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The SPUP

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CONTENTS

- 1 Faculty Research Characteristics, Productivity and University Research Environment: Basis for Enhancing Research Culture**
Lauro S. Aspiras
Doctor of Philosophy in Education
Major in Educational Management
- 26 Social and Economic Benefits of Tourism to the Local Community of Santiago City**
Christine Joy I. Julian
Master of Science in Hospitality Management
- 42 Student Enrolment Management System of Lyceum of Aparri**
Marie Khadija Xynefida R. Purificacion
Master in Information Technology
- 52 Road Safety Management of the Department of Public Works and Highways: Basis for Policy Recommendation**
John Philip M. Rivera
Doctor in Public Administration
- 67 Organizational Climate and Productivity of Public Elementary Schools**
Leslie Dalafu Tarun
Doctor of Philosophy in Education
Major in Educational Management
- 84 School-Based Management Practices of Public Secondary School Heads: Basis for Policy Recommendation**
Eric R. Viggayan
Doctor of Philosophy in Education
Major in Educational Management

**102 The Use of Ebook as an Instructional Tool: The St. Paul
University Philippines Experience**

Sr. Maria Althea B. Alfonso, SPC

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**FACULTY RESEARCH CHARACTERISTICS, PRODUCTIVITY AND
UNIVERSITY RESEARCH ENVIRONMENT: BASIS FOR
ENHANCING RESEARCH CULTURE**

Lauro S. Aspiras

*Doctor of Philosophy in Education
Major in Educational Management*

ABSTRACT

This study aimed to determine the research characteristics, productivity, and research environment of the faculty members of Quirino State University. The study utilized the mixed methods descriptive design employing both quantitative and qualitative approaches. Data were collected through survey questionnaires, interviews and focus group discussion. Quantitative data were analyzed using descriptive and inferential statistics while the qualitative data were analyzed thematically. The study found that the University's research management is efficiently functioning. The three campuses have varied extent of productivity along the number of proposals developed, researches completed, outputs presented, conferences attended, researches published, and creative works copyrighted, patented and trademarked. The faculty members of the three campuses are highly motivated and knowledgeable in doing research. The participants' number of subject preparations significantly affects their motivational, attitudinal drive in doing research. The age and years as a researcher together with their number of subject preparations greatly affected their knowledge and skills in research. The extent of the departmental research culture, participants' working conditions, extent of collaboration and access to professional networks is high and low on online publication in the three campuses. The problems encountered by the participants include overloaded subject preparations, unequal distribution of research training opportunities, fear of statistics, uninstitutionalized collaborative research; only best papers are given recognition and absence of incentive during in-house reviews.

Keywords: *Research attitude, research characteristics, research environment, Quirino State University*

INTRODUCTION

Research in the context of globalization is a newly formulated concept which means different things to different people resulting to a multitude of descriptions, interpretations, and definitions. Defining research globalization is not an easy task because one is faced with a new situation with old disciplinary lenses and thus, one tends to dwell on what his training makes most readily apparent (Stromquist, 2002). Every era has concepts that capture the public imagination and ‘globalization’ has recently emerged as one concept in the present time” (Hall and Tarrow, 2000).

Indeed, the global initiative builds on a legacy of global engagement by encouraging a global outlook in research, study, and practice. Unprecedented emphasis is being placed on research as key motor for advancing the knowledge society and its offspring, the Knowledge Economy (UNESCO Forum, 2007). Consequently, “research on the state of research” has become a high priority agenda for Higher Education Institutions (HEIs), focusing on the area of specialization of the different programs of the organization. Thus, it has become essential to map and analyze research characteristics and research environment to acquire an understanding of the needs and priorities of the institution to compete in the global world of scientific knowledge.

Research, as a major function in higher education, sets higher education apart from basic education. In the Bologna Ministerial Meeting of 2007, the world leaders in higher education explicitly stated: “The basis of research in higher education is its independence and search for truth which justifies higher education’s continued exercise of academic freedom”. Furthermore, the UNESCO World Declaration on Higher Education for the 21st Century highlights the important role of research in higher education, i.e., “State policies must promote and develop research, which is a necessary feature of all higher education systems, in all disciplines, including the human and social sciences and arts, given their relevance for development”.

In the Philippine context, specifically Republic Act No. 7722, known as the “Higher Education Act of 1994” Section 8, the Commission on Higher Education (CHED) is mandated to enhance

the research functions of Higher Education Institutions (HEIs) in the Philippines. Pursuant to this mandate, CHED recognizes the need to decentralize the promotion and management of research in order to broaden outreach and provide the research support needed by the HEIs more effectively, efficiently and equitably. Thus, the mandate focuses on research grants, support to paper presentations, and research productivity enhancement. Further, in line with the said mandate, the National Higher Education Research Agenda-2 (NHERA) was formulated which aims to place the Philippine higher education in the international research community through awards and recognition of Filipino researchers in cutting edge disciplines as well as in other priority disciplines.

CHED Memorandum Order 46 Series of 2012, called “Policy Standard to Enhance Quality Assurance (QA) in Philippine Higher Education through an Outcomes-Based and Typology-Based QA,” was the brain child of CHED’s Outcomes-Based Education (OBE) initiatives. The order ultimately came from a series of conferences between HEIs and CHED, changing the focus of modern Philippine education from input-based to output-based. While the focus before is more on the inputs of the teaching-learning process - aiming on teachers, their facilities and their resources, among others - the OBE focuses instead on the outputs of learning. Examples are competencies acquired and developed by students and how these things are made concrete and measurable to be applied in the future. Indeed, the University’s generated research ideas on the new approaches in teaching concepts are valuable as constructive development pedagogy in which teachers apply results of researches in the process of constructing knowledge in their disciplines.

In the case of Quirino State University, the institution is very steadfast in the realization of its research vision and mission that is to postulate excellence through quality and responsive research and to promote quality research in improving the standard of life of its target clientele. Its conversion into a university gave way to a new horizon of academic arena and thus became very persistent in the realization of the four-fold functions of the Higher Education Institutions - instruction, research, extension, and production. Further, the university has been very determined in the attainment of its altruistic mission and

vision adherent to the aforementioned thrusts of the Commission on Higher Education. Apparently, to achieve this noble vision and mission, a sound Research and Development (R&D) program should be formulated and implemented to answer the technological needs and problems of its service area. Moreover, R & D is an integral part of an academic institution upon which the basis of truth for both instruction and extension is formed.

Currently, QSU is on its path of developing a stronger research culture among its faculty members. The perplexity in successfully attaining the goals and objectives of the Research Department is really challenging. Thus, the revitalization of research programs should be undertaken and activities on research capability building among the faculty members should also be organized to enhance their capacity in conducting research.

Moreover, research undeniably gives the institution the access to work collaboratively with other researchers or with allied institutions and prepares everyone to be active and be engaged participants in a global community. Thus, the development and sustainability of the university towards excellence is in the hands of professionally competent, research oriented and productive faculty members.

One important factor for the successful conduct of research is the researcher's research motivation and attitude. This is the main objective of this study, to find out the research attitude and capabilities of the faculty members of Quirino State University. The survey of research characteristics, productivity and research environment of the teaching personnel can ascertain the current state of the faculty members' skills, capabilities, and competence in conducting research activities. Further, establishing clearly the research attitudes of the identified personnel will provide the university with wise decision on which research domains to develop and which ones are to be sustained to achieve excellence in research.

The crux is: the research culture in any academic institution needs to be enhanced particularly the research environment which could eventually motivate faculty members to achieve. The result of this study can definitely be used as basis in coming up with possible programs

and activities for the Research and Development Office which could be of help in enhancing the research culture and eventually research productivity of the university. Therefore, it is on these premises that the present study was conceptualized.

Statement of the Problem

This study aims to determine the faculty research characteristics, environment and research productivity of Quirino State University. The assessment results served as significant inputs in setting the University's strategic directions aimed at enhancing its research culture.

More specifically, the study sought to answer the following questions:

1. What is the campus profile of the University along the following:
 - 1.1 research infrastructure;
 - 1.2 research budget, allocation and utilization;
 - 1.3 research management;
 - 1.4 research priorities, and
 - 1.5 Publications?
2. What is the profile of the faculty in terms of the following:
 - 2.1 faculty members' campus affiliation;
 - 2.2 age;
 - 2.3 civil status;
 - 2.4 academic rank;
 - 2.5 highest educational attainment;
 - 2.6 area of specialization;
 - 2.7 years in service;
 - 2.8 years as a researcher, and
 - 2.9 number of subject preparations?
3. To what extent are the following productivity targets achieved per campus:
 - 3.1 number of developed proposals;
 - 3.2 number of completed research;
 - 3.3 number of researches presented;
 - 3.4 number of research fora/conferences attended;
 - 3.5 number of membership to research organizations;
 - 3.6 number of research publications, and

- 3.7 creative works and patents?
4. To what extent do the faculty manifest the following characteristics:
 - 4.1 research motivation;
 - 4.2 attitude towards research, and
 - 4.3 research knowledge and skills?
5. Is there a significant difference in the extent to which the faculty manifests the specified research characteristics when they are grouped according to profile variables?
6. To what extent do the faculty members experience the following research environment as characterized by the following:
 - 6.1 institutional research policies and agenda;
 - 6.2 departmental culture and working conditions;
 - 6.3 collaborations and access with professional networks;
 - 6.4 research management, and
 - 6.5 infrastructures?
7. What are the problems encountered by the participants in implementing a culture of research?
8. What enhancement program can be implemented to improve the research culture at Quirino State University?

METHODOLOGY

Research Design

This study used a mixed method research design employing both quantitative and qualitative approaches to collect and analyze the data. The study used the descriptive survey design. This design fits best in the present study considering that it describes the nature of situations as it exists at the time of the study and explores issues that could have possible connections to the present queries. More specifically, this design was applied to describe and assess the research environment, characteristics and productivity of the faculty members in the three campuses of Quirino State University. Hence, questionnaires were administered to collect the quantitative data, while qualitative data were gathered using interviews and focus group discussion.

Participants of the Study

The research protocol for this study was submitted to the Ethics

Review Committee of the Graduate School of St. Paul University Philippines. As approved by the committee, the participants of this study were the 145 full time faculty members in the three campuses of Quirino State University. All faculty members with plantilla position or with permanent status were included in the study. On the other hand, newly hired Contract of Service (COS) faculty members were excluded in the conduct of this research. Moreover, the departmental research coordinators and the two Campus Research Directors were also included as participant in this study. The Campus Research Director of QSU, Cabarroguis is not included considering that he is the proponent of this endeavor. Further, the participants were chosen by the researcher considering the fact that they are the direct individuals who possess the knowledge of the processes of research and understand the implementation of the research programs and activities of the university. The data contained in the following table present the participants to be covered in the study:

Table 1
Data on the Number of Participants per Campus

Campus	Number of Participants
Quirino State University, Main Campus	69
Quirino State University, Cabarroguis Campus	44
Quirino State University, Maddela Campus	32
TOTAL	145

Informed consent from the participants was secured prior to the conduct of interviews and the administration of the questionnaire. This is to ensure of the participants' willingness to provide information for the attainment of the study objectives.

Instrumentation

To obtain the data needed for the investigation, the researcher used the following data gathering instruments:

Interview Script. A face to face interview was conducted with

the faculty researchers, research coordinators and research directors in the two campuses to elicit information regarding their research characteristics and their perspective concerning research environment.

Semi-structured Questionnaire. The questionnaire was developed based on the review of research literature and ideas from texts and documents on action researches. Having validated the content of the various aspects covered in the questionnaire, it was later sent to all the participants. The questionnaire consisted of the structured items describing teachers' involvement and the drive in conducting research.

Documentary Analysis. A validation of data through cross verification will also be undertaken in this study. Thus, the profile of the faculty members specifically their educational attainment, years in service, training and workshop attended, and membership to research organizations were verified using the documents from the Human Resource Department. On the other hand, the number of research proposals, number of completed researches, and research fora/conference attended by the faculty researchers were verified in the office of the university research director, considering the fact that the data needed were stipulated in the university quarterly report of the Research and Development Office.

Focus Group Discussion (FGD). The focus group discussion (FGD) is also one of the data gathering tools to be utilized. This process is a good way to gather together people from similar backgrounds or experiences to discuss specific topics pertaining important research-related issues and problems. The participants were selected from the different groups consisting of the departmental research coordinators and selected faculty members. They are selected considering that they are the direct individuals who initiate and observe research activities and programs in their department. The main objectives of the FGD are to get information particularly on the activities undertaken in their respective departments, research environment, and the problems they had encountered in the conduct of research.

Further, the process started by setting the date and the time for the group discussion. Upon approval of the date and time, the members of the group met on the said date to discuss further the

research activities of the department and their observations on the characteristics or the attitude towards research of the faculty members in their department. Moreover, the discussions were recorded which were used in the affirmation of the data stipulated in the filled-out questionnaire by the faculty researchers.

Thus, to fully understand the issue, the study obtained qualitative data by interviewing selected groups of teachers, selected departmental research coordinators, and selected program chairs in the three campuses. The purpose was to gather a more complete and in-depth information on what hampers the faculty members to conduct research. Moreover, this approach is also a reaffirmation on some of the results of the quantitative part of this study. Further, the researcher purposively selected the nine participants per campus composed of three faculty members, three research coordinators, and three department heads representing each group either active or not active in research. They were all contacted and showed willingness to be interviewed. Face to face interviews were held with the participants in their respective campuses. The casual conversation with the participants made the interview comfortable and set a more sincere sharing of experiences. Most of the data were recorded and the researcher had to take notes as the interview is conducted. Thus, all the data were recorded and written down in verbatim, and the researcher went through the transcripts. The major themes and trends were identified and classified. The psychometrician of the campus, experienced in qualitative research, was asked to go through the transcripts. There was an agreement to the general themes identified.

Data Gathering Procedure

There are various steps that were followed in the conduct of the study. The Ethics Review Committee protocol were strictly observed.

1. The researcher coordinated and secured permission from the University President, Dean for Instruction, Deans/Program Chairs, and Campus Research Directors regarding the conduct of the study.
2. Upon approval, the researcher got the list of faculty researchers in the three campuses of the university from the Human Resource Department and validated by the Director for Instruction.

3. The researcher coordinated with the Deans/Program Chairs regarding the participation of their faculty researchers in the study.
4. Upon approval of the Deans/Program Chairs, the researcher also sought permission from the participants or the faculty researchers to participate in the data gathering process.
5. The researcher conducted interview and Focus Group Discussion with Research Coordinators and Research Directors.
6. The questionnaires were floated and endorsed properly to the faculty researchers for them to answer.
7. As soon as they answered the instrument honestly, the researcher personally collected the filled-out questionnaire so as to attain 100% retrieval.
8. Lastly, the data gathered were consolidated, analyzed, and interpreted by the researcher using appropriate data analysis tools.

Data Analysis

The following were the statistical tools used in the analysis of data:

Scale ratings. This was used to present the data on the campus research profile such as research infrastructures, research management, research priorities, research publications and research environment. The rating scale used is presented below:

Rating	Descriptive Value
0	Not present
1	Present
2	Present and functioning well/ present and partially implemented
3	Present and efficiently functioning/present and fully implemented

Frequency Counts and Percentages. These were used in the tabulation of the quantitative data of the study specifically, the demographic profile of the participants.

Mean. This was used to present data on budget allocation and utilization; research productivity; research motivation; attitudes towards research; research knowledge and skills; research infrastructure; research management; research priorities; research publications and research environment.

Analysis of Variance (ANOVA). This was used to determine whether significant differences exist on the faculty research characteristics when they are grouped according to profile variables.

Thematic Analysis and Narrative Analysis. These were used to analyze interview responses as well as the participants' responses in the conducted Focus Group Discussions (FGDs).

RESULTS AND DISCUSSION

Campus Profile of the University

Research Infrastructure

Research infrastructure of the three campuses is present and efficiently functioning. On the other hand, software and publications is not present in the two campuses of the university (Campus A and B). It was also found out that the three campuses adopted the format standards for data archiving and data mining; and have a pool of experts and considered long term sustainability of research infrastructure.

Research Budget, Allocation and Utilization

There is an allocated budget for the research departments of the three campuses and optimally utilized by the department. Thus, the allocated budget and its utilization are stipulated in the Project Procurement Management Plan (PPMP) of the division approved by the university and DBM. As such, although given the prerogative of the research division to utilize the allocated budget, guidelines and procedures that govern the use of SUCs' income pursuant to RA 8292 should be taken into consideration.

Research Management

All the three campuses have clear organizational structure and are presently and efficiently functioning. In all campuses, the R & D management is composed of the University Research Director, Campus Research Director, Departmental Research Coordinators, Pool of Experts, and Liaison Officers to research linkages. Further, it also shows that the policies on research funding and monetary incentives for research productivity as well as their honoraria, and inclusion of students in the research activities of the division is present and efficiently functioning. The research programs and activities in the campuses and departments in particular were given prerogative or independence in their implementation.

Research Priorities

The three campuses have defined research priorities that match the stated university vision. The campuses also have different research priorities whereas the items are rated as present and fully implemented except for Campus B where research priorities is present and partially implemented. Further, Campus A prioritizes researches on technical, developmental, social science, educational and technological. On the other hand Campus B focuses on social science, educational and technological researches. Campus C also focuses on technical and social science researches.

Publications

Campus A and B have institutional research journals and research publications which are efficiently functioning. Further, Campus C has no institutional research publication and has manpower resources but not functioning well. Campus C has manpower resources in their Research and Development publications but not functioning. Finally, the result of the study also revealed that Campus A, B, and C has no online research journal.

Faculty Profile

Faculty Members' Campus Affiliation

Among the three campuses, the biggest number of participants is Diffun Campus followed by the Cabarroguis Campus and Maddela Campus, respectively.

Age

Most of the participants are in the middle age category. Generally, the faculty members of the university are relatively young in the profession as most of them are in the early adult age.

Civil Status

Overall, seventy-three percent of all participants reported they are married at the time of the survey and twenty-six percent reported that they are single.

Academic Rank

The highest reported percentage of faculty members' academic rank is in the instructor level (62.07%) and most of them are Instructor I, followed by Assistant Professor level (29.66%) of which most of them are Assistant Professor II and III, respectively. The Associate Professor Level has the least number (8.28%).

Highest Educational Attainment

Among the 145 faculty members, most of them have Doctoral units (28.28%), followed closely by those who finished their Master's Degree (26.90%). The participants with the least number are those who graduated with a Doctoral Degree (11.72%). This implies that most of the teachers of the university attended post graduate school.

Area of Specialization

Language teachers have the highest percentage (19.31%), followed by science category (13.10%), technical Vocational (10.34%), agriculture (8.97%), mathematics (8.28%), business management (7.59%), health sciences (6.92%), social sciences/ psychology and Information technology (6.21%), management (4.83%), education (4.14%), and engineering/ forestry (3.45%).

Years in Service

Out of 145 participants, there are 65 or 44.83 percent who have served the institution for 1 to 5 years, followed by the 29 (20.00%) faculty who have served the school for 6 to 10 years. Furthermore, 16 or 11.03 percent hve been working in the institution for 11 to 15 years, followed closely by those who have been with the university for 21 to 25 years with a frequency of 15 or 10.34 percent. Moreover, there are 11 or 7.59 percent who have been with the university for 16 to 20 years, and lastly 9 of the faculty who have been serving the school for 26 to 30 years.

Number of Years as Researcher

Most of the faculty members of QSU have been researching for 1 to 5 years. There are only 5 among the faculty who have been engaged in research for more than 10 years.

Number of Subject Preparations

Most or 58.62 percent of the teachers have 4 to 6 subject preparations. On the other hand, 51 or 35.17 percent of them have 1 to 3 subject preparations and 9 or 6.21 percent have 7 to 9 subject preparations.

Extent of the Attainment of Productivity Targets per Campus

Number of Developed Proposals

Campus A has a high extent of attainment of its productivity

targets along the number of proposals. On the other hand, the other two campuses (B, C) have moderate extent of number of proposals target attainment.

Number of Completed Research

Campus A attained high extent of productivity targets with respect to the number of completed researches. Campus B has a moderate extent of productivity and Campus C has a low extent of productivity.

Number of Researches Presented

Campus A has a very high extent of productivity target on the number of researches presented locally, high extent on the regional and national presentation, and moderate extent in the international level. Campus B achieved high extent of productivity specifically on local presentations. Further, Campus B also achieved very low extent in the regional/national level and attained low extent in the international level. Campus C has a moderate extent rating on regional/national and international level research presentations; and very low in the regional/national level.

Number of Research Fora/Conferences Attended

Campus A has a very high extent rating along the number of research conferences/fora locally, high extent rating on the regional and national conferences, and moderate extent rating in the international level. On the same productivity indicators, Campus B achieved high extent of productivity specifically on local fora or conferences. Further, Campus B also achieved very low extent rating in the regional/national level and attained low extent rating in the international level. Campus C has a moderate extent rating on regional/national and international level research conferences and very low in the regional/national level on research presentations.

Number of Membership to Research Organizations

There is a high extent rating of Campus A, moderate extent

rating for Campus B, and low extent rating for Campus C with respect to the number of membership to research organizations.

Number of Research Publications

Campus A has a very high extent of attainment of productivity targets with respect to publications specifically on institutional research journal but have very low rating on international refereed journal. Moreover, Campus B has a moderate extent rating on institutional journal publication and a very low extent rating on the publication in the international journals. Campus C has no extent of research productivity indicator specifically on institutional journal.

Creative Works and Patents

Campus A has a moderate extent of attainment of the productivity target with respect to the number of copyrighted researches and very low extent along patent and trademark. Campus B has a moderate extent of attainment along copyrighted researches but no extent of attainment along patent and trademark. Campus C has a moderate extent of attainment along copyrighting of researches but no extent of attainment along patent and trademark.

Extent to which Faculty Manifest the Following Characteristics

Research Motivation

The participants have a very high level of motivation in doing research to improve their way of teaching and to contribute to the university's academic reputation. On the other hand, the participants have a moderate level of motivation on monetary incentives. In general, the faculty members are highly motivated in doing research as revealed in the overall mean of 3.87 which is described as "high" motivation.

Attitude towards Research

The participants have high positive attitude towards research undertakings. They believed that research is very important in

building their career, which could lead to more opportunities and could improve their way of teaching.

Research Knowledge and Skills

The participants are highly knowledgeable on the basics and advance concepts of research.

Test for Significant Difference on the Extent to which the Faculty Manifests the Specified Research Characteristics when Grouped according to their Personal Profile

Research Motivation

Faculty Members' Campus Affiliation. The motivation of the faculty members to conduct research is significantly different when grouped according to their campus affiliation. It shows in the results that Campus C has significantly higher motivation compared with Campus A and B.

Age. There is no significant difference on the research motivation of the participants when grouped according to their age. Civil Status. The research motivation of the participants has no significant difference when grouped according to civil status.

Academic Rank. There is no significant difference on the research motivation of the participants when grouped according to academic rank.

Highest Educational Attainment. There is no significant difference on the research motivation of the participants when grouped according to highest educational attainment.

Area of Specialization. There is no significant difference in the research motivation of the faculty members when grouped according to their area of specialization.

Years in Service. The result is not significant, which implies that the research motivation of the faculty is not dependent on their number of years in service.

Number of Years as Researcher. The research motivation of the faculty is not dependent on the number of years as a researcher.

Number of Subject Preparations. The level of research motivation of the faculty with 1 to 3 subject preparations is significantly higher than those with 4-6 and 7-9 subject preparations.

Attitudes towards Research

Faculty Members' Campus Affiliation. The result is not significant, which implies that the research attitude of the faculty has nothing to do with the campus where they belong.

Age. The result shows no significant difference on the research attitude of the participants when grouped according to age.

Civil Status. The result is not significant, which imply that the research attitude of the faculty is not significantly different when grouped according to their civil status.

Academic Rank. There is no significant differences on the research attitudes of the participants when grouped according to academic rank.

Highest Educational Attainment. The result is not significant. Thus, there is no significant differences on the research attitudes of the faculty members when grouped according to educational qualification.

Area of Specialization. The result is not significant. There is no significant differences on the research attitude of the faculty members when grouped according to the area of specialization.

Years in Service. The result is not significant, The research attitude of the faculty is not dependent on their number of years in services.

Number of Years as Researcher. The research attitude of the faculty is not dependent on the number of years as a researcher.

Number of Subject Preparations. The data tabulated and analyze show significant result. Thus, it indicates that those with less preparations (1-3 subject preparations) have a more favorable attitude towards research as compared to those with higher number of preparations (4-6 and 7 -9 subject preparations).

Research Knowledge and Skills

Faculty Members' Campus Affiliation. There is a significant result as shown by the Scheffe test, the Research Knowledge and Skills of faculty in Campus C is significantly higher than those in Campus A and B.

Age. The age of the faculty member has a great influence to the research knowledge and skills they manifest. Scheffe test reflects that faculty with age range 46-50 and 51-55 have higher level of skills and knowledge as compared with the rest of the age groups.

Civil Status. Result is not significant, which imply that the research knowledge and skills of the faculty is not significantly different when grouped according to their civil status.

Academic Rank. There is no significant differences on the research knowledge and skills of the participants when grouped according to academic rank.

Highest Educational Attainment. The result is not significant. There is no significant differences on the research knowledge and skills of the faculty members when grouped according to educational qualification.

Area of Specialization. There is no significant differences on the research knowledge and skills of the faculty members when grouped according to the area of specialization.

Years in Service. The result is not significant, which implies that the research knowledge and skills of the faculty is not dependent on their number of years in services.

Number of Years as Researcher. The results shows significant differences on the research knowledge and skills of the participants. The research knowledge and skill level of those with less than 5 years of experience as a researcher is significantly lower than those with more than those with 6-10 years or with those more than 10 years of experience in research.

Number of Subject Preparations. The data tabulated show significant result. It shows that the level of research knowledge and skills of the faculty with 1 – 3 subject preparations is significantly higher than those with 4-6 and 7-9 subject preparations.

Extent to which the Faculty Members Experience the following Research Environment

Institutional Research Policies and Agenda

It indicates in the result that the overall composite mean in this area is 4.11 and interpreted as high extent. It could be inferred that the faculty members observed a high extent of inclusion and execution of the policies and agenda anchored to the to the university's research developmental framework.

Departmental Culture and Working Conditions

The faculty members favored that there is a high extent of research culture and working conditions in their department.

Collaborations and Access with Professional Networks

The result shows a high extent of Collaborations and Access with Professional networks of the university specifically Campus A and C.

Research Management

The faculty members of the three campuses agreed that there is a high extent of research management of the university.

Infrastructures

There is a high extent of research infrastructure of the university specifically Campus A. Campus B and C shows moderate extent on the provision of a separate R and D publication division and on-line research journals and books.

Problems Encountered by the Participants in Implementing the Culture of Research

Problems encountered by the faculty members were acquired from the conduct of face to face interviews with selected group of teachers, research coordinators, and program chairs of the three campuses. Responses from the interviews were analyzed thematically. The themes emerged are as follow: Overload Subject Preparations, Unequal Distribution of Research Training Opportunities, Fear of Statistics , Collaborative Research is not institutionalized, Only the Best Papers are given Recognition and Incentive during In-house reviews

Enhancement Program to Improve Research Culture at Quirino State University

A program for Research Culture Enhancement was conceptualized and proposed based on the result of the present study. The main focus of the program is to enhance the research attitude and eventually develop the culture of research among the faculty members of the university.

CONCLUSION

This study focuses on issues related to research motivation, attitude, productivity, and research environment. The data gathering process carried out in the present study have provided valuable insights and data on their research characteristics and problems encountered by the participants in inseminating research culture in the university. The results also show existence and non-existence of some of the aspects of the R & D infrastructure and giving emphasis on the problems encountered by the faculty in the implementation of research culture in the university. Indeed, such problems assumed

to be the reasons why some of the faculty members are reluctant in engaging themselves in research and most probably affect their research characteristics. Thus, these problems are the real empirical data and considered as serious issues that the university must address. Therefore, the university should include elements of changing the views of faculty towards research endeavor. Enhancement program emphasizing research culture could be of great help in realizing the vision and mission of the institution towards the ambition to be a “research university”. This, the researcher is certain, will motivate teachers to embark research in the institution – the Quirino State University.

RECOMMENDATIONS

The following are recommendations grounded from the outcomes and scrutiny of the study. Concomitantly, research studies could be conducted to further explore the queries pointed out in this study.

Based on the findings and result of the study, it is recommended that programs that could encourage change in the motivational behavior of teachers needed to develop research culture in their respective department, or the university as a whole.

It is strongly recommended that faculty members take into account the research sustained “engaged inquiry” or “scholarly inquest.”

To sustain the programs on research culture, it is recommended that there is a constant monitoring and evaluation of the existing research policies and guidelines.

The University may innovate and repackage the research benefits to maintain the number of faculty who engage in research.

There is a need for faculty to update and harness their research writing skills.

The proposed enhancement program needs support from the administration.

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**SOCIAL AND ECONOMIC BENEFITS OF TOURISM TO THE LOCAL
COMMUNITY OF SANTIAGO CITY**

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Master of Science in Hospitality Management

ABSTRACT

This study was conducted to determine the social and economic benefits of tourism to the Local Community of Santiago City. The descriptive research design was employed using survey questionnaire and structured interview in gathering the data. There were one hundred five participants (105) comprising of LGU employees involved in tourism planning, project formulation and policy making; people who are directly involved in tourism business such as travel agencies, food industry, hotel and resort establishments; and local entrepreneurs such as souvenir shops and shops offering locale delicacies and independent providers of other tourism products and services. Frequency, percentage, weighted mean and the Likert scale were used for the statistical data analysis. On the other hand, thematic analysis was used for the interpretation of the participants' responses as regards the interview questions. Results showed that individuals, families and the community as a whole enjoy the social benefits of tourism to a great extent while the tourism benefits to the local economy of Santiago City was rated to a great extent using the areas of individual income, employment, foreign exchange, infrastructure, foreign investment, local entrepreneurship and tax revenue as bases.

Keywords: *Social and economic benefits, tourism, local community*

INTRODUCTION

The tourism industry is growing rapidly in many developing countries. Over the past decades, international tourism has grown extraordinarily and it is now one of the most important industries in the world in employment creation and generation of foreign revenues. It has been regarded as a vehicle for economic growth and social development for this eventually contributes to the improvement of economic standing and social conditions of the destination countries or the host communities. Tourism plays a paramount role in poverty reduction and sustainable development promotion with its ability to generate employment, provide economic linkages and to contribute to both formal and informal economies. Tourism boosts economic resilience and social progress through job creation.

Statement of the Problem

This study was conducted to determine the social and economic benefits of tourism to the residents of Santiago City.

Specifically, answers to the following queries were sought:

1. What is the profile of the participants in terms of occupation?
2. What is the tourism profile of Santiago City in terms of:
 - 2.1 tourist attractions frequently visited in the City;
 - 2.2 number of tourists who visited the destinations;
 - 2.3 number of hotels and accommodation facilities;
 - 2.4 number of food service establishments;
 - 2.5 number of travel agencies, and
 - 2.6 number of resorts?
3. How many people are employed in tourism related establishments such as:
 - 3.1 hotels;
 - 3.2 food industry;
 - 3.3 travel agencies, and
 - 3.4 resorts?

4. To what extent do the following benefits from tourism affect the local community?
 - 4.1 social benefits, and
 - 4.2 economic benefits?

5. How much is the amount of tax collected from tourism establishment such as:
 - 5.1 hotels;
 - 5.2 food industry;
 - 5.3 travel agencies, and
 - 5.4 resorts?

METHODOLOGY

Research Design

The researcher made use of descriptive research in order to assess the suitability, relevance, effectiveness and to access reliable information for the evaluation of the study, since this study aims to evaluate the social and economic benefits of tourism in Santiago City. The researcher described the participants' characteristics as regards their responses.

Participants of the Study

There were one hundred five participants (105) comprising of LGU employees involved in tourism planning, project formulation and policy making; people who are directly involved in tourism business such as travel agencies, food industry, hotel and resort establishments; and local entrepreneurs such as souvenir shops and shops offering locale delicacies and independent providers of other tourism products and services.

Instrumentation

The primary instrument used in gathering the needed data of the study was a survey questionnaire that was distributed to the participants composed of the LGU employees involved in tourism planning, project formulation and policy making; people who are

directly involved in tourism business such as travel agencies, food industry, hotel and resort establishments; local entrepreneurs such as souvenir shops and shops offering locale delicacies and providers of other tourism products and services. The questionnaire was adapted from 6 different studies. Items number 1, 2, 3, 4, 12, 13, 14, 15, 16, 17, 20 and 22 were patterned from the report prepared by Meyers Norris Penny (2010) titled, "Corn and Apple Festival Social and Economic Impact Analysis". Items number 5, 6, 7, 26 and 34 were adapted from the study of Liedewij van Breugel (2013) titled, "Community-based tourism, Local Participation and Perceived Impacts: A Comparative Study between Two Communities in Thailand".

Items number 21, 23, 30, 32,35 were patterned from the study of Mostafa Mohammadi et al. (2010) titled, "Local People Perceptions toward Social, Economic and Environmental Impacts of Tourism in Kermanshah (Iran)" which gauged the impact of tourism in three (3) areas namely, economic impact, social impact and environmental impact. Items number 8, 27, 28, 29, 33, 39 and 40 were patterned from the study of Azizan Marzuki (2012) titled, "Local residents' Perceptions Towards Economic Impacts of Tourism Development in Phuket". Items number 11, 18, 19, 36, 37 and 38 were patterned from the study of Kongfa Phoummasak et al. (2014) titled, "The Socio-Economic Impact of Tourism and Entrepreneurs in Luang Prabang Province, Lao PDR. Items number 9, 10, 25 and 31 were patterned from the study of Azizan Marzuki (2011) titled, "Residents' Attitude towards Impacts from Tourism Development in Langkawi Islands, Malaysia".

The questions asked during the interview were made by the researcher except for item number 1 which was patterned from the study of the Meyers Norris Penny. Some slight and necessary revisions were made to suit the needs of the study.

Data Gathering Procedures

The researcher gathered the data needed for the study using the following procedures:

The researcher prepared a letter addressed to the City Mayor and noted by Dr. Mercita O. Pamittan, Thesis Adviser, and Dr. Inicia

C. Bansig, Dean of the Graduate School, requesting permission to conduct the study in Santiago City and be provided by the concerned department with the necessary data/information pertaining to the following statistics:

- a. Tourist Attractions
- b. Number of hotels and accommodation facilities operating in the City
- c. Number of food service establishments operating in the City
- d. Number of travel agencies operating in the City
- e. Number of resorts operating in the City
- f. Tourists arrival on a yearly basis
- g. Number of people employed in the different tourism related establishments such as:
 - g.1 hotels
 - g.2 food industry
 - g.3 travel agencies
 - g.4 resorts
 - g.5 tourist destination maintenance
- h. Total amount of tax generated from tourism-based businesses

After the approval of the Mayor, the departments and offices concerned, such as City Planning and Development Office, City Permit and License Inspection Office, Treasury's Office, Office of the Secretary of the Sanggunian and PESO, were requested to provide the data needed for this study.

The researcher prepared a letter addressed to each of the participants. The letter was attached to the questionnaire which was simultaneously administered to the participants. After the participants had fully answered the questionnaires, structured interviews were also conducted. Immediate personal retrieval of the questionnaire by the researcher had been done to ensure one hundred percent return of the research instruments.

Data Analysis

To give meaning to the data that were gathered in this study, the researcher utilized the following statistical tools:

Frequency and Percentage. These were used to interpret the data gathered on the demographic profile of the participants and the tourism profile of Santiago City.

Weighted Mean. This was also used to interpret the social and economic benefits of Tourism in Santiago City. The following scale was used to interpret the weighted mean ratings on the extent of the effects of the tourism benefits.

Scale	Range	Qualitative Interpretation
5	4.50-5.00	Very Great Extent
4	3.50-4.49	Great Extent
3	2.50-3.49	Moderate Extent
2	1.50-2.49	Little Extent
1	1.00-1.49	Very Little Extent

Thematic Analysis. This was used for the interpretation of the participants' responses as regards to the interview questions.

RESULTS AND DISCUSSION

Profile of the Participants

Food Industry has the highest number of participants for this research with a total of forty seven participants over 105 while there are only two participants from the Travel Agencies.

Profile of Tourism in the City

Tourist Attractions in the City

There are seven tourism attractions which can be visited by tourists in Santiago City. These are the following: Calvary Hills, The Chapel of Transfiguration, Balay na Santiago, Santiago Concrete Water Tank (Philippines' Tallest Mural), Museo de Pattaradday, Balamban Festival and Feast of St. James the Apostle.

Number of Tourists who Visited the Tourist Destinations

Records from the Department of Tourism (DOT) indicate that in 1997, 40,968 foreign and domestic visitors arrived in the City of Santiago. In the year 1998, the Department of Tourism recorded a slight increase of 4.20 percent or 42,689 tourist arrivals and based on a yearly growth, 1996 saw a sharp rise in visitor arrivals at 73.71 percent, and in the early part of January to August 1998; the number of visitors reached 25,581, already more than half of the number during the entire period of 1997.

Number of Hotels and Accommodation Facilities

There are 44 hotel accommodation facilities operating in the city.

Number of Food Service Establishments

There are 36 food service establishments operating in the city.

Number of Travel Agencies

There are 35 travel agencies operating in the city.

Number of Resorts

There are 7 resorts operating in the city.

Number of People Employed in Tourism Related Establishments

Number of People Employed in Hotels

There are 188 employees from 20 hotels and accommodation facilities in the city.

Number of People Employed in Food Industry

There are 545 people employed in the Food Industry as of 2016.

Number of People Employed in Travel Agencies

There are five employees in the travel agencies. There are only 3 agencies that are included in the counting.

Number of People Employed in Resorts

There are 27 people employed in the 3 resorts.

The Extent in which Social and Economic Benefits Derived from Tourism Affect the Local Community

Social Benefits

In general, as shown by the overall mean on the social benefits, the participants consider tourism as beneficial to the community to a great extent. Nonetheless, the participants rated the social benefits of tourism in the community level, specifically in the item “tourism enhances the community’s image and reinforces the community’s pride and identity” to a very great extent, while new activities, improved quality of life, unity of various groups in working for the community, promoted higher standard of living, training opportunities, positive experiences in meeting tourists, positive changes in values and customs, personal health/ well-being of the community, increased availability of goods and services in the community, opportunities to meet new people, on-going social benefits in the community and positive recognitions as a result of tourism are rated by the participants to a great extent.

Tourism is considered as beneficial for the individual and the family to a great extent. Tourism ensures a more secured and stable life, improves living standard, provides an opportunity for people to learn new things, provides valuable experiences and gives opportunities to have fun with friends and family. Hence, tourism presents itself as a powerful tool in promoting social development.

The interview results complement certain claims. According to the participants, living in satisfactory conditions is one of the most important benefits with respect to people’s lives. Their standard

of living improved. Tourism allows them to provide for the basic needs of their families. Having their monthly income/commission lets them offset their cost of living, such as paying for housing, food, clothes and medical expenses. Money earned from working also provides them savings for retirement and enjoy activities like vacations. Furthermore, income obtained from tourism and hospitality business gives opportunity for the employees' family to have an out-of-town vacation. The employees also realized that they possess important skills, which they could use in helping others promote self-esteem. More so, income from tourism and hospitality business enabled the participants to send their siblings to school and support them in the entire duration of their schooling.

Being employed has many important benefits that include: providing a source of income, improving social inclusion, fulfilling one's own aspirations, building self-esteem and developing skills and competencies. While money may not buy happiness, it is an important means to achieve higher living standards and greater well-being.

Economic Benefits

In general, as shown by the overall mean on the economic benefits, the local community participants consider tourism as a favorable tool for job creation to a very great extent. Employment benefits are beneficial from great to very great extent. The data from interviews also support this as the participants say, "People working in tourism and hospitality related businesses are the ones who directly obtain benefits from tourism activities. But the benefits do not end with them. The benefits trickle down to our family members whether for food or for education or any other needs." Aside from this, there are also participants from hotels who say that they receive amounts between Ph 10,000 and Ph 20,000. The others say their salaries range from Ph 5,000 - Ph 15,000 depending on the time spent at work. Those who are connected with travel agencies say that their earnings are dictated by the number of people they have booked. Aside from the monthly salaries they earn, they also have commissions which may come from the bulk of bookings they have. There are also travel agency employees who rely solely on their

monthly salary and do not receive commissions for every booking made. People employed in the travel agency earn approximately from Ph 5,000 to Ph 10,000 pesos on a monthly basis.

Those who are employed in resorts said that they receive around Ph 1,000 – Ph 5,000 per month. Some of the participants particularly those that have their own small shops, also said that the amount they earned is highly reliant on the scale of their business.

Those who are operating shops offering local delicacies such as patupat say that they earn around Ph 500 – Ph 1,500 on a daily basis. However, the amount may tend to be smaller or higher depending on the season. On the other hand, tourism is considered beneficial in terms of foreign exchange and economic stability to a great extent because it increases foreign exchange earnings and diversifies the local economy which makes it less vulnerable to recessions. Results from interviews further validate this. The interviewees say, "In addition to what is spent by tourists, the tourism dollars that are earned, by both businesses and individuals are often re-injected into the local economy. So more money which is being earned locally, is then spent in the local economy as well. The dollar earnings from tourism can deeply permeate a local economy. Because tourism is a labor-intensive industry, and there are also participants who are micro to small business operators, they said that the effect is felt quickly and directly through local spending. Ultimately, the more dollars coming in, the larger the economic benefit for everyone." On infrastructure, it is considered valuable to a great extent as it improves public utilities/ infrastructure such as transport infrastructure, encourages the building of recreational facilities that may be used by the local population, facilitates the provision of new facilities and infrastructure (such as roads, airports and hospitality edifices), and ensures that public facilities and infrastructure are kept at better standard.

Moreover, tourism is also considered advantageous for foreign investments to a great extent, for it brings more investments in hospitality-related jobs such as food and beverage, accommodations, attractions, tour operators, entertainment, leisure and relaxation services and invites other organizations to invest in

the community. It is also beneficial for local entrepreneurship as it creates opportunities for entrepreneurs to create more businesses (products, facilities and services) and expand existing businesses which would not otherwise be sustainable based on the resident population alone, promotes local businesses, accelerates the number of local investors in hospitality-related jobs such as food and beverage, accommodations, attractions, tour operators, entertainment, leisure and relaxation services and creates new business opportunities.

Supplementary to this is the result of the interviews which stated, “Entrepreneurs are also benefitting from tourism. Bringing tourists into a community gives it new life, and creates opportunities for business persons and investors to establish new services and products, or facilities that would not be sustainable based on the local population of residents alone.”

The government, through tourism tax revenues, is also benefitted to a great extent. The data presented on the amount of tax collected from tourism related establishments further supports this claim. The interviews conducted reveal the same idea as far as government revenue is concerned. In addition, the government also benefits from tourism activities. The taxes paid by tourism and hospitality industries are sourced from the spending of the tourists. These taxes are used for varied projects which are mainly intended for the local residents. It means more tax dollars, which allows public projects to be launched or developed. This results to infrastructure improvement, with new roads being built, parks developed and public spaces enhanced. These improvements are experienced by everybody in the community even those who are not working in tourism-based business. Tourism is a potential source of economic growth as it boosts the local economy in terms of employment, infrastructure, foreign exchange, foreign investment, local entrepreneurship, and government revenue.

Total amount of tax collected from tourism related establishments

Total amount of tax collected from hotel and accommodation facilities

The total amount of tax revenues collected from hotel and accommodation facilities amounts to Ph 437,426.19 in 2014, Ph 513,612.49 in 2015 and Ph 683,480.44 in 2016.

Total amount of tax collected from the food industry

The total amount of tax revenues collected from the food industry amounts to Ph 458,013.00 in 2014, Ph 600,847.30 in 2015 and Ph 1,663,294.20 in 2016.

Total amount of tax collected from travel agencies

The total amount of tax revenues collected from travel agencies amounts to Ph 53,700.10 in 2014, Ph 65,305.00 in 2015 and Ph 71,507.00 in 2016.

Total amount of tax collected from resorts

The total amount of tax revenues collected from resorts amounts to Ph 267,210.00 in 2014, Ph 331,252.00 in 2015 and Ph 304,856.00 in 2016.

CONCLUSION

The following are the conclusions derived from the results of the study:

The researcher concludes that tourism benefits Santiago City both on the social and economic aspects. Since it has vast potentials for creating employment and generating large amount of tax revenues, the city can utilize and strengthen tourism as a social and economic development tool to reduce poverty and stimulate socio-economic wellbeing. But much more remains to be done. Tourism needs to be promoted with more intensity so that tourism in the City could continue

to flourish. Tourism in Santiago City can accommodate and entertain visitors with minimal intrusion or destruction to the environment in the locations where they are operating in.

Furthermore, the researcher concludes that there is an improvement in the lives of the tourism entrepreneurs and employees in the tourism or hospitality businesses. However, for the tourism industry to significantly make positive socio-economic contributions to these tourism entrepreneurs as well as to the employees, there needs to be a significant improvement in the income earnings in the tourism enterprises. This can be done if tourists' arrival will continue to significantly rise. A wide array of activities can be done in the City as well as additional attractive destinations to go to. These will give the drive for tourists to come and visit the City.

RECOMMENDATIONS

In the light of the findings and conclusions drawn, the following recommendations are deemed necessary:

The Local Government Unit of Santiago City should initiate the improvement of the existing tourist destinations particularly the Calvary Hills.

The Local Government Unit should initiate the development of new man-made tourist spots, such as nature or water parks, to attract more tourists.

The Local Government Unit should design events/activities that are unique to draw more tourists.

The Local Government Unit should provide assistance and support to the providers of other tourism products and services (those who are involved in making and selling patapat and locally made wines and vinegar) so as to reinforce their operation.

The Local Government Unit should establish a separate local tourism office and officers who will do tourism planning and project implementation activities. The office will focus on tourism concerns

and deal with tourism issues in the City.

The Local Government Unit should train local guides or form an Association of Local Guides who will accompany tourists in the different attractions. Members could be composed of out-of-school youth. This is to make them productive and earn money while they are not yet schooling.

The traffic system in the City should be improved so tourists can have better and more convenient travel experience. Reinforcement in the implementation of traffic rules and regulations should be done.

Improvement of transport facilities as well as provision of new transport systems should be initiated to match the improvement of tourist spots.

The provision of an infrastructure that will cater to sporting and other events should be planned and implemented so the city can hold provincial or even national affairs.

LGU Santiago City entrepreneurs should design and formulate products or services and activities which are unique, of high quality and more engaging.

Future researchers may also conduct research on the same field but in a broader context such as determining the impact of the tourism industry to the city.

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**STUDENT ENROLMENT MANAGEMENT SYSTEM
OF LYCEUM OF APARRI**

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Master in Information Technology

ABSTRACT

The study aimed to develop a fully customized Student Enrolment Management System (SEMS) for Lyceum of Aparri to facilitate the enrolment and accounting process and to cater to the needs of all the clients and the staff in the delivery of frontline services. This study followed the framework of Design Science Research for Information Systems, thus, the researcher identified the problems encountered in the enrolment and accounting process, defined the objective of the study, designed and developed the system, deployed, evaluated, and presented the results of the study. The SEMS operates in multiple computer units over the network having a centralized database for data storage and retrieval. It has different integrated features that support the needs of the frontline service providers and the clients. The overall functionality of the SEMS increased the efficiency of the frontline service providers since most of the processes are automated. The results of the survey along with quality of services, accuracy of records and reports, and timeliness reveal that SEMS is a significant and an efficient instrument in the delivery of frontline services.

Keywords: *Information system, accounting system, enrolment system, enrolment process, computerized system*

INTRODUCTION

As educational institutions move away from traditional grading and towards the assessment of specific skills, information technology redefines how to judge whether academic key persons have realized their objectives. The advent of computers has long gauged manual dealings with tasks at hand as much of what is used in earlier student information systems and school administration worked on outdated code base and data accessibility. The predominant issues in today's education sector center upon enrolment management, student services, and student academic outcomes. Hence, it is with this regard that a Student Enrolment Management System is a must as it is no longer a luxury but a necessity for all growing schools, colleges and universities.

The use of technology in the academe is already much expected in the present time. In addition, the Philippine Senate introduced a bill Enhancing Education through Technology Act of 2001 or Achievement through Technology and Innovation Act (ATTAIN, 2000). The Student Enrolment Management System is a management information system for educational establishments that provides capabilities for enrolment, registrations, and evaluations, assessment of fees and school credentials. It is web-based application software designed to introduce a conducive and structured information exchange environment which enables educational institutions to supervise student-related activities.

Generally, the Student Enrolment Management System provides a complete student record system. It is designed with diverse application potentials ranging from simple management of student records at school to management of all student-related functions as well as administrative functions of a university or a chain of educational establishments.

Lyceum of Aparri, as a top performing Catholic higher education institution in the northern tip of Cagayan in the Philippines, has a level III accredited status in its curricular programs. It caters to a total of more or less one thousand students. Students in the said institution wait for long hours and stand in line filling out enrolment and assessment forms as Lyceum of Aparri does not have a system that stores its student

records. The manual procedures have been the outcry of students. Moreover, the personnel manning the registrar, cashier and accounting services are dramatically burdened on the situations especially when students flock during scheduled examinations. It is with this foregoing reason that the researcher ventured to embark on this study.

Statement of the Problem

The study sought to develop and evaluate a “Student Management Enrolment System” that automates the manual procedures of registration, enrolment and accounting processes at the Lyceum of Aparri.

Specifically, the study sought answers to the following questions:

1. What is the assessment of the students, faculty and staff on the current system along the following offices in terms of:
 - 1.1 Registrar;
 - 1.1.1 Admission;
 - 1.1.2 Enrolment;
 - 1.1.3 Evaluation;
 - 1.1.4 School Credentials;
 - 1.2 Accounting;
 - 1.2.1 Assessment of fees;
 - 1.3 Cashier;
 - 1.3.1 Payment; and
 - 1.3.2 Statement of Account?
2. What are the problems and issues encountered in the current enrolment system?
3. What system can be developed to address the problems, issues and concerns regarding the current system?
4. What is the extent of efficiency of the proposed Student Enrolment Management System in terms of:
 - 4.1 Functionality;
 - 4.2 Reliability;
 - 4.3 Usability;

4.4 Maintainability; and

4.5 Portability?

METHODOLOGY

Research Design

The researcher employed the Design Science Research (DSR) for Information Systems following the six procedural steps. The Design Science Research creates and evaluates IT artifacts intended to solve identified organizational problems (Peppers, 2007). It involves a rigorous process to design artifacts to solve observed problems, to make research contributions, to evaluate the designs, and to communicate the results to appropriate audiences. The procedures are as follows:

Problem identification and motivation

First, the researcher went through problem identification as she diagnosed the problems and needs in performing the enrolment and accounting processes through series of interviews with concerned participants in the study.

Definition of the objectives for a solution

Second, after knowing the problems, the researcher derived the objectives of the study based on the problems and needs. The development of a fully customized Student Enrolment Management System that will support the enrolment and accounting processes for quality delivery of services was done.

Design and development

Third, the researcher analyzed the requirements based on the identified problems and the derived objectives. She then created the design of the desired interface and system functionality which involves modeling and flowcharting. The design created has features which involved programming or coding and preliminary testing for deployment.

Demonstration

Fourth, the researcher deployed the finished initial version of the system for production in the registrar, accounting and cashier’s office. This constituted the end-user training and support, management of change and data conversions. Moreover, it involved experimentation or testing for refinements.

Evaluation

Once the software was developed, the researcher started a thorough testing process. The researcher evaluated the effectiveness of the system by comparing the complete functionality of the system versus the manual pattern.

Communication

Lastly, the researcher made the availability of this paper to diffuse or communicate the problem and its importance, the artifact which refers to the SMES, its utility, novelty, design and its success to the researcher and other audience such as practicing professionals.

Participants of the Study

The participants of the study consisted of college students and faculty who were chosen at random as well as the entire staff of the frontline offices of Lyceum of Aparri. The participants are composed of the following:

Type of Participants	Frequency	Percentage
Students	300	69.28
Faculty	121	27.94
Staff	12	2.77
Total	433	100.00

In order to obtain the desired information on the current transaction scheme and the proposed system, this study involved 433 participants consisting of students and faculty together with the staff of the frontline offices which includes the Registrar, Cashier and Accounting Offices of Lyceum of Aparri. The researcher made use of the Slovin's formula to determine the sample size of the participants.

Instrumentation

The researcher made use of the following methods in gathering the data necessary for analysis.

Interview. The researcher interviewed the staff of the Registrar, Cashier and Accounting Offices in order to understand the processes and transactions done to obtain some information beyond the researcher's knowledge.

Observation. Through this method, the researcher was able to formulate predefined problems, transactions and questions to have an idea on how the system requirements would be developed and enhanced.

Internet Surfing. The researcher utilized the internet for the information that are not available within the framework of the target processes; such as related literature and studies, definition of terms, and other related information necessary for the conduct of the research.

Questionnaires. The researcher floated two sets of questionnaires: the pre-survey and post-survey questionnaires. The pre-survey questionnaire was used to assess and determine the problems encountered on the existing system. Then, the post-survey questionnaire was used to determine the degree of effectiveness of the proposed system in terms of software features/capabilities.

Data Gathering Procedure

The following steps were undertaken in order to pursue the objectives of this study:

The researcher sought the approval of Rev. Fr. Joel M. Reyes, the Executive Vice President of Lyceum of Aparri before the conduct of the study.

After which, the researcher immediately interviewed the staff of the frontline offices as well as some of the students and faculty of Lyceum of Aparri as regards the existing information system.

Through a survey questionnaire, the researcher was able to determine the problems encountered regarding the existing information system. As the system would be in progress, the researcher interviewed the Cashier, Registrar and Accounting staff for the enhancement of the said proposed system.

Data Analysis

The data obtained by the researcher were tallied and organized for their analysis and interpretation.

Frequency and Percentage Count. This tool was used to assess the existing processes & transactions and also to determine the problems encountered regarding the existing system.

Weighted Mean. This was utilized to determine the degree of effectiveness of the proposed student enrolment system.

Likert Scale. This scale was used to get the point scales and descriptive equivalent of the participants' response on the existing system as well as the proposed system by means of the pre-survey and post-survey questionnaires.

RESULTS AND DISCUSSION

On the basis of the analysis of the data gathered, the following findings are obtained:

The participants when grouped according to students, faculty, and staff on the transactions and processes rated the existing enrolment system of Lyceum of Aparri as "Moderately Efficient".

The participants regardless of their status assessed the current transactions and processes on the existing enrolment system as “Moderately Efficient”.

The number one problem or concern encountered by all the participants is “It takes time for students to fill up enrolment forms”.

Among the suggested intervention measures provided by the participants, the item “The school should develop and implement an enrolment system” has the highest frequency or rank.

The result of the evaluation by the participants for the proposed system is “Very Highly Efficient”.

CONCLUSION

From the above findings, the researcher concludes that the proposed Student Enrollment Management System of Lyceum of Aparri is efficient. The proposed system has complied with the standard features or capabilities compared to the existing system because it is automated and it contains the desired features/capabilities to facilitate transactions and enrollment process of the students. Compared to the existing system, the proposed system is more capable in facilitating various transactions and processes of enrollment.

RECOMMENDATIONS

From the obtained findings and conclusion, the researcher recommends the following:

Lyceum of Aparri should adopt and implement the proposed Student Enrolment Management System to keep track and easily monitor the students’ records.

The faculty and staff who will be using the proposed system should be given an orientation of the functions and capabilities of the new system before its formal use.

The assigned staff to manage the system should be computer literate.

Lyceum of Aparri administrators should implement the Student Enrolment Management System to replace the existing system.

The Lyceum of Aparri administrators should provide a stand-alone server.

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**ROAD SAFETY MANAGEMENT OF THE DEPARTMENT
OF PUBLIC WORKS AND HIGHWAYS: BASIS
FOR POLICY RECOMMENDATION**

John Philip M. Rivera
Doctor in Public Administration

ABSTRACT

The Road Safety Audit in the Department of Public Works and Highways - Isabela First District Engineering Office is very important to address the issue of the accident potential, road accidents and most likely safety performance of the distinct plan for a road scheme, whether for new construction, or a rehabilitation of existing road and existing condition of road networks. The concept of road safety management is that all highway schemes must operate as safe as possible. This study looked into the extent of implementation of the Road Safety Management and the extent of compliance to the policies on road safety management along road networks of the Department of Public Works and Highways-Isabela First District Engineering Office. The study utilized the descriptive research design. The participants of the study consisted of forty (40) participants. The researcher made use of a questionnaire that was subjected to try-out and validation and data gathered revealed that the DPWH-Isabela First District Engineering Office complied to Department Order No. 41 Series of 2016 on the maintenance of existing signages to a moderate extent. Awareness of policies such as Department Orders for road safety is very important. The implementing rules and regulations of these Department Orders for Road Safety must be observed strictly prior for the implementation of road safety management along the national roads of the Department of Public Works and Highways. Road traffic injuries are preventable if all necessary devices are considered during the planning stage. The Implementing Rules and Regulations must be strictly enforced and these rules must be widely disseminated and observed.

Keywords: *Road safety management, Department of Public Works and Highways, policy recommendation*

INTRODUCTION

The Isabela First District Engineering Office is a District Engineering Office of the Department of Public Works and Highways (DPWH) which focuses on the development of major infrastructure projects along its national roads. The Road Safety Management of the DPWH – Isabela First District Engineering Office is tasked and committed to serve the needs of the travelling individuals along its road networks.

Road safety nowadays is one of the concerns of the DPWH. The rapid development of the DPWH-Isabela First District Engineering Office involving road network, changing vehicle population, constraints in road construction and technological advances, has contributed a lot to the environment of increased accident potential.

In the statistical data gathered from the Isabela Police Provincial Office from January 2013 to August 2015, two hundred twenty-one cases of road injuries were reported due to road defects and ongoing roadwork in the Province of Isabela. For the year 2016, a record of two thousand eight hundred twenty-two cases of traffic accidents were reported in the said province based on the statistics record of the Isabela Police Provincial Office.

The Road Safety Audit in DPWH-Isabela First District Engineering Office is very important to address the issue of the accident potential, road accidents and most likely safety performance of the distinct plan for a road scheme, whether for a new construction, or rehabilitation of an existing road and existing condition of road networks. The concept of road safety management is that all highway schemes operate as safely as possible. A safety management of DPWH-Isabela First District Engineering Road Network looks at the situations as if through the eyes of any road user and to make suggestions to solve road accidents using the principle of road safety engineering. The extent of compliance of DPWH-Isabela First District Engineering Office to policies such as Department Orders for Road Safety will bring trust to the safety and comfort of the travelling public. On the other hand, the implementation of policies in terms of planning will be very important to show whether the road projects comply with the different standards for better road safety. The implementation of road projects along busy

roads of DPWH-Isabela First District Engineering Office is very critical in terms of being prone to road accidents, thus, it will also be an assessment of compliance to the Department Orders on Road Safety for Road Works. The evaluation of better road safety management of DPWH-Isabela First District Engineering will improve the effectiveness of better road safety management and it will also be a tool to address new and common problems in the compliance and implementation of road safety.

The study wanted to illustrate, analyze and assess the use of policies of the DPWH-Isabela First District Engineering Office to construct and maintain a safe road and traffic scheme and to minimize and reduce the risks of accidents occurring in the future. Road safety management is a matter of accident prevention and accident reduction.

Statement of the Problem

This study looked into the extent of implementation of road safety management along road networks of the Department of Public Works and Highways-Isabela First District Engineering Office.

Specifically, it sought answers to the following:

1. What is the participants' assessment in the extent of compliance of the road networks to the policies on road safety management when grouped according to type of participants?
2. Is there a significant difference in the participants' assessment in the extent of compliance of the road networks to the policies on road safety management when grouped according to type of participants?
3. What is the participants' assessment as to the extent of implementation of road safety management in terms of:
 - 3.1 Planning and design;
 - 3.2 Operational/implementation; and
 - 3.3 Evaluation?

4. Is there a significant difference in the participants' assessment as to the extent of implementation of the road safety management when grouped according to type of participants?
5. To what extent are the problems and issues encountered in the implementation of road safety management?
6. What policy reforms can be recommended to improve the implementation of the road safety management?

Research Design

The research design used in the study is the descriptive research design. The descriptive survey method of research, according to Pimentel (2000) involves an element of analysis and interpretation of the meaning or significance of what is to be described. Description is often combined with comparison and contrast involving measurement, analyses and interpretation (Pimentel, 2000).

This method was appropriate since the study aimed to determine the implementation of the DPWH-Isabela First District Engineering Office Road Safety Audit and the extent of compliance to the different policies such as DPWH Department Order No. 13, Series of 2008; Guidelines in the Procurement and Installation of Road Safety Devices and Facilities, DPWH Department Order No.36, Series of 2007; Provision and Installation of Road Safety Devices along Critical Sections of all DPWH Preventive Maintenance/ Asphalt Overlay and Reblocking Projects, DPWH Department Order No.41, Series of 2012; Adoption of DPWH Highways Safety Design Standards, May 2012 Edition, DPWH Department Order No.41, Series of 2016; Amended Policy Guidelines on the Maintenance of National Roads and Bridges and DPWH Department Order No. 135, Series of 2015; Strict Compliance to Road Works Safety and Traffic Management and Construction Safety and Health Requirements during Construction and Maintenance of Roads and Bridges.

Research Participants

The research participants of the study consisted of forty

(40) participants, ten (10) DPWH-Isabela First District Engineering Office Engineers, nine (9) Contractors of DPWH-Isabela First District Engineering Office, namely: EGB Construction, BMJ Construction, Dragon 12 Builders and Construction Supply, GAPT Construction and Supply, Atlantic Construction, 4As Construction, MC Taguba Construction, ES Pua Construction, Megabucks Construction and Development Corporation and a total of twenty one (21) Road Users from the Provincial Disaster Risk Reduction and Management Council, City Disaster Risk and Reduction Office of the City of Ilagan, Isabela State University, Isabela Police Provincial Office, Municipal Engineers Office from the Municipalities of Tumauni, Delfin Albano, Cagan, San Pablo and City of Ilagan Isabela, Businessmen from Delfin Albano and Cagan, Office of the Provincial Engineer, Engineering Students and Road Users from the Municipal Planning and Development Council of Delfin Albano, Isabela.

Table 1

Frequency and Percentage Distribution of Research Participants

Participants	Number of Participants	Percentage
DPWH Engineers	10	25.00
Contractors	9	22.50
Road Users	21	52.50
Total	40	100.00

Table 1 shows the profile of the research participants.

Instrumentation

The researcher made use of questionnaire consisting of statements, and rated using a 5-point Likert scale with five as the highest, to gather data. The statements were designed to enable the participants to assess the extent of implementation of the road safety management system of the DPWH-Isabela First District Engineering Office. The data gathering tool used in the research was reviewed and validated by an Engineer III from the DPWH Central Office-Bureau of Quality and Safety; Assistant Regional Director of the DPWH, Regional

Office No. 2; Ret. Police Chief Superintendent, Assistant Public Safety Officer of the Department of Public Order and Safety of the Provincial Government of Isabela.

The first part of the questionnaire consisted of statements meant to assess the compliance of the roads to policies under DPWH Department Order for Road Safety. The second part assessed the extent of implementation of road safety management system in terms of planning, operational implementation patterned from Road Safety Around School Task Force, Audit Checklists, by Metropolis and Associates and followed by evaluation or the overall assessment based on planning and implementation. The last part dealt with the issues and problems on the implementation of road safety management of DPWH-Isabela First District Engineering Office which was recommended by the content assessor of the questionnaire.

After the validation and review of the questionnaire, the first try out was conducted to two DPWH Engineers, nine Road Users and two Contractors and followed by a second administration of the questionnaires after seven days.

Data Gathering Procedure

Before gathering and collecting data, the researcher sought the proper authorization and permission from the District Engineer of the DPWH-Isabela First District Engineering Office with regards conducting an assessment of the agency's road projects with respect to Road Safety Management along its national roads. Upon the grant of approval to conduct the research, the administration of research tools and collection of data were done. Data were collected from both primary and secondary sources with an attached informed consent letter to the participants.

Data Analysis

The data collected were tabulated, analyzed, interpreted and summarized using descriptive statistics. Descriptive statistics, like frequency counts, percentage, and mean were used to analyze the safety performance of DPWH-Isabela First District Engineering Office

on the extent of their road projects' compliance to Road Safety Policies and the extent of implementation of Road Safety Management System.

The following scale was used to interpret the weighted means on the extent of compliance to road safety policies and extent of implementation of road safety management system to national roads of the DPWH-Isabela First District Engineering Office.

Mean Range	Description
4.20 – 5.00	VGE - Road Safety aspects are evident and met exceedingly, neatly complied and extremely well organized in implementation. (A MODEL COMPLIANCE TO POLICIES – Excellent / Complied to a Very Great Extent)
3.40 – 4.19	GE - Road Safety aspects are evidently met. (COMPLIED TO WHAT IS EXPECTED – Very Satisfactory / Great Extent)
2.60 – 3.39	ME - Almost complied with all Road Safety aspects. (ALMOST COMPLIED TO POLICIES – Satisfactory/ Moderate Extent)
1.80 – 2.59	LE - Most of the policies under Road Safety aspects were not fairly met. (SORT OF WHAT IS EXPECTED – Fair/ Little Extent)
1.00 – 1.79	VLE - The compliance to policies for Road Safety is poorly met (NOT WHAT IS EXPECTED – Poor/ Very Little Extent)

For the inferential questions stated in the problem statement, One-Way ANOVA was utilized using 0.05 level of significance to assess the extent of compliance of the road projects to road safety policies and extent of implementation of road safety management of the DPWH-Isabela First District Engineering Office when participants were grouped according to type.

RESULTS AND DISCUSSION

Findings on the extent of compliance to the policies on road safety management

The DPWH-Isabela First District Engineering Office's compliance to Department Order No.41, Series of 2016, on Maintenance of existing signages was assessed and rated with overall mean description of 'moderate extent' of compliance.

The extent of compliance in terms of the implementation of road safety management by the DPWH-Isabela First District Engineering Office to all road safety policies is to a "great extent"

Findings on the test for significant difference on the extent of compliance to the policies on road safety management

There is no significant difference on the participants' assessment as to the extent of compliance of road projects to road safety policies when grouped according to type of participants.

Findings on the extent of implementation of road safety management in terms of:

Planning

The extent of implementation of road safety management in terms of planning corresponds to Road Right of Way issue was rated to a moderate extent of compliance.

Planning of pedestrian and cyclist route were quite observed.

During the planning stage, the inclusion of safety nets on road shoulder was quite observed based on the mean description of moderate extent of compliance.

The road design, with the inclusion of overtaking and passing sight distances, was not fully clear to all obstruction, mostly to the line of sight based on assessment.

There was insufficiency of roadside stopping areas within the road section of DPWH-Isabela First District Engineering Office Road Networks.

The overall assessment on the implementation of road safety management in the DPWH-Isabela First District Engineering Office in terms of planning is only satisfactory.

Operational Implementation

During the implementation or the operation of all road projects, clear travel path for both directions was not fully observed with the inclusion of clarity of sight and stopping distances.

Street lighting, safety barriers, road signages were not fully installed, maintained, and are insufficient during roadworks.

Untrained flagman during roadworks.

Consideration to the movements of pedestrian along the project site was not fully observed.

There was presence of some road defects along the national roads of DPWH–Isabela First District Engineering Office.

Evaluation

The overall assessment in terms of the implementation of road safety management along the national roads of DPWH-Isabela First District Engineering Office was rated with a moderate compliance in terms of planning and operational stage.

Findings on the test for significant difference on the extent of compliance to the policies on road safety management

There is no significant difference on the participants' assessment as to the extent of implementation of road safety management when grouped according to type of participants.

Findings based on the issues and problems encountered in the implementation of road safety management

Funding for road safety activities needs necessary attention by the DPWH.

Research agenda for road safety and seeking professional help for road safety activities were rated low by the participants.

Low assessment rating was given to road safety awareness and limited scope of curriculum on road safety aspect.

Coordination between agencies for road safety is not observed.

Installation of necessary road safety devices such as “help sign” and “Lay bay rest areas” are not included in the planning stage.

Enforcement of penalties to all road safety violators needs necessary attention.

Proposed policy reforms to improve the implementation of the road safety management

Inclusion of Road Safety Action Plan to all road projects of the DPWH.

Immediate attention to the inclusion of 20% additional allocation for road safety aspect to all road projects of the DPWH.

Prioritization in the improvement of hazardous prone areas of the different road networks of the DPWH-Isabela First District Engineering Office.

CONCLUSION

Based on the findings of the study the following conclusion is formulated:

The cause of accidents involves numerous factors, all of which

cannot be possibly explored. They are not easy to predict yet a focus can be made, highlighting them to enhance authorities' awareness. Awareness of policies such as Department Order for Road Safety is very important. The implementing rules and Regulations of these Department Orders for Road Safety must be strictly observed prior to the implementation of road safety management along the national roads of the DPWH. During the planning stage, there is an insufficiency of consideration on some inclusions to the plans and programs of works for various road projects. Road traffic injury is preventable if all necessary devices are considered during the planning stage. Operational stage of road project is very critical to which roadworks are prone to road crashes. Implementation based on the Implementing Rules and Regulations must be enforced in actual scenario. However, these rules can be successful only if they are widely known and obeyed. Based on the overall assessments, the road safety management system of the DPWH-Isabela First District Engineering Office was not fully implemented to what is expected from the public. Strict compliance and strict enforcement must be observed while non-observance to these rules must be sanctioned strictly based on the Implementing Rules and Regulations of these Department Orders.

RECOMMENDATIONS

Based on the findings and the conclusion reached, the researcher hereby recommends the following:

The DPWH Engineers and Contractors must strengthen their political commitment in the implementation of road safety in all national roads.

Establish a road safety leadership at DPWH–Isabela First District Engineering Office.

Make the DPWH Engineers, the Head of the Agency and Project Engineer fully implement policies and be held accountable for those tasked in the projects.

The DPWH–Isabela First District Engineering Office must organize proper coordination among Contractors and the DOTr/LTO.

Establish a relation goals, plans, organization, and road safety with appropriate funding.

Disseminate knowledge and information concerning road safety to the public by way of an information system.

Engineers from the Department of Public Works and Highways – Bureau of Quality and Safety of the Central Office must monitor and evaluate systematically the implementation of plans and programs on road safety in compliance to the different Department Orders of DPWH.

Train and maintain road safety professionals in the DPWH – Isabela First District Engineering Office who will monitor the compliance and implementation of road safety plans and programs within the national roads of this district engineering office.

Include civil society in policy formulation (politicians, administrators, policy makers, road safety practitioners, and the community and road users).

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**ORGANIZATIONAL CLIMATE AND PRODUCTIVITY
OF PUBLIC ELEMENTARY SCHOOLS**

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ABSTRACT

The study aimed to determine the organizational climate and productivity of public elementary schools. Specifically, it sought to determine if there is a significant difference in the organizational climate and organizational productivity when grouped according to school administrator profile, teacher profile, and school profile. It also examined for significant relationship between the schools' organizational climate and productivity. The participants include the public elementary school administrators and teachers of the District of Cabagan, Division of Isabela. The study used descriptive correlational research design. The organizational climate in terms of teacher interaction varies with teachers' age and pupil population. The disparities in age and number of pupils tend to gap the teachers from interacting with one another. The schools' organizational productivity in terms of NAT performance varies with teachers' length of service and educational attainment. The teachers' vigor and enthusiasm together with educational foundation contribute in the performance of the learners. Organizational productivity both in terms of NAT performance and faculty competence are not generally associated with the organizational climate of the school. The teachers' professionalism and ability to accomplish tasks and perform duties and responsibilities regardless of work environment are deemed crucial which determines the faculty competence.

Keywords: *Organizational climate, organizational productivity, NAT performance, faculty competence*

INTRODUCTION

Organizational climate is a major factor in the academic lives of educators who teach, learn, and grow professionally in schools. School climate can be a positive factor in the lives of educators or a significant roadblock to learning. Dedicated administrators who are working toward improved school climate make conscious efforts in enhancing and enriching the culture and conditions in the schools so that teachers can teach better and students can learn more (Hansen & Childs, 1998).

Organizational climate can be defined as the internal environment which directly or indirectly influences the organization's activity and characterizes the life in the organization (Venkatesh Organization, 2015). It is the distinct atmosphere of the school strongly observed and felt by the faculty and staff which greatly affects school productivity. Thus, school climate in a broad sense can be understood as the social setting of the school.

Gottfredson and Hollifield (1998) stated that school climate is the single most important factor whether a school succeeds with its students. It is an important predictor of organizational productivity and success. In academic institutions, the school administrators, the teachers, and other school-related aspects to consider are among the major influential factors of school climate that directly affect productivity.

The school administrator, who provides leadership in developing and maintaining a climate conducive to learning, has the responsibility to establish a positive school climate (Dietrich & Bailey, 1996). The relationship between school climate and leadership behaviors is one factor of school success that cannot be ignored. The vision that is articulated by the school administrator can become the foundation for developing a healthy school climate. Sagor (1992) reported that it is imperative that school administrators constantly push for improvement of academic performance. School administrators who can read, and then shape the climate of the school gain a greater understanding of how to positively affect student achievement (Deal & Peterson, 1990). According to Balfanz and Maclver (2000), it is the school administrator's role to provide an environment in which teachers are encouraged to

take risks that lead to increased student achievement.

Teachers, on the other hand as part of the academic organization, are the most valuable asset for their competence is indispensable in the quest for knowledge and quality education. Teachers are the key partners in the learning environment, and their perceptions on school climate need to be assessed in order to improve and maintain educational excellence (Freiberg, 1998). However, school administrators have a strong influence most especially with regard to how the teachers behave in the school. The leadership styles and managerial skills employed and practiced by the school administrators undoubtedly control the interaction describing the school climate. It is deemed crucial in the manner the teachers perform duties and responsibilities and deliver services that directly affect students' achievement.

Other school factors that include school size, faculty and student population, and incentives have political and social impact. The size and complexity of the school make the organization's structure. Stevenson (2001) attested that these school factors are not somewhat nebulous. It actually represents an amalgam of effects rather than just a raw number or a single effect. These are important because these catalyze conditions in terms of school climate, curricular offerings, student participation in extracurricular activities, student self-concept and self-esteem, teacher-student relationships, home-school relationships, and student opportunities to learn and grow. All of these have important roles to play in determining student outcomes.

From the aforementioned, the need to establish a favorable school climate therefore is quite obvious. In the country, this is the clamor of the education sector which calls for a strong leadership of school administrator who would look into the enormous works and functions which can dramatically change the school. This is because school performance springs from the image of the school climate. In developing schools for future programs, Diaz (2015) suggested that the key principle is to empower the school principal as an instructional leader so that together with a team of competent, committed and conscientious teachers, the potentials for pupil achievement can be brought to a higher level.

However, the lack of available researches in the organizational climate and productivity of public elementary schools in the District of Cabagan, Division of Isabela emphasizes the need for such issue to be addressed. By examining the various factors that make up organizational climate and productivity as well with their relationship, this study provides a better understanding the social setting of the said schools. Hence, the study proposed a diligent inquiry on the organizational climate and productivity of public elementary schools in the District of Cabagan.

Statement of the Problem

The study aimed to determine the organizational climate and productivity of public elementary schools.

Specifically, it sought to answer the following questions:

1. What is the profile of the school administrator participants in terms of the following:
 - 1.1 Age;
 - 1.2 Length of Service;
 - 1.3 Administrative Experience; and
 - 1.4 Educational Attainment?

2. What is the profile of the teacher participants in terms of the following:
 - 2.1 Age;
 - 2.2 Civil Status;
 - 2.3 Length of Service; and
 - 2.4 Educational Attainment?

3. What is the profile of the school participants in terms of the following:
 - 3.1 School Type;
 - 3.2 Pupil Population;
 - 3.3 Faculty and Staff Population; and
 - 3.4 Annual Budget?

4. What is the organizational climate of the public elementary schools in terms of:
 - 4.1 School Leadership
 - a.1 Supportive Principal Behavior;
 - a.2 Directive Principal Behavior;
 - a.3 Restrictive Principal Behavior;
 - 4.2 Teacher Interaction
 - b.1 Collegial Teacher Behavior;
 - b.2 Intimate Teacher Behavior; and
 - b.3 Disengaged Teacher Behavior?

5. Is there a significant difference in the organizational climate of public elementary schools when grouped according to:
 - 5.1 School Administrator Profile;
 - 5.2 Teacher Profile; and
 - 5.3 School Profile?

6. What is the organizational productivity of public elementary schools in terms of:
 - 6.1 National Achievement Test Performance; and
 - 6.2 Faculty Competence?

7. Is there a significant difference in the organizational productivity of public elementary schools when grouped according to:
 - 7.1 School Administrator Profile;
 - 7.2 Teacher Profile; and
 - 7.3 School Profile?

8. Is there a significant relationship between the organizational climate and organizational productivity of public elementary schools?

9. What program can be proposed to enhance the organizational climate and organizational productivity of public elementary schools?

METHODOLOGY

Research Design

The study made use of descriptive correlational research design. It aimed to determine the organizational climate and productivity of public elementary schools. Specifically, it sought to determine if there is a significant difference in the organizational climate and in the schools' organizational productivity when grouped according to school administrator profile, teacher profile, and school profile. Moreover, it examined whether there is a significant relationship between the organizational climate and organizational productivity of the schools.

Participants of the Study

The participants of the study were the administrators and teachers of the complete public elementary schools (offering Kindergarten and Grades I – VI) in the District of Cabagan, Division of Isabela. The study comprised of nineteen (19) school participants, nineteen (19) school administrators, and two hundred forty four (244) teachers.

Instrumentation

The researcher made use of the standardized Organizational Climate Description Questionnaire (OCDQ) for Elementary Schools adopted from Hoy, et al. (2002). It was modified into two major parts. The first part of the questionnaire sought to determine the profile of the teacher participants whereas the second part assessed the school climate as assessed by the participants in their respective schools. Each statement was rated using a five-point scale from which the participants indicated their degree of agreement or disagreement. The following were the categories that corresponded to a five-point scale:

- 5 - VSA (Very Strongly Agree)
- 4 - SA (Strongly Agree)
- 3 - A (Agree)
- 2 - D (Disagree)
- 1 - SD (Strongly Disagree)

Three subtests of the OCDQ define principal openness, namely: supportive, directive, and restrictive. Likewise, the collegial, intimate, and disengaged subtests define the degree of openness in teacher behavior. These six scores represent the climate profile of the school.

A. School Leadership	Statements
a.1 Supportive Behavior	4, 9, 15, 16, 22, 23, 28, 29, 42
a.2 Directive Behavior	5, 10, 17, 24, 30, 34, 35, 39, 41
a.3 Restrictive Behavior	11, 18, 25, 31, 36
B. Teacher Interaction	
b.1 Collegial Behavior	1, 6, 12, 19, 26, 32, 37, 40
b.2 Intimate Behavior	2, 7, 13, 20, 27, 33, 38
b.3 Disengaged Behavior	3, 8, 14, 21

On the other hand, a separate instrument was used to determine the personal profile of the school administrators while the performance of the school participants in the National Achievement Test and the faculty competence as indicators of organizational productivity as well as with the school profiles were taken from the records of the schools in the Division Office.

Ethical Consideration

The ethical review of research proposals that involve human subjects was recently made mandatory by the Commission on Higher Education (CHED) last March 3, 2015 for all public and private educational institutions in accordance with the provisions of R.A. 7722 otherwise known as Higher Education Act of 1994. The requirement covers all researches involving human participants such as undergraduate theses, master’s theses, doctoral dissertations, faculty researches, as well as researches referred by other institutions such as HEIs and government agencies.

The researcher believes that this study complied with the requirements of the Commission on Higher Education with regard to the treatment of the study’s human subjects.

Data Gathering Procedures

Prior to the conduct of the study, a letter was sent to the OIC-Schools Division Superintendent of Isabela for approval to conduct the study. After which, the research instruments were floated to the participants with their informed consent during their vacant period and at their most convenient time to eliminate possible constraints and for a more valid and reliable test results. Likewise, the performance of the schools in the National Achievement Test and faculty competence were taken from the office of the Department of Education – Schools Division of Isabela, City of Ilagan, Isabela.

Data Analysis

The data gathered were tabulated, analyzed, and described using the following statistical tools:

Mean. This was used to determine the organizational climate assessment and organizational productivity of the public elementary schools.

To describe the organizational climate assessment, the following arbitrary levels were used based on the overall weighted mean score of the group.

Weighted Mean Score Level	Descriptive Equivalent
4.20 – 5.00	Very Highly Evident
3.40 – 4.19	Highly Evident
2.60 – 3.39	Moderately Evident
1.80 – 2.59	Less Evident
1.00 – 1.79	Least Evident

To describe the schools’ organizational productivity in terms of the National Achievement Test performance, the following descriptive equivalents were used based on the overall mean percentage score (MPS) performance of the public elementary schools in the National Achievement Test for three consecutive years.

Overall MPS	Descriptive Equivalent
90.00% - 100%	Superior
75.00% - 89.99%	Met Standard
35.00% - 74.99%	Below Standard
0% - 34.99%	Poor

To describe the organizational productivity in terms of the faculty competence, the following adjectival ratings were used based on the Individual Performance and Commitment Review Form (IPCRF) of the teachers.

Range	Adjectival Rating
4.50 – 5.00	Outstanding
3.50 – 4.49	Very Satisfactory
2.50 – 3.49	Satisfactory
1.50 – 2.49	Unsatisfactory
1.49 and below	Poor

The Analysis of Variance (ANOVA) was used to test if there is a significant difference in the organizational climate and in the organizational productivity of the schools when grouped according to school administrator profile, teacher profile, and school profile.

The Pearson Product Moment Correlation was used to measure the degree of relationship between the organizational climate and organizational productivity in public elementary schools in the district of Cabagan.

To interpret the coefficient of correlation, the following interpretations as to the degree or extent of relationship for the different values of correlation coefficients were used:

Coefficients of Correlation	Interpretations as to Degree or Extent of Relationship
$\pm 0.80 - \pm 1.00$	Very High Correlation; Very Dependable Relationship

$\pm 0.60 - \pm 0.79$	High Correlation; Marked Relationship
$\pm 0.40 - \pm 0.59$	Moderate Correlation; Substantial Relationship
$\pm 0.20 - \pm 0.39$	Low Correlation; Definite but Small Relationship
$0.00 - \pm 0.19$	Negligible Correlation

RESULTS AND DISCUSSION

Profile of the School Administrator Participants

Out of nineteen (19) school administrators, majority or 52.63% are of age fifty one (51) and above and have rendered service of eleven (11) to twenty (20) years. Nine (9) or 47.37% have experiences in the public school. Eleven (11) or 15.79% have been administrators for five (5) years and below and seven (7) or 36.84% have master's degree units.

Profile of the Teacher Participants

Out of two hundred forty four (244) teachers, most of them or 29.51% belong to age forty one (41) to fifty (50), two hundred ten (210) or 86.07% are married, eighty eight (88) or 36.07% have rendered service of ten (10) years and below in the public school, and one hundred eighty three (183) or 75.00% have master's degree units.

Profile of the School Participants

Out of nineteen (19) complete public elementary schools in the district, only one (1) is a central school located at the town proper, majority or 57.89% are below the mean pupil population, eleven (11) or 57.89% are below the mean faculty population, and twelve (12) or 63.16% fall below the mean annual budget.

Organizational Climate of Public Elementary Schools

a. Supportive and directive principal behaviors are highly evident while

restrictive principal behavior is moderately evident.

- b. Collegial teacher behavior is highly evident with, intimate teacher behavior moderately evident, whereas disengaged teacher behavior is low.

Comparative Analysis on the Schools' Organizational Climate when Grouped according to Profile Variables

- a. When grouped according to school administrator' profile, in terms of school leadership, supportive and directive behaviors are highly evident in the schools while restrictive behavior is moderately evident. In terms of teacher interaction, collegial behavior is highly evident in schools, intimate behavior is moderately evident, while disengaged behavior is less evident.
- b. There is no significant difference in the organizational climate of the schools both in terms of school leadership and teacher interaction when grouped according to school administrators' profile.
- c. When grouped according to school teachers' profile, in terms of school leadership, supportive and directive behaviors are highly evident in the schools while the restrictive behavior is moderately evident. In terms of teacher interaction, collegial behavior is highly evident in schools, intimate behavior is moderately evident, while disengaged behavior is less evident.
- d. When grouped according to school profile, in terms of school leadership, supportive and directive behaviors are highly evident in the schools while restrictive behavior is moderately evident. In terms of teacher interaction, collegial behavior is highly evident in schools, intimate behavior is moderately evident, while disengaged behavior is less evident.
- e. There is a significant difference in the organizational climate of the schools when grouped according to teachers' age particularly in terms of collegial teacher behavior.
- f. There is a significant difference in the organizational climate of the

schools particularly in terms of collegial teacher behavior when grouped according to pupil population.

Organizational Productivity of Public Elementary Schools

- a. The schools, in general, performed below standard in the National Achievement Test while the faculty competence is very satisfactory.
- b. Majority of the schools performed below standard in the National Achievement Test. On the contrary, most of the teachers or 68.42% performed very satisfactorily as to faculty competence.

Comparative Analysis on the Schools' Organizational Productivity when Grouped according to Profile Variables

- a. There is no significant difference in the schools' organizational productivity in terms of NAT performance when grouped according to school administrators' age, length of service, administrative experience, and educational attainment.
- b. There is a significant difference in the schools' organizational productivity in terms of NAT performance when grouped according to teachers' length of service.
- c. There is no significant difference in the NAT performance of the schools when grouped according to school type, pupil population, faculty population and annual budget.
- d. There is no significant difference in the schools' organizational productivity in terms of faculty competence when grouped according to school administrators' age, length of service, administrative experience, and educational attainment.
- e. There is no significant difference in the schools' organizational productivity in terms of faculty competence when grouped according to teachers' age, civil status, length of service, and educational attainment.
- f. There is no significant difference in the schools' organizational

productivity in terms of faculty competence when grouped according to school type, pupil population, faculty population and annual budget.

Correlational Analysis on the Schools' Organizational Climate and Organizational Productivity

- a. Organizational climate in terms of school leadership, supportive and directive behaviors are highly evident while restrictive behavior is moderately evident. In terms of teacher interaction, collegial behavior is highly evident, intimate behavior is moderately evident while disengaged behavior is less evident. With regard to organizational productivity, the schools, in general, performed below standard in the National Achievement Test while the faculty competence is very satisfactory.
- b. There is no significant relationship between the schools' organizational climate and organizational productivity in terms of NAT performance.
- c. There is no significant relationship between the schools' organizational climate and organizational productivity in terms of faculty competence.

CONCLUSION

Organizational climate in terms of teacher interaction varies with teachers' age and pupil population. The disparities in age and number of pupils tend to gap the teacher from interacting with one another. On the other hand, the organizational productivity of the school in terms of NAT performance varies with teachers' length of service and educational attainment. The vigor and enthusiasm of the teachers together with educational foundation contribute in the performance of the learners.

Accordingly, organizational productivity both in terms of NAT performance and faculty competence are not generally associated with the organizational climate of the school. Student achievement is affected by numerous other factors outside the school that cause

the achievement gaps among the learners. In addition, the teachers' professionalism and the ability to accomplish tasks and perform duties and responsibilities regardless of work environment are deemed crucial which determine faculty competence.

RECOMMENDATIONS

Based on the findings and conclusions of the study, the following recommendations are presented:

1. The school administrators, faculty and staff are encouraged to hold group dynamics and team building activities to develop blossoming social relationship among the workforce of the school alleviating the obstructions within the organization. The social relationship is characterized by harmony, intimacy, and progress for a flourishing organizational climate. Thus, healthy relationships are built on the foundation of secure attachment and are maintained by positive relationship behaviors.
2. Open communication within the workplace is encouraged. Effective communication is essential for the members of the organization to perform and function. Good communication within an organization tends to boost employee morale. When employees feel that they are well informed of the organization's direction and vision, they feel more secure within their role. Thus, it leads to an improved work ethics. School administrators are encouraged to communicate effectively to their subordinates so as to achieve team goals.
3. Regular review and assessment as well as strict implementation and monitoring of educational programs should be conducted by curriculum planners, education supervisors and education specialists to ensure the effectiveness of the programs geared towards educational excellence and organizational productivity.
4. Strengthen home-school partnerships to develop strong relationships with students understanding the environment, economic, political, and cultural influences that shape students' views and behavior. This leads to improved communication between students, parents, and teachers, enhancing trust and mutual respect that helps to improve

the academic performance of the learners.

5. Disseminate the result of this study to the schools concerned and a replication of the study by using a bigger pool or a different district is encouraged to be conducted to ascertain the findings of this study and for greater generalizability.

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**SCHOOL-BASED MANAGEMENT PRACTICES OF PUBLIC
SECONDARY SCHOOL HEADS: BASIS FOR
POLICY RECOMMENDATION**

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ABSTRACT

School-Based Management (SBM) is characterized as an era of the transition of the roles and functions of school leaders|| or school managers such as principals, head teachers, officers-in-charge and teachers-in-charge who participate in school leadership activities. As managers, school heads are accountable for financial operations, building maintenance, student scheduling, personnel, public relations, school policy regarding discipline, coordination of the instructional program, and other overall school matters. This study attempted to analyze the school-based management practices of secondary school heads in the first district of Isabela. This study employed the descriptive method of research and involved two hundred fifty three (253) teacher-participants selected through stratified proportional random sampling and used a questionnaire in gathering data needed for the study. The findings of the study fostered better understanding of the basic tenets namely: vision and purpose, features, structures and roles, and support system of school-based management. Coordination among stakeholders served as the best measure for an effective school-based management which is influenced by the participants' educational attainment, position, and length of service.

Keywords: *School-based management practices, public secondary school heads, policy recommendation*

INTRODUCTION

In a world where knowledge has become a crucial element for nations to prosper and compete, primacy is placed on quality and accessible education, from early childhood development to primary, secondary, and tertiary learning. It is for this reason that the significance of education to any country needs to be underscored for it is believed to be the primary source of all technological advances, innovations, and human comforts. In most countries, particularly those that are developing like the Philippines, education is seen as the key to social mobility and major determinant of the levels of prosperity, welfare, and security of the people.

The formidable task of delivering educational service to the country's populace is one of the responsibilities assumed by educational institutions. Education in the Philippines has undergone several stages of development from the pre-Spanish times to the present. It pursues policy reforms that seek to improve the basic quality education. These policy reforms are expected to create critical changes necessary to further accelerate, broaden, deepen and sustain the improved education effort already started.

In order to meet the needs of the Philippine society, education serves as emphasis and priority of the leadership in all periods or epochs in the Philippine's national struggle as a race. As an umbrella term, "restructuring" in the education sector has been used to define a number of interrelated changes which may include changes in the core technology of schools, the conditions of teaching, the structures and authority for decision making, and the relationship between the school and its community.

In August 2001, Republic Act 9155, otherwise called the Governance of Basic Education Act, was passed transforming the name of the Department of Education, Culture and Sports (DECS) into Department of Education (DepED) in order to redefine the role of field offices. This also provides the overall framework for (i) school head empowerment by strengthening their leadership roles and (ii) school-based management within the context of transparency and local accountability.

The goal of basic education is to provide the school-aged population and young adults with skills, knowledge, and values to become caring, self-reliant, productive and patriotic citizens. This transformation, then, has embarked on a nationwide effort to introduce and implement School-Based Management or SBM. The Department of Education has been pursuing a package of policy reforms called the BESRA to build upon the efforts of the Schools First Initiative (SFI) and to create a basic education sector that is capable of achieving the Education for All (EFA) and Millennium Development Goals (MDG) objectives by 2015.

Referred to as the Key Reform Thrust (KRT) 1 in BESRA, the SBM is being promoted and institutionalized as one of the key strategies for achieving the desired learning outcomes. It is premised on the principle that in order to deliver better outcomes in a sustainable manner, schools must be enabled and empowered to manage their own affairs. School-based management is concerned with the decentralization of decision-making authority from the central, regional, and division offices to the individual schools. The idea is to unite the school heads, teachers, students, local government units, and the community to improve the quality of early formal education in Philippine public schools (DepEd, 2006b).

The DepEd has decentralized decision-making powers to local officials as its response to RA 7160 (the Philippine Local Government Code) in 1999. DECS Order 230, defined decentralization as the best position to know the needs of their schools and to make appropriate decisions in a timely manner. So involving local stakeholders in addressing local problems is the key to improving schools and even to mobilizing much-needed resources (World Bank, 2004).

Statement of the Problem

The study attempted to analyze the school-based management practices of secondary school heads in the first district of Isabela. Specifically, it sought to answer the following questions:

1. What is the profile of the participants in terms of:
 - 1.1 School Population,

- 1.1.1 Total Number of Teachers
 - 1.1.2 Total Number of Students
- 1.2 Educational Attainment,
- 1.3 Position, and
- 1.4 Length of Service?
2. What is the extent of knowledge and understanding of the participants on school-based management relative to the following:
 - 2.1 vision and purpose,
 - 2.2 features,
 - 2.3 structures and roles, and
 - 2.4 support system?
3. To what extent is the school-based management practiced as assessed by the participants relative to the following:
 - 3.1 school leadership,
 - 3.2 internal stakeholders participation,
 - 3.3 external stakeholders participation,
 - 3.4 school improvement process,
 - 3.5 school-based resources, and
 - 3.6 school performance accountability?
4. Is there a significant difference on the participants' extent of knowledge and understanding of school-based management when participants are grouped according to profile variables?
5. Is there a significant difference in the assessment of the participants on the extent of practice of school-based management when grouped according to profile variables?
6. What are the best practices manifested by the participants along the implementation of SBM?
7. What is the degree of seriousness of the problems encountered by the participants in the implementation of school-based management?
8. Is there a significant difference on the degree of seriousness of the problems encountered by the participants in the implementation of school-based management when grouped according to profile variables?

9. What measures should be undertaken to address the problems encountered in the implementation of school-based management?
10. What policies can be proposed to address the problems encountered in the implementation of school-based management?

METHODOLOGY

Research Design

This study employed the descriptive method of research for it is designed to determine the extent or degree to which two or more variables are associated with each other. This was used to describe the existing behavior or characteristics of a particular population.

Participants of the Study

The participants of the study involved two hundred fifty three (253) teacher-participants who were randomly selected using the stratified proportional random sampling.

Instrumentation

The researcher made use of a questionnaire in gathering data pertinent to the study. A letter explaining the purpose of the study accompanied the questionnaire.

The questionnaire was patterned from the first and second parts of the tool used by Baguec (2008) who conducted the study on "School-Based Management Practice of School Heads in the Division of Apayao in Relation to Academic Performance" and Dulin (2013) who conducted the "Implementation of School-Based Management and School Performance among Elementary Schools in the Division of Tuguegarao City", respectively. These were modified and categorized by the researcher to suit the requirements of the study.

The questionnaire consists of the following parts:

Part I. Questionnaire for the School Heads

- A. Profile of the School Heads
- B. Extent of Knowledge and Understanding of the Participants in School-Based Management
- C. Extent of Practice of School-Based Management
- D. Best Practices relative to the Implementation of School-Based Management
- E. Degree of Seriousness of the Problems Encountered in the Implementation of School-Based Management
- F. Possible Measures to Address the Problems Encountered relative to the Implementation of School-Based Management.

Part II. Questionnaire for Teacher-Participants

- A. Profile of Teacher-Participants
- B. Extent of Knowledge and Understanding of the Participants in School-Based Management
- C. Extent of Practice of School-Based Management
- D. Best Practices relative to the Implementation of School-Based Management
- E. Degree of Seriousness of the Problems Encountered in the Implementation of School-Based Management
- F. Possible Measures to Address the Problems Encountered relative to the Implementation of School-Based Management

Data Gathering Procedure

In pursuing this particular study, the following steps were undertaken:

1. The researcher sought permission to conduct the study from the Office of the Schools Division Superintendent.
2. A letter of request pertaining to the study was sent to the school principals.
3. The researcher personally floated and retrieved the questionnaire from the participants.

Data Analysis

Upon retrieval of the questionnaires, the data were collated, tabulated and treated statistically through the following tools:

Frequency Count and Percentage. These were used to describe the profile of the participants.

Weighted Mean. This was used to interpret the assessment of the participants on school-based management.

Likert Scale. The following scale was used to interpret the weighted means:

Scale	Qualitative Interpretation
4.20 – 5.00	Very Great Extent/ Very Serious
3.40 – 4.19	Great Extent/ Serious
2.60 – 3.39	Moderate Extent/ Moderately Serious
1.80 – 2.59	Limited Extent/ Somewhat Serious
1.00 – 1.79	Very Limited Extent/Not Serious

Analysis of Variance (ANOVA). This was used to test for significant difference in the participants' extent of knowledge and understanding on SBM when grouped according to profile variables. Further, it was used to test for significant difference on the extent of practice of SBM as well as on the degree of seriousness of the problems encountered in the implementation of SBM when participants are grouped according to profile variables.

RESULTS AND DISCUSSION

Based on the results of the data gathered, the researcher obtained the following findings:

Profile of the participants in terms of:

School Population

Ilagan National High School is categorized as a large school while Simanu National High School is considered a small school.

Educational Attainment

Most of the participants have master's units and are professionally prepared for their task as evidenced by their intention to acquire higher level of educational ladder.

Position

Most of the school heads have Principal III position while most of the teacher-participants are designated as Teacher III.

Length of Service

Majority of the school heads are classroom teachers. Generally the teacher-participants are newly-hired in the field based on their service records.

Extent of knowledge and understanding of the participants on school-based management in terms of the vision and purpose, features, structures and roles, and support system

The participants assessed to a very great extent their knowledge and understanding of the set vision and purpose, features, structures and roles, and support system of school-based management.

Extent of practice of School Based Management as assessed by the participants in terms of school leadership, internal stakeholders' participation, external stakeholders' participation, school improvement process, school-based resources, and school performance accountability

The participants assessed to a very great extent their practice of School-Based Management along school leadership, internal stakeholders' participation, external stakeholders' participation, school improvement process, school-based resources, and school performance accountability.

Test of significant difference on the extent of knowledge and understanding of school-based management when participants are grouped according to profile variables

Educational Attainment

There is no significant difference in the extent of knowledge and understanding of school heads in terms of the vision and purpose, features, structures and roles, and support system school-based management when grouped according to educational attainment. Likewise, there is no significant difference in the extent of knowledge and understanding of teachers in terms of the vision and purpose, features, structures and roles, and support system school-based management when grouped according to educational attainment.

Position

There is no significant difference on the extent of knowledge

and understanding of school heads on the vision and purpose, features, structures and roles, and support system of school-based management when grouped according to position. Similarly, there is no significant difference on the extent of knowledge and understanding of teachers on the vision and purpose, features, structures and roles, and support system of school-based management when grouped according to position.

Teaching Experience

There is no significant difference in the assessment of school heads on the extent of knowledge and understanding of the vision and purpose, features, structures and roles, and support system when grouped according to their teaching experience. However, there is a significant difference in the assessment of teachers on the extent of knowledge and understanding along the vision and purpose, features, and structure and roles of school-based management.

Administrative Experience

There is a significant difference on the extent of knowledge and understanding of the school heads along the vision and purpose and support system of school-based management while there exist no significant difference on the extent of knowledge and understanding of the features of school-based management.

Test of significant difference in the assessment of the participants on the extent of practice of School-Based Management in terms of school leadership, internal stakeholders' participation, external stakeholders' participation, school improvement process, school-based resources, and school performance accountability when grouped according to profile variables

Educational Attainment

There is no significant difference in the assessment of school heads on the extent of practice of SBM when they are grouped according to educational attainment. Similarly, there is no

significant difference in the assessment of teacher-participants on the extent of practice of SBM when they are grouped according to educational attainment.

Position

There is no significant difference in the assessment of school heads on the extent of practice of SBM in terms of school leadership, internal stakeholders' participation, external stakeholders' participation, school improvement process, school-based resources and school performance accountability when grouped according to position. Likewise, there is no significant difference in the assessment of teachers on the extent of practice of SBM with respect to school leadership, internal stakeholders' participation, school improvement process, school-based resources and school performance accountability. However, there is a significant difference in the teachers' assessment on the extent of SBM practice with regard to external stakeholders' participation when grouped according to position.

Teaching Experience

There is no significant difference in the assessment of school heads on the extent of practice of the six dimensions of SBM when grouped according to teaching experience. Similarly, there is no significant difference in the assessment of teachers on the extent of practice of the six dimensions of SBM when grouped according to teaching experience.

Administrative Experience

There is no significant difference on the extent of practice of the school heads in terms of school leadership internal stakeholders' participation, external stakeholders' participation, school improvement process, and school-based resources of school-based management when grouped according to administrative experience. However, there is a significant difference on the extent of practice of the school heads on school performance accountability.

The best practices manifested by the school heads along the implementation of school-based management were effective working relationship among stakeholders and fully transparent school. On the other hand, the best practice manifested by the teacher participants along the implementation of school-based management was focused on teaching that is coordinated with students' performance.

The participants stated that the behavior and absenteeism of students hinders the implementation of school-based management in the First District of Isabela. They also assessed that poverty, lack of human and material resources in schools, too much chain and bureaucracy in the school system, far-flung school site that delays pertinent communications, misunderstanding by many schools of what SBM is seen and how it functions, confusion on the part of the stakeholders in relation to new roles and responsibilities, Interference of influential persons and politicians, illiteracy of parents in promoting the development of the entire school, distraction of extra-curricular activities, lack of resource generation in schools, resistance of teachers to change, difficulties of coordination with the stakeholders, "no care" attitude of the stakeholders , occasional absences and tardiness of teachers affecting school performance, and lack of training or professional development to council members affect the implementation of school-based management.

There is no significant difference on the degree of seriousness of the problems encountered by school heads in the implementation of school-based management when grouped according to educational attainment, teaching experience and administrative experience. Similarly, there exists no significant difference in the degree of seriousness of the problems encountered by teachers in the implementation of school-based management when grouped according to educational attainment and administrative experience. However, there is a significant difference in the degree of seriousness of the problems encountered by teachers in the implementation of school-based management along designation.

The two groups of participants recommended that there must be coordination among stakeholders for effective SBM implementation. Likewise, both teachers and school heads suggested the following in

order to solve school-based management problems and challenges towards the realization of the school objectives: (a) initiate and conduct training about SBM to stakeholders, (b) encourage collaboration among teachers and participation among stakeholders, (c) there must be transparency in the allocation and utilization of MOOE, SEF, community contribution and supplemental budget, (d) de-politicize the school system or structure, (e) there must be a compulsory management course for school head, (f) the school head should discourage favoritism, (g) delegate powers for better decision-making, (h) regular monitoring and evaluation of school performance, and (i) democratic way of managing people.

Policy formulations or designs are recommended and are subjects for further and more intense deliberation among all concerned stakeholders namely: quarterly re-orientation of stakeholders in relation to their new roles and responsibilities, improved system of fair and just mechanism, resource generation of schools through school to school partnership, strict adherence to paperless communication system, continuous professional development of council members, and regulation of the conduct of extra-curricular activities.

CONCLUSION

The study had fostered better understanding of the basic tenets, namely: vision and purpose, features, structures and roles, and support system of school-based management. School-based management depends on the level of practice in terms of school leadership, internal stakeholders' participation, external stakeholders' participation, school improvement process, school-based resources, and school performance accountability brought by effective working relationship among stakeholders, fully transparent school, and focus on teaching that is coordinated with student performance, and effective working relationship.

Hence, this study provides that coordination among stakeholders serves as the best measure for an effective school-based management influenced by educational attainment, position, and length of service.

RECOMMENDATIONS

Based on the findings and conclusions drawn from the study, the following are the researcher's recommendations:

A re-orientation program for the stakeholders must be conducted to improve their awareness of their responsibility and accountability.

Schools must enhance the support system for teachers to provide the needs for basic instructional equipment and materials for the development of the learners' full potential.

Schools must strengthen the parents' accountability for students' performance by involving them in the management and monitoring of students' learning process.

Schools must draw greater support from the Local Government Stakeholders and other community leaders, government, and non-government organizations to provide community-wide improved learning outcomes.

Concerted efforts must be made by the stakeholders in establishing a monitoring and evaluation team to validate the actual level of SBM implementation in order to pass not only Level 1 but also the higher levels of SBM assessment.

School administrators and teachers must implement an intervention plan in order to solve behavioral issues and absenteeism of students.

A similar study may be conducted to validate the findings of the study.

The findings of the study must be disseminated to the participants of the study.

The policy recommendations formulated by the researcher must be presented to the school administration for efficient implementation of school-based management in the First District of Isabela.

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**THE USE OF EBOOK AS AN INSTRUCTIONAL TOOL:
THE ST. PAUL UNIVERSITY PHILIPPINES
EXPERIENCE**

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ABSTRACT

Technology has changed education and how educators can leverage new educational tools to personalize learning, encourage collaboration, and prepare students for the future. Technology, too, is one of the hallmarks of the 21st century learners. This study would like to document the use of eBook as an instructional tool which includes the knowledge, skills, and attitudes of teachers, parents and students, as well as their practices, problems encountered and suggestions. The quantitative approach, particularly descriptive research design was employed to document the knowledge, skills, attitudes, practices, experiences, views, and suggestions of students, teachers and parents on the utilization of eBooks in the instructional process. In the study, there are three groups of participants: teachers handling Grade 7-10, students from the Science section and parents. Questionnaire as well as interview protocol were used as research instruments. For data analysis, frequency and percentage, mean, ANOVA, and thematic analysis were employed. Results of the study revealed that most of the student-participants are 15 years old and grade 9. Majority of the teacher-participants are female with ages ranging from 21-25, handling grade 9 and taught Mathematics subjects. With regard to parent-participants, majority are female, at age 41 and above, have access to formal education in tertiary level and business owners. Furthermore, the student and teacher-participants' knowledge on the use of eBook are "very high," while that of the parent-participants are "high." On the other hand, all participants have "high" skills and "highly favorable" attitudes on the use of eBooks.

Keywords: *Ebook, instructional tool, iPad, basic education unit*

INTRODUCTION

Advancement in technology is inevitable, be it in offices, hospitals, factories, laboratories and schools, among any others. In the school set up, the learning landscape is improved to accommodate technology integration in education. Whether people like it or not, a lot of changes are taking place. Students from secondary and tertiary levels are engaging in the net to follow some blogs, graders using their cell phones, or even kids in the kindergarten, navigating their Ipads by touch. They are today's digital natives. Technology is their world. They are instinctively inclined to use technology as part of their educational process. They are the 21st century learners who are described as innately born collaborators, communicators, critical thinkers, evaluators and a lot more from the list.

This generation's vernacular is the digital word. Therefore, in a manner of speaking, children today are reared to grow up in the digital world. In this context, schools play a special role. However, these are not the same 21st century learners in the first decade of the new millennium. For these students, simply watching videos or images during class, playing an internet multiplication game, or even taking turns at an interactive whiteboard is no longer enough.

These new 21st century learners are highly relational and demand quick access to new knowledge. More than that, they are capable of engaging in learning at a whole new level. In order for the teaching-learning process to be more effective, the school necessitates itself to provide a conducive teaching-learning environment for the learners. Knowing the environment will give the idea of a 21st century classroom landscape, a place that creates a life-like situation that enhances learning. It allows equitable access to quality learning tools, technologies and resources.

The adoption of iPads in the teaching-learning process enhances student engagement. The students exhibit better performance because of the highly visual and multimedia content that the eBooks provide them. The use of eBooks boosts the learning process not only of students but also the teaching process. It offers advantages like portability, 24-hour access, text search, annotation, linking, and

multimedia and self publishing possibilities.

However, despite its wide acceptance, many schools are still wary about its use thinking that students' attention might be diverted from studies due to many built-in applications in the iPad. In the Philippines, it was only recently that private schools began adopting its use. From the simple and yet perennial problem of the students who were experiencing carrying heavy bags and the goal to improve the quality of education, the need to digitized the printed books was greatly felt. The La Salle Green Hills in Mandaluyong City has pioneered the use of electronic tablets (e-tablets) to selected students to lessen their burden in carrying books in 2011. Students do not hunch their backs from carrying heavy backpacks, teachers do not deal with mountains of test papers for checking, and class reports are not painstakingly handwritten on Manila paper and taped on the board for the class to see.

In the school year 2015-2016, St. Paul University Philippines joined the bandwagon of using technology in the science sections of the Basic Education Unit. It is through the initiative of the administration after its consultation and recommendations from stakeholders namely the eBook providers, officers of the Parents' Council, some teachers and students that the use of eBooks be adopted. Since this has just not been long enough implemented in the school, this study would like to document the use of eBook as an instructional tool which includes the knowledge, skills, and attitudes of teachers, parents and students, as well as their practices, problems encountered and suggestions.

Statement of the Problem

This study aimed to document the knowledge, skills, attitudes, practices, experiences, views, and suggestions of students, teachers and parents on the utilization of eBooks in the instructional process. The results of which shall serve as basis for improving the implementation of the use of eBooks on instruction.

More specifically, the study sought answers to the following:

1. What is the profile of the student-participants in terms of:
 - 1.1 gender;
 - 1.2 age, and
 - 1.3 grade level?

2. What is the profile of the teacher-participants in terms of:
 - 2.1 gender;
 - 2.2 age;
 - 2.3 grade level handled, and
 - 2.4 subject taught?

3. What is the profile of the parent-participants in terms of:
 - 3.1 age;
 - 3.2 gender;
 - 3.3 educational attainment, and
 - 3.4 occupation?

4. What is the level of knowledge, skills and attitudes of the three groups of participants particularly on eBook and its use?

5. Is there a significant difference on the knowledge, skills and attitudes of the different groups of participants on the utilization of eBooks in the instructional process?

6. What are the participants' experiences and views on the use of eBooks in the classroom?

7. What do the participants suggest to hasten the implementation of the use of eBooks?

8. What plan of action can be implemented to intensify the implementation of the use of eBooks for classroom instruction?

METHODOLOGY

Research Design

The researcher used the quantitative approach utilizing the descriptive research design since the research described the

knowledge, skills and attitudes of the participants, as well as their experiences, views and suggestions on the utilization of eBooks in the instructional process. This method also gives opportunity to draw inferences on the implications on the use of eBook among the Junior high school students of St. Paul University Philippines.

Participants of the Study

The study covered three groups of participants as sources of data, particularly, the teachers of St. Paul University Philippines handling Grade 7 to Grade 10, the students from the Science sections who are using the eBook, and their respective parents for Academic Year 2016-2017.

Instrumentation

This study used the questionnaire method to gather information on the knowledge, skills, and attitudes of participants, as well as their experiences, views and suggestions on the utilization of eBooks in the instructional process.

The researcher developed a questionnaire for the three sets of participants to gather the needed data. The said questionnaire was validated by the eBook developer, as well as one teacher and one research expert who undertook reliability testing before its administration to the participants. Reliability testing used the test-retest method to non-participants (12 students and their parents, and 10 teachers). There was a one-week gap for the pilot testing given to the non-participants. The test-retest answers were subjected to reliability analysis ($r = 0.80$). The items with low reliability were further refined. The survey questionnaire was divided into three parts. The first part includes the participants' profile. The second part deals with parallel items that measure the knowledge, skills and attitudes of each group of participants. The third part deals with open-ended questions that ask about the participants' experiences, views and suggestions that would enhance the utilization of eBooks in the classroom.

An interview protocol was utilized to substantiate the information obtained from the survey questionnaire.

Data Gathering Procedures

In gathering the data for this study, the researcher undertook the following:

First, she sought permission from the Principal of the school to conduct a survey to the teachers, to the students from the Science sections of Grade 7 to Grade 10, who are using eBooks, and their respective parents.

Second, she sought for informed consent from the teachers and parent-participants. Parental consent, as well as students' assent, was also sought.

Third, the researcher administered personally the questionnaire. In-depth personal interview was conducted to participants to obtain and validate information obtained from their written responses.

Fourth, the information gathered were subjected to data treatment.

Data Analysis

The quantitative data were organized, analyzed and interpreted using the following statistical tools:

Frequency Count and Percentage. These were used to interpret the profile of the three groups of participants. Mean. This was used to describe the knowledge, skills and attitudes of the participants on the utilization of eBooks in the instructional process.

The participants' knowledge, skills and attitudes were interpreted using the following scale:

Scale Range	Knowledge, Skills, Attitudes
4.20 - 5.00	Very High/ Very Highly Favorable
3.40 - 4.19	High/ Highly Favorable

2.60 - 3.39	Moderate/ Moderately Favorable
1.80 - 2.59	Low/ Less Favorable
1.00 - 1.79	Very Low/ Unfavorable

Analysis of Variance (ANOVA). This was used to test for significant difference on the knowledge, skills and attitudes of the different groups of participants.

Thematic Analysis. This was used to organize the qualitative responses obtained from the last part of the questionnaire and the interview, as well as the experiences, views and suggestions of the participants on the use of eBooks in the instructional process. The common themes were tabulated and further ranked according to the obtained frequencies.

RESULTS AND DISCUSSION

Profile of the Student-Participants

Gender: Majority (70.16%) of the participants are female.

Age: Students' ages range from 12 to 17 years and most (28.27%) of them are 15 years old. The students' mean age is 14.45.

Grade Level: Most (28.80%) of the participants belong to Grade 9 and the least number of participants come from Grade 10.

Profile of the Teacher-Participants

Gender: Majority (68%) of the participants are female.

Age: Most (28.00%) of the teacher participants have ages ranging from 21-25 years. The mean age of the teacher-participants is 33.

Grade Level Handled: There are more teacher participants (48.00%) who are handling Grade 9 subjects.

Subject Taught: The most commonly taught subjects by the

participants are Mathematics (17.86%) and Science (17.86%) followed by the English subject (14.30%).

Profile of the Parent-Participants

Gender: Majority (52%) of the participants are female.

Age: Most (31.41%) of the parent-participants' age are 41 years old and above.

Educational Attainment: Most (40.31%) of the parent-participants had an access to formal education in the tertiary level.

Occupation: Most of the parent-participants are engaged in business particularly, as owners of business enterprises or are self-employed.

Participants' Knowledge, Skills and Attitudes on eBook and Its Use

Knowledge

Both student-participants and teacher-participants have a "very high" knowledge with an overall mean of 4.66 and 4.31, respectively on the use of eBooks while the parent-participants have "high" knowledge with an overall mean of 3.81.

Skills

All participants have "high" skills on the use of eBooks with an overall mean of 4.13 (students), 3.70 (teachers) and 3.29 (parents).

Attitudes

All participants have "highly favorable" attitude on the use of eBooks with an overall mean of 3.63 (students), 3.53 (teachers) and 3.97 (parents).

Test for Significant Difference on Knowledge, Skills and Attitudes of the Different Groups of Participants on the Utilization of eBooks in the Instructional Process

There is a significant difference on the knowledge, skills and attitudes of the three groups of participants on the utilization of eBooks in the instruction process.

Participants' Experiences and Views on the Use of eBooks in the Classroom

Extent of eBooks' Use

The extent of eBook use is “moderate” with an overall mean of 2.70 for all participants.

Degree of Satisfaction Derived from the Use of eBook

Both teacher-participants and parent-participants have “moderate” degree of satisfaction derived from the use of eBooks with mean scores of 2.76 and 2.75, respectively, while student-participants have “low” degree of satisfaction with mean score of 2.57.

Level of Importance of eBook Features (with 1 as the Highest and 7 as the Lowest)

“Search and cross reference functions” are the features rated most important by the students and parents while “interactive tools” by the teachers.

How eBook is Utilized in the Classroom

The students and the parents agreed that they use eBooks primarily to research/learn new information or skills. The teachers, on the other hand, use eBooks primarily as reference for collaborative activities in the classroom. The participants have also been allowed to provide other uses of the eBooks in the classroom, stating that they use eBooks to air drop and pass data and images; to use and

project illustrations and presentations and other innovative learning application; to serve as teaser exercises and other motivational activities; to make research available, and browse for topics; to intensify learning; to enrich group activity and make materials handy and practical; to use for assessment of learning; to apply other strategies in the teaching-learning process (innovation); to develop higher-order-thinking skills, and to enhance the students' vocabulary.

Problems Encountered on the Utilization of eBooks

The students and the teachers' major concern is the "crashing and lagging" of the application they use for the eBooks; however, the parents find the temptation presented by the games in the iPad as their major problem that distracts them from focusing solely on the material. It is also relatively notable to consider the succeeding responses of the participants on some other concerns posed by the use of eBooks in the classroom where the students also find the loss of valuable time in fixing technical troubles, as well as the eye-straining effect of the digital material is problematic.

Similarly, the other problem cited by the participants is the difficulty in finding the lesson, which may be caused by the wrong pagination. They also included the eBooks features' inconsistencies (highlights are missing, book marks are confusing, annotations cannot be found at times) that lead to time-consuming loading processes, as well as the browsing of pages, such as lagging and crashing. They also mentioned the distractions caused by some apps; moreover, they are concerned with the high probability of lost and damaged iPad, the lack of storage space, the low battery issues of the device, and the lack of space in the armchair to accommodate their iPad and their notebook.

How does eBook help make learning better?

The participants have a common opinion that eBooks develop their knowledge and skills on media technology, particularly, on the use of the device itself.

As per their suggestions, the participants enumerated that eBooks help them by making learning fun and creative and providing access to information. eBooks also make them technology-savvy (KSA), and enhance collaborative learning. The participants also stated that eBooks aid in the retention of memory and encourage multi-tasking, allow them to use varied teaching-learning strategies, make it easy to prepare presentations by the portability of the device, which lead them to obtain improved academic ratings.

Participants' Suggestions to Hasten the Implementation of the eBooks in the Instructional Process

The students and the parents suggest that a solution should be sought regarding the crashing and lagging of the device. The teachers, meanwhile, suggest that there should be a regular monitoring by the teachers on the apps used by their students.

There are a considerable number of students and parents who agree to focus on the same concern cited by the teachers.

Overall, almost all of the participants have arrived at a suggestion to address all the concerns presented in the study concerning the utilization of eBooks in the instructional process.

Plan of Action to Intensify the Implementation on the Use of eBooks for Classroom Instruction

The proposed Plan of Action sought to address some pressing problems on the utilization of eBook in the instructional process.

CONCLUSION

Based on the results of this study, the following conclusions were drawn:

The student and teacher-participants have “very high knowledge” while parent-participants have “high knowledge” on the use of eBooks. This indicates that they are familiar with, aware and understand how technological tools are utilized and applied in the instructional process.

The participants have “high” skills on the use of eBooks which signify that they have the ability to maximize and strategize the use and feature of the technology and make meaningful learning out of it.

The participants have “high” favorable attitudes on the use of eBooks which denote that they have been exposed to digital technology and have been using it in school, at home or at the workplace. The “moderate” satisfaction of teachers and parents and the “low” satisfaction of students on the use of eBooks in the instructional process maybe the result of their unpleasant experiences (e.g. frequent technical problems, time consuming in browsing, etc.) especially, during class hours. eBooks in class are applied according to their intent for instruction (e.g. as reference material, for research, assessment, collaborative activities, etc.). Considering the importance of the device (iPad) and its application (eBook) in the instructional process, problems encountered on its use need to be addressed for a more effective and efficient use of the tool.

RECOMMENDATIONS

Based on the findings and conclusions made, the researcher recommends the following:

The Principal needs to coordinate with the eBook developers for the troubleshooting of problems especially on the following:

Pagination. Developers of eBooks may create a program that would not affect the placement of pages even if the users adjust their font size and style.

Lagging and Crashing Issues. The provider of eBooks may consider visiting and studying first the infrastructure of schools before the actual implementation. The device, maybe, at least 8.1 version, with an IOS (Apple) operating system (OS).

For the continuous utilization, users must update the eBook or the learning management system (LMS) and they may refrain from downloading unnecessary apps that could consume storage capacity. The different versions of eBooks (PDF, flat and interactive)

need also to be checked if they are compatible with the platform used.

The teachers need to periodically monitor the iPads of the students to prevent installation of unnecessary applications that could consume storage space. Random checking may be applied.

The researcher may consider presenting the results of the study and the proposed action plan to the Principal to improve eBook utilization in the Basic Education Unit.

- a. Continuous collaboration with the eBook developers;
- b. Orientation and training of students, teachers and even of parents;
- c. Training of eBook specialists; and
- d. Enhancing the ICT infrastructure of the school.

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GUIDELINES FOR STUDENT JOURNAL PUBLICATION

PREREQUISITES

- Journal Article must be checked thoroughly by the author's Thesis/Dissertation Adviser and duly endorsed by the Graduate School Dean prior to submission to RPO.
- A final hard copy and a MS Word soft copy (CD-R) are submitted to RPO.
- RPO will check the submitted copy using the **GRAMMARLY SOFTWARE**.
- Number of pages: 8 to 20 pages (from Title Page to References)
- Font Family: Calibri
- Font Size: 11

PAPER STRUCTURE AND CONTENT

TITLE

- Clearly stated and to the point.
- Catchy, interesting and relevant.
- Able to stand alone to convey the importance of data; communicates contents.
- Not more than 20 words.
- ALL CAPS
- Written in "inverted" pyramid style.

ABSTRACT

- Contains Summary of: (INTRODUCTION, METHOD, RESULTS and DISCUSSION (IMRaD))
- Summary of information of what the paper contains.
- Mini-version of the Thesis/Dissertation.
- Also called Executive Summary.
- One-paragraph of 100 to 250 words (300 words - for qualitative research, allowable).
- Indented, 1 tab - First line.
- Single-spaced (Body of **ABSTRACT**).

Format of ABSTRACT

- Title of Research (ALL CAPS), bold, in "inverted pyramid", single-spaced (20 words or less)
- 2 spaces below Title: Name of Researcher/s, bold, UPPER CASE.
- Below researcher's name: Degree/s obtained, lower case, italicized.
- Between name of author and degree obtained, no space.
- 2 spaces below degree obtained, then the name of Adviser (UPPER CASE) with Title: Dr., Engr., Mr., Ms., etc, before Adviser's name.
- 2 spaces below Adviser's name: **ABSTRACT** (UPPER CASE, italicized, centered).

- 2 spaces below **ABSTRACT**: one-paragraph body, with first line indented.
- Below Abstract body, 1 space, then type bold line across the page.
- 2 spaces below the line, then write **Five (5) Keywords**, with no indentation.
- After the **5 Keywords**, no other writings should appear on the **ABSTRACT** page.

INTRODUCTION

- Gives the setting/scene/background.
- Describes the problem.
- Relates to other works done for the past 5 years.
- Summarizes the structure of the paper.

Figures and Tables (Only minimal number of tables will be included, only the important ones)

Tables

- Summarized data.
- Main points described in text.

Figures

- Snapshots.
- Conceptual diagrams.
- Instructive and adequately labelled/titled.

METHODOLOGY

- Research Design
- Participants
- Instruments/Tools
- Data Analysis
- Ethics Approval

RESULTS AND DISCUSSION

- Reports the findings objectively.
- Salient findings must follow discussions that would contain interpretations or implications, especially with respect to the original hypothesis.
- The researcher is free to examine, interpret and qualify the results, and draw inferences from them.

References

- Follow American Psychological Association (APA) Format.
- Make just one general listing for all references cited; no need to classify them.
- Alphabetically arranged for all entries regardless of classifications.

PUBLISHABLE JOURNAL FORMAT

For publishable research, the researcher should follow the prescribed format shown below.

TITLE

ABSTRACT

INTRODUCTION

Conceptual Framework
Statement of the Problem

METHODOLOGY

Research Design
Participants of the Study
Instrumentation
Data Gathering Procedure
Data Analysis

RESULTS AND DISCUSSION

CONCLUSION

RECOMMENDATIONS

References

HOW TO STATE THE RECOMMENDATIONS

Introductory statement of the Recommendations:

Based on the findings and conclusion of the study, the following recommendations are derived:/are offered:/are drawn: (Use any one of the 3 endings).

Samples (with Target-Implementers). (Just made-up SAMPLES; no particular schools are alluded to).

- The school may consider conducting benchmarking activities with other institutions/agencies for its administrators, Faculty, and personnel to enhance their administrative, teaching, and technical skills.
- The administration may institute measures to solve the problem of faculty in-breeding.
- The faculty are strongly encouraged to speak in English in the campus, inside and outside the classroom to serve as models for Speak-English Policy of the school.
- The registrar's Office may conduct a study on the causes of drop-outs, incomplete grades/projects, failures (for the past three/five years) as basis for instituting appropriate intervention program to address such academic concerns.
- The HR Office may look into the periodic updating of the different School Manual/Handbooks to attune to the needs of the time.
- The Community Extension services Program may undertake an impact study on the effects of the extension services done for each adopted Barangay for better services towards uplifting the life of the poor.
- The Alumni Office may consider the profiling of Alumni.
- The Offices of the Registrar, Finance, Library and Book Store may adopt a "No-Noon-Break" Policy for availability and convenience.
- The Student Services unit may consider revisiting the Student Handbook, with focus on restorative justice, to better address the disciplinary concerns of the students.
- The Research Center may undertake a study focusing on the actual implementation aspect of the recommendations made by the different researches (for the past three or five years), as basis for instituting practical measures towards enforcing the utilization dimension of research.
- This study may be replicated or adopted by other schools on areas applicable to them.

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