SM	5
Commercial Field	2.16	SM	2
Agricultural Field	1.96	SM	4
Aesthetic Field	2.12	SM	3
Mechanical Field	1.66	SM	7
Professional Field	2.34	SM	1
Scientific Field	1.85	SM	6

An analysis of the data in Table I revealed that all the seven occupational preferences were rated sometimes. However, it is interesting to note that respondents still preferred jobs in professional field which requires intellectual learning rather than mere working with the hands. Additionally, the respondents are not very well inclined in the mechanical field. These jobs under mechanical field cater to designing and processing, machine operation, building and construction, maintenance and repair.

Table 2

Consolidated Results of the Multiple Intelligences of Students

Item	Aggregate Weighted Mean	Description	Rank
Logical/Mathema-tical Intelligence	2.46	F	4
Linguistic/Verbal Intelligence	2.35	SM	7
Spatial Intelligence	2.28	SM	8
Musical Intelligence	2.45	F	5
Bodily/Kinestheti c Intelligence	2.56	F	2
Interpersonal Intelligence	2.76	F	1
Intrapersonal Intelligence	2.39	SM	6
Naturalistic Intelligence	2.53	F	3

The result suggested that majority of the respondents are high in interpersonal intelligence. It indicates that they have the ability to relate and understand on how others think and feel.

Table 3

Correlation between Students' Multiple Intelligences and Occupational Preferences

VARIABLE	X^2 C	X^2 t	Interpretation
	0.05 Level of Significance		
Occupational Preferences of Students Multiple Intelligences of Students	205.88	55.758	There is a significant correlation between the Occupational Preferences of Students and Multiple Intelligences of Students

The Chi-square Contingency was used at 0.05 level of significance to determine the relationship between students' multiple intelligences in relation with their occupational preferences.

The computation resulted to an obtained chi-factor of 205.88 which was higher than the tabular value of 55.758 at 42 df and at 0.05 of significance which proves that there was a significant degree of relationship between the multiple intelligences of students to their occupational preferences. The results demonstrated that the students' multiple intelligences were closely related with their occupational preferences.

Findings

1. Most of the students possess high intrapersonal intelligence. This is evidenced by the average weighted mean of 2.76, or frequently. This is followed by other multiple intelligences in their rank of order (2) bodily kinesthetic, (3) Naturalistic, (4) Logical-Mathematical, (5) Musical, (6) Interpersonal, (7) Linguistic/Verbal and rank 8 is the spatial intelligence.

2. Overall, the respondents gave similar rating described as sometimes to the seven fields of occupational preferences although at varying degrees. Among the seven fields, the professional field got the highest aggregate weighted mean of 2.34.The least preferred is the mechanical field.

3. There was a significant degree of relationship between students' multiple intelligences and occupational preferences.

Conclusions

1. Each person has a different intellectual composition. All human beings possess eight intelligences in varying amounts.

2. Knowing the multiple intelligences of the students help to predict their occupational preferences. Thus, the results demonstrated that students' multiple intelligence was closely related with their occupational preferences.

Recommendations

1. The graduating students should undergo group vocational counseling according to their occupational field of interest.

2. A career week will be included in the school calendar of activities that should feature the different the different occupational preferences.

3. The implementation of the career guidance program is earnestly recommended. The assessment of its success or failure could be a starting point for a future parallel research to be undertaken by someone who has the heart to guide the students in their quest for their rightful place in the work force. This will reduce, if not totally eliminate the great number of unemployed, underemployed, discontented and dejected young professionals.

Acknowledgment

The researchers would like to show their gratitude to Dr. Dioscoro A. Avergonzado and Dr. Regucivilla A. Pobar for sharing their pearls of wisdom with us during the course of this research. They are also immensely grateful to Dr. Alma Bella B. Diputado and Atty. Salvador D. Diputado for their comments on an earlier version of the manuscript, although any errors are our own and should not tarnish the reputations of these esteemed persons. They also place a sense of gratitude to their husbands Richard R. Lumantas and Tertuliano D. Tejada and to their children for their love, understanding and inspiration. Notably, to GOD for this great and countless blessings.

References

Apat, U. (2012). Determinant factors that affect course choices of selected college students of the BIT – Tagbilaran. unpublished masteral thesis.BIT. Tagbilaran City

Campbell, L. (2011). Multiple intelligences and student achievement. New York. Mc Graw Hill Companies Inc.

Garcia, M. (2011).The interest profile of fourth year high school students of immaculate conception: as basis of a proposed guidance program. masteral thesis, University of Bohol. Tagbilaran City.

Jensen, E.(2012). Integrating multiple intelligences in classroom. New York. Mc Graw Hill Companies Inc.

Kahayon, F. (2012). Teaching with the brain in mind. USA. John Wiley and Sons Inc.

Santamaria, J. (2011, September 30). Career categories. Philippine daily inquirer, p.6.