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Foreword

Today is the 25th of December, and I welcome you – with the ringing of bells – to the December Issue of the ASEAN Journal of Basic and Higher Education. In this issue, we are joined by authors from seven (7) different learning institutions in the country. These authors come from the Pangasinan State University School of Advanced Studies, Pangasinan State University Lingayen Campus, Tibag High School in Tarlac, Mendoza Memorial Elementary School in Schools Division Office of Pangasinan I, Pangasinan School of Arts and Trades in Lingayen, Nueva Ecija University of Science and Technology, and Emilio Aguinaldo College in Cavite, Philippines.

In this issue, Rose Ann and Amado provided us with insights on the social sensitivity of secondary school principals and teachers in Region III where attendance to post-graduate studies, conferences, and trainings has been given as one of the recommendations for increased social sensitivity. Ma. Jasmine *et al.*, on the other hand, has found that graduates of BSBA in the Lingayen Campus who are academic awardees landed jobs at a time faster than non-academic awardees did, among other findings. Still, Mariz and Raquel, recommended that Pangasinan songs could be integrated in the curricula in the teaching of kindergartners. Analiza, on one hand, has found some degree of relationship between the academic performance in Science of students and their grade in Science from the preceding school year. Raymund, in a development and validation study, recommended that his module in statistics and probability may be used in the teaching of such a subject in the curriculum. Finally, Ethel – a dean from Cavite – has successfully shared with us a module template she developed and was implemented in her college before the end of the year.

Once again, welcome to the 2020 December Issue and I am with deep gratitude to our authors from all over the Philippines who are sending their papers for peer review for possible publication in the ASEAN Journal of Basic and Higher Education. With the Vision of the Publication Team of the Publisher (PARESSU, Inc), we will expect more from this Journal in the years to come.

JUN S. CAMARA, PhD
Editor-in-Chief

Finally, I take pride to inform you that this Journal has been included in the citefactor.org this year. Congratulations to everyone who made this possible, and see you all in 2021!

Message to Readers

Good day fellow writers, researchers and future researchers. Being engaged and active in the world of research is really a wonderful experience for me! Knowing that I started nothing—as in zero knowledge in research when I attempted to finish my thesis writing in my Master's degree, I couldn't really imagine myself that I would be a researcher. I was so ashamed that time and I felt so useless. And out of my frustration, I forced myself to start to write, edit, reconstruct and incorporate corrections with countless revisions. There were times that I almost gave up and just looked for a ghost writer to help me finished the agony, however, I realized that if I would do it, I would just prove that I was really a loser.

I spent more time for the non-stop revisions of my manuscript until my critic reader gave up and finally accepted my work. I was so happy that time and that was the start for loving research and accepting it as part of my career and self-satisfaction. This passion again helped me to finish two doctorate degrees for my professional growth and self-esteem.

Now, I consider research as my ultimate weapon to survive. I also agree with Wernher von Braun in his quotation "research is what I'm doing when I don't know what I'm doing." If you don't know what to do, you better do a research (ika nga i-google na yan). At first, it is really difficult but when you start it already, I am pretty sure that you would enjoy because you will be challenged to finish it.

It is not yet too late to start because today you are badly needed to be part of the solutions! With the present situation we are facing right now and with the numerous problems that arise everyday, a researcher like you is what we need today. A researcher who will consider the majority and not for himself/herself alone. A researcher who has the courage to solve and produce innovations. This is the best time to start and be in-love in research.

To my fellow researchers and writers in PARESSU, Inc., I would take this opportunity to thank you all of you. To Dr. Jun S. Camara whom I considered as my brother in Christ and usually called as "myfren", thank you so much for the love and motivation you gave. I am not well-motivated as I am today if I haven't met a persistent and well-versed researcher like you. God bless us all.

ELSA Q. TERRE, EdD, PhD
Managing Editor

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Social Sensitivity of Secondary School Principals and Teachers of Region III

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Abstract – *The purpose of this study was to determine the level of social sensitivity of secondary school principals and teachers in Region III and its relationship with some selected profile variables during the school year 2019-2020. It also determined the profile of the secondary schools in terms of the following factors such as, enrolment size; number of faculty per school; faculty-student ratio; and facilities/equipment per school in relation to, number of classrooms, number of laboratory rooms, number of books in the library, and number of computer units. This study also assessed the level of social sensitivity of the school principals and the teachers in terms of the following aspects, social welfare, customs and tradition, environmental consciousness and community development. This study had likewise determined the significant relationship among the level of social sensitivity on the perceptions of the school principals and the teachers and their profile variables; and the school related factors which resulted to a proposed an intervention plan. The findings, conclusions and recommendations are hereby advanced, Administrators who have not finished their post graduate studies should pursue in order to acquire more knowledge and be more equipped professionally in meeting and solving the difficulties to be met especially towards planning, implementing and monitoring and evaluating extension activities.; (2) More relevant school undertakings like conferences, trainings and seminars should be conducted to increase the level of social sensitivity of the administrators from high to very high; (3) The level of involvement of the teachers in planning, implementing, and monitoring and evaluating extension programs should be enhanced. Faculty members should be more involved in planning and implementing extension activities. More financial assistance and moral support from the administration should be observed to increase their participation; and (4) DepEd should standardize the number of subjects handled by teachers or decrease the number of subjects to be taught from the eight regular classes to 6 classes to give more time for other activities like engaging in flexible instructional materials.*

Keywords – *community development, customs and traditions, environmental consciousness, social sensitivity, social welfare*

INTRODUCTION

Education is one of the prime movers of the Philippine's economic and social development. It develops knowledge, skills, positive behaviours and attitudes of individuals to become self- confident, capable and committed to setting goals, making informed choices and acting in ways that improve living conditions. Industry 4.0 refers to the fourth industrial revolution. It calls for a dynamic transformation of how all aspects of business and production are done.

A new wave of global technology will change global production. Internationalization, in all aspects of business and industry, will be the norm. Countries can no longer remain confined within their borders but must become citizens of the world. Leaders in this new era will need to be critical thinkers, problem solvers, and be able to interact across the globe. In short, they need to be liberally educated, Gray [1]. The big question is: how can schools adapt to these demands? Students need to understand how they can correlate and use and apply different knowledge in diversified contexts, what they really mean and how they can create synergies problem solving and to learn how to be imaginative, creative, adaptable, flexible and to develop brain plasticity among different subjects to develop/create "something" that connects to the real world. This takes us to another very important point: students need to work in a framework of projects and from there they need to collaborate with their colleagues, with their teachers and with the outside world.

They need to develop new ways of communicating; they need to be put in front of complex situations to develop critical thinking and complex. As Horch [2], states that Industry 4.0 will require the world to produce a new kind of worker—a knowledge worker! Tomorrow's industry leaders and managers must possess new skill sets to adapt, to manage, and to take advantage of Industry 4.0. They must be critical thinkers, problem solvers, innovators, communicators, and provide value driven leadership. They must be able to see beyond the technology at play to the implications for society for the use of that technology. These traits define the knowledge worker. They must know the technology but be able to meet and solve all aspects of the challenges engendered by this technology. This kind of leader requires a new approach to education.

Social sensitivity describes the proficiency at which an individual can identify, perceive, and understand cues and contexts in social interactions along with being

socially respectful to others. This is an important social skill and having high levels of social sensitivity can make you more well-liked and successful in social and business relationships. Social sensitivity, which has been defined as the ability to accurately perceive and comprehend the behaviour, feelings and motives of other individuals, is generally viewed by personality theorists, social psychologists and clinicians alike to be a psychological variable of major importance for the understanding of such basic phenomena as the development of a conception of self, the acquisition of roles and the interaction within and between groups, Rothenberg [3].

Social sensitivity defined by Sarwono [4], as the ability of human beings to be able to adjust its behaviour according to its views and expectations of others. People who are not able to understand and adjust to social situations will be deemed not to have social sensitivity. Literally, the term sensitivity is derived from the word sensitive which means it is easy to feel, easy to accept the stimulus, or a condition of a person who is easy to react to a situation. If it is associated with social conditions then it can be termed social sensitivity which can be interpreted as a condition of a person who is easy to react to the problems of social which seen and experienced.

The development of information and communications technology has provided various improvements and facilities in various aspects of human life. Through technology, a variety of the world's citizens is now able to connect quickly and can access a variety of information indefinitely. But behind all these positive effects there are various problems that can not addressed properly to authority concerned, then it might cause people to lose essentially as a social creature and cultured. Turmudhi as cited by Nurdiansyah [5], describes this era are as an individualistic, egoistic, the nature of the contractual relationship, just based on profit and loss and exploitation by which are not adequate. It can be seen in the lives of today's society, where social aspects diminishing, the gap became obvious, even indifferent towards others which all of these indicators describe the start decreasing sensitivity to the social environment.

The decline in social sensitivity in people's lives would make them less likely to be sensitive to people and their surrounding social issues. Groups of middle class people to upper felt natural thing to wear things that are luxurious and sophisticated, but on the other hand the community economic middle and lower felt things were shown groups of people middle to top it is a vanity, finally arose perceptions and prejudices can lead to conflict between groups. As suggested by Madani [6], that the

more the world develops, the more prostitutions, criminal behaviours, teen fights, brawls, abortions, drug abuse and other phenomena that deviate from moral values.

Results of this study would challenge, therefore, the school principal's leadership and responsibility in upgrading the standard of living of the people in their respective localities. Furthermore, results would be a basis for institutional planning because it may give DepEd administrators and teachers relevant information needed in formulating relevant programs and services geared towards the improvement of the country's quality of life. It will highlight strengths, close problem areas and unmet needs, indicate areas for improvement along curricular and instruction development, trainings and seminar- workshops to be conducted that would give the DepEd principals and teachers better teaching techniques and strategies, skills and abilities, and transfer knowledge needed for the socio-economic development of the community. Thus, they could become more effective in their effort to make their tasks more relevant to the needs and aspirations of the community.

This study was undertaken to determine the level of social sensitivity of the secondary school principals and the teachers of the 12 National High Schools in the six Provinces in Region III during the school year 2019-2020 and its relation to selected personal and professional factors. The personal and professional factors included the following: sex, age, civil status, religion, highest educational attainment, length of administrative experience, present position, membership to professional organizations, and number of trainings/seminars attended. Likewise, length of teaching experience, area of concentration/major, and number of subjects handled will be included on the part of the secondary teachers. While the school-related factors included enrolment size, number of faculty per school, faculty-student ratio, and equipment and facilities specifically, the number of classrooms, number of laboratory rooms, number of books in the library, and number of computer units.

OBJECTIVES OF THE STUDY

This study aimed to determine the level of social sensitivity of secondary school principals and teachers in Region III and its relationship with some selected variables during the school year 2019-2020. Specifically, it sought to answer the following questions:

(1) What is the profile of the secondary school principals and teachers in termssex; b) age; c) civil status; d) religion; e) place of residence; f) number of dependents; g) position; h) highest educational attainment; i) length of administrative experience; j) membership to professional organization; and k) number of trainings/seminars attended?

2. What are the characteristics of the secondary schools in terms of a) enrolment size; b) number of faculty per school; c) faculty-student ratio; d) facilities/equipment per school -number of classrooms -number of laboratory rooms -number of books in the library - number of computer units?
3. What is the level of social sensitivity of the school principals and the teachers in terms of the following aspects a) social welfare; b) socio-economic; c) political; d) customs and tradition; e) community development?
4. Is there a significant relationship between the level of social sensitivity on the perceptions of the school principals and the teachers and their profile variables?
5. Is there a significant difference in the level of social sensitivity in the perceptions of the school principals and the teachers?
6. Is there a significant relationship between the level of social sensitivity of principals and the teachers in each of the school related factors? 8) What intervention plan can be proposed to address in the findings of the study?

MATERIALS AND METHODS

The descriptive-comparative and correlation methods of research method of research were employed in this investigation, wherein the researcher was primarily interested in describing relationships among variables, without seeking to establish a causal connection.

Respondents of the Study

This study involved public secondary schools from the seven (7) provinces of Region III, namely: Aurora, Bataan, Bulacan, Nueva Ecija, Pampanga, Tarlac, and Zambales. The number of teachers and principals from each division was taken from the Planning Office of the Department of Education, Region III. Teacher-respondents were limited to those teaching different subjects while the secondary school principals were included only the head and/or Officer-In-Charge of the institutions.

Research Instrument

The social sensitivity questionnaire was adopted from Alfonso [7]. These questionnaires used to gather information on social sensitivity of secondary school principals and teachers. Documentary analysis was also employed particularly under the school-related factors like determining enrolment size, number of faculty per school, faculty-student ratio, and identifying available facilities and equipment of each school.

Statistical Treatment

The data gathered by the researcher were submitted to appropriate statistical tools. The researcher sought the help of the PSU-SAS Statistical Center for the appropriate tools to use for each of the specific problems. The data collected were interpreted and analyzed using the following statistical tools: Frequency count and percentage were used to describe the respondents of the study in terms of personal and professional factors and the schools in terms of selected factors.

Mean was employed to determine the level of social sensitivity of the respondents. Bivariate Correlation Analysis was utilized to find out the level of social sensitivity of the respondents and the following factors: principals and teachers' personal and professional factors as well as school-related factors. The One Way Analysis of Variance (ANOVA) procedure was employed to determine the significant differences in the level of social sensitivity as well as the level of involvement of the principals and teachers in extension programs among the schools in Region III. The Scheffe' Test was also used to further verify the pair of schools which were significantly different.

RESULTS AND DISCUSSION

Profile of the Respondents. The respondents' attributes were categorized into two namely, personal and school related attributes. The variables included in the personal attributes of the respondents were their age and sex. There were four school-related attributes included in this study namely, civil status, and religion, place of residence, number of dependents, position, highest educational attainment, length of administrative experience, membership to professional organization, and number of trainings/seminars attended. Table 2 presents the frequency and percentage distribution according to the respondents' attributes.

On Sex. It can be seen from the table that out of the 60 administrator-principals majority of them are female (36 or 60%) while there are 24 (40%) male-principals which indicates that administrators in Region III are dominated by females. It is indicative that the school principal is the highest- ranking administrator in secondary schools in Region III. While the teacher-respondents, the data show that majority (210 or 67.09%) of the secondary teachers are females. There are only 103 or (32.91%) male respondents. This data indicates that the teaching profession is female-dominated. The data obtained confirm that the predominance of women in the teaching profession is an effect of the harmonization of the female respondents' habitus and their perception of the field they are entering.

On Age. It can be gleaned from the table that 21 (35%) of the administrator-principals generally belong to the age bracket 41-45 years old while 15 (25%) belong to the age bracket 46-50 years old. This indicates that the administrator-principals have acquired a long experience, more time, and training which have contributed much in becoming more effective and efficient in discharging their duties and responsibilities. By nature, matured and older-aged principals had strong leaders which tend to lead by example, with a tendency of wanting to do things by themselves, but it is important to learn how to delegate. Thus, it resulted to have better control of one's workload, develop core skills, and enables the team to meet their goals faster, produce the best results, and help accomplish more tasks.

Whereas among teachers, the table reveals that the highest percentage of the overall respondents fall within the 41-45 bracket (68 or 21.73%) while the smallest number (3 or 0.95%) fall under the above 61 years of age. There are only 14 (4.47%) respondents falling under the 25 years old and below. This picture indicates in general that secondary school teachers are at the peak or prime of their teaching careers and have acquired experiences beneficial to offering better service to the students.

On Civil Status. Majority (50 or 83.33%) of the administrator-principals are married and only ten (16.67%) are single. This shows that the principals value marriage, a reflection of Filipino culture. This further indicates that principals are men and women whose responsibility to duty is divided between family commitment and attention to work and service. On the other hand, it can also be gleaned from Table 2c that majority of the secondary school teachers (235 or 75.08%) are married and only six (1.92%) fall under widow. Generally, this implies that teachers in Region III value the importance of having a compact family, a reflection of positive Filipino culture.

On Religion. Out of the 60 administrator- principals, 39 (65.0%) belong to the Roman Catholic faith while the other 15 (25.0%) belong to other sects like Iglesia ni Kristo, and others (6 or 10%) are Born Again. This is a clear indication that majority of the principals are united in terms of faith and religious differences have a very minimal impact in carrying out their duties and responsibilities. On the part of the secondary school teachers' religion, as a whole, the data reveal that most teacher (223 or 71.24%) are Roman Catholics while there are very few belonging to the other sects especially Iglesia Ni Kristo and Born Again (45 or 14.38%), respectively. This could be attributed to the fact that in Region III could be attributed to the fact that Monasterio De Tarlac, was one of the centers of Catholicism. In general, the dominance of Roman Catholics among Region III is a reflection of Spanish dominance for more than three centuries.

On Number of Dependents. The data show that majority (18 or 30.0%) of the administrator- principals have three dependents; 11 or 18.33% have 4 dependents; 10 (16.67%) have no dependents; and one (1.67%) have more than six dependent. This implies that the principals have an ideal number of dependents which is two to three children based on the Philippine Population Commission. It could also be attributed to the kind of work they are doing which is very demanding that school work is brought

at home just to lessen or finish the load of work in school. In this case, it would imply that their children are already married and they have already their own families.
On the part of the teachers' number of dependents, Table 3 also reveals that out of the 313 teachers, 82 (26.2%) have two dependents, followed by 80 or (25.56%) with no dependents, 57 or (18.21%) with three dependents and only seventeen with five dependents. This is a clear indication that secondary school teachers adhere to family planning and responsible parenthood. Having equal number of children, i. e., 1-3 or 4-6 children, also reflects the demanding work of a teacher; that even school work is brought home sacrificing the time which should be spent for the husband or wife.

On Place of Residence. As a whole, equally (50%) principal-administrators are residing in either rural and urban areas, respectively, which means that majority of them are living nearly and away from the vicinity of their workplace.
Majority of the teacher-respondents (202 or 66.5%) are living in the urban areas while 105 or (33.5%) are living in urban areas. This data implies that most respondents are living apart from their place of work which could have an effect in joining/doing school activities especially beyond school and work hours.

On Highest Educational Attainment. Majority of the principal-administrators 21 (35%) have doctorate degrees; followed by (18 or 30%) finished MA/MS with Ed. D./ Ph. D. units, and only 11 (11.7%) of them are Bachelor's degree holders with MA/MS units. Generally, principal- administrators are highly qualified in their positions in terms of education and it also implies how they value pursuing higher education. It is also a clear indication that the demanding work of being a teacher or administrator is not a deterrent in finishing post-graduate studies. On the other hand, the significant number of administrators who did not pursue higher education could be attributed to their old age, considering that significant number of administrators belong to the old age bracket as shown in the Table 2b.

On Length of Administrative Experience. Most of the principal-administrators have administrative experience within the range of 5 to 8 years (30 or 50%); followed by (12 or 20%) have one to four years administrative service and only 2 (3.3%) belong to the bracket of more than 17 years. Generally, administrators do not have long years of administrative experience. This implies that DepEd secondary

schools are very objective and open for designations and re-designations to administrative positions. In addition to this findings that obtaining higher education can lead to many benefits, including a prosperous career and financial security. In the 21st century, education plays an even more significant role in other aspects of your life. Attaining a higher education can increase your opportunities and improve your overall quality of life. The higher education gives a person an opportunity to succeed in today's global economy. Modern universities provide their students with various programs aimed at preparing them for different economic sectors, helping them to stay and progress in the labor market for long, programs that make a difference for labor market outcomes and keep pace with changes in the global economy and changes in the innovation process. Universities promote lifelong learning; they offer opportunities to engage and attract professionals into training and professional development.

Length of Teaching Experience. In terms of teaching experience, the highest number of teacher-respondents (93 or 29.7%) have more 8 to 14 years of teaching experience followed by 15 to 21 years (83 or 26.5%). Bracket of 36 – 41 years have the least number with 4 (1.3%). This indicates the richness of experience of the DepEd secondary school teachers in teaching which could have a direct effect on their effectiveness and efficiency in teaching. In educational context, richness in experience is a critical element in the facilitation of meaningful learning, which describes the kind of pedagogy that allows deep integration of learned content with the experiential context of each student in the classroom. This integration, in turn, allows for learned content to be expressed both meaningfully and lastingly.

On Area of Specialization. Most of the teacher-respondents are distributed in their area of specialization, to wit, (60 or 19.2%) are teaching English, 56 or (17.9%) are Filipino, (54 or 17.3%) are Mathematics, (46 or 14.7%) are Social Science, (34 or 10.9%) are MAPEH, (30 or 9.6%), (17 or
5.4%) are TLE, (16 or 5.1%) are ESP. This picture reveals the varied expertise of DepEd secondary school teachers.

On Seminars/Trainings Attended. On table shows that the seminar and trainings attended by the respondents. Majority (37 or 61.7%) of the respondents have attended national seminars while the least (26 or 43.3%) attended international ones.
This data show that principal-administrators give high importance to seminars for there is a need to be aware of the upgraded and updated innovations in administration. The seminars and trainings will contribute greatly in upgrading their job competencies.
On Seminars/Trainings Attended. It can be gleaned from the table that most teacher-respondents (207 or 66.1%) have attended seminars sponsored by the institution or the school division. This would imply the preference of joining seminars within the school vicinity due to convenience as well as monetary considerations. This is further reflected by considerable attendance in national seminars with 206 (65.8%) respondents. International seminars have the least (2 or 0.6%) which could be attributed to financial constraints. Attending seminars on international category entails a lot of money and this is only given to a very limited number of personnel at a time.

On Membership in Organizations. The data show that 36 (60.0%%) are members of professional organizations, 44 (73.3%) belonging to social organizations, and 46 (76.7%) are members of religious organizations. This high membership in professional organizations implies that principal-administrators are fully aware of the advantages of being a member of an organization. The significant membership in religious organizations reflects also the awareness of the administrators in the advantages of being a member of such organizations. Likewise, high percentage membership in social organizations would indicate that principal-administrators have manageable time to devote for such although most of their times are demanded by their professional duties and responsibilities.

On the other hand, teachers' membership in organizations, most of the secondary school teachers (163 or 52.1%) are members of professional organizations, however, significantly high (210 or 67.1%) membership in social organizations. In terms of membership in religious organizations have a frequency and percentage show that 36 (60.0%%) are members of professional organizations, 44 (73.3%) belonging to social organizations, and 46 (76.7%) are members of religious organizations. This high membership in professional organizations implies that principal-administrators are fully aware of the advantages of being a member of an organization. The significant membership in religious organizations reflects also the awareness of the administrators

in the advantages of being a member of such organizations. Likewise, high percentage membership in social organizations would indicate that principal-administrators have manageable time to devote for such although most of their times are demanded by their professional duties and responsibilities.

DepEd Region III Profile of the Secondary Schools

Region III is composed of seven (7) provinces, namely, Aurora, Bataan, Bulacan, Nueva Ecija, Pampanga, Tarlac, and Zambales. The frequency and percentages of six selected DepEd Division Schools are hereby presented in Table 3. Table 3 shows the distribution of the DepEd secondary schools division in Region III in terms of the school factors. It can be seen in the table that in terms of enrolment, out of 60 secondary schools division, the highest number of students 41.7% (3,0001-5,100), followed by 33.3% (5,101-7,200) and 8.3% has the lowest number with 11,401- 13,500. In terms of number of teachers, the highest number of teacher faculty members 41.7% that ranges from 44-95 and 96-147, respectively. As to the teacher-student ratio, 40:1 where one faculty member has either 40 or 45 students.

In terms of facilities and equipment, it can be seen that 40 to 66 (50%) has more number of classrooms compared to the other secondary schools in Region III. This further explains then why it has more number of classrooms than the rest. 25 or (41.7%) schools has the number of laboratory rooms of 12 to 14. Among the schools in Region III, 25 or 41.7% has the highest collection of books in the library with 8,083- 11,124. Moreover, DepEd secondary schools have more number of computer units- 35 or 58.3% have 90 to 142 Computer units, followed by 10 (16.7%) schools having 143 – 194 and 195 – 246 computer units. of teachers, the highest number of teacher faculty members 41.7% that ranges from 44-95 and 96-147, respectively. As to the teacher-student ratio, 40:1 where one faculty member has either 40 or 45 students. In terms of facilities and equipment, it can be seen that 40 to 66 (50%) has more number of classrooms compared to the other secondary schools in Region III. This further explains then why it has more number of classrooms than the rest. 25 or (41.7%) schools has the number of laboratory rooms of 12 to 14. Among the schools in Region III, 25 or 41.7% has the highest collection of books in the library with 8,083- 11,124. Moreover, DepEd secondary schools have more number of computer units- 35 or 58.3% have 90 to 142 Computer units, followed by 10 (16.7%) schools having 143 – 194 and 195 – 246 computer units.

Level of Social Sensitivity of the School Principals and the Teachers

The positive interaction of a person with others leads to a pivotal role in his success or failure in occupational and social life, since he lives in an interlocked environment of relation, and the social intelligent behaviour is characterized with its interest in people, practicing accepted behaviour from society, and retaining with good relationships with others, so the success of an individual does not depend on cognitive intelligence but on social intelligence. Table 4 presents the level of social sensitivity of the school principals and the teachers in relation to social welfare; socio-economic; political; customs and tradition; and community development.

A close inspection on the table reveals in relation to level of social welfare on the social sensitivity of the school principals, that a large majority of the school principal-administrators perceived that they were high in three task indicators as manifested in the computed weighted mean values, these tasks were participates actively in community undertakings aimed to alleviate the problems of juvenile delinquency, alcoholism, drug addiction and prostitution (4.25); manifests concern for out-of-school youth (3.83); and renders assistance to distressed victims of disasters such as floods, drought, fire, wars, and other calamities and social disorganization (2.25). This implies that an important trend evident in any of the effective strategies and programs is a close coordination between law enforcement, treatment providers, and prevention professionals address substance abuse and related problems. Thus, these partnerships are vital to the success of programming because they minimize redundancies, help to streamline service delivery, d improve access to expertise and financial sources. All types of initiatives in prevention, treatment, and enforcement seem to work better d have a greater impact if interagency collaboration is well-developed and well-orchestrated.

Such collaborations are vital to providing a continuum of care that can effectively intervene at all stages of an individual's life. The findings showed positive impact on the social welfare on the sensitivity as Reno [9], that communities looking to implement promising anti- ug approaches should first assess the areas of greatest need. In some communities underage drinking may be the most prominent problem, in which case prevention, treatment, and enforcement activities should be enhanced. Other communities may face problems of violence linked to illicit drug trafficking

requiring law enforcement activities to target "hot spots" of heightened drug activity. Determining the gaps in services currently provided by and for the community is an essential step. The local health department, police department, and other state and local agencies often track data and services that will help identify community needs.

While the two task indicators has the least computed weighted mean values, and these were, Provides childcare for the community's children to free parents from work and enable them to pursue their interest and activities (3.33); and shows concern on the growth of street children in the locality 2.82) which falls under the level, moderately high. The overall weighted mean of 3.70 falls under the level, high which indicates that the school principal-administrators, in general, are high in relation to social welfare on the social sensitivity.

On the other hand, the table pictures the general perception of the public secondary school teachers on the level of social sensitivity along social welfare. On the whole, mean values of five individual indicators related to the level of social sensitivity along social welfare fall under the level of moderately high. The two highest computed weighted means were, provides childcare for the community's children to free parents from work and enable them to pursue their interest and activities (3.33), and renders assistance to distressed victims of disasters such as floods, drought, fire, wars, and other calamities and social disorganization (3.06). But nonetheless, the weighted means of three remaining indicators related to the level of social sensitivity along social welfare fall under the same level of moderately high. This might conceptualize warning response as a form of collective behaviour that is guided by emergent norms brings several issues to the fore. One is that, far from being automatic or governed by official orders, behaviour undertaken in response to warnings is the product of interaction and deliberation among members of affected group activities that are typically accompanied by additional confirmatory information. Circumstances that complicate the deliberation process, such as conflicting warning information that individuals and groups may receive, difficulties in getting in touch with others whose views are considered important for the decision- making process, or disagreements among group members.

On the Table 4b, it can be surmised from the overall responses of the school principal- administrators that they generally perceived themselves to be very high in relation to social sensitivity along customs and traditions. Majority of them generally perceived that they were very high in customs and traditions having a weighted mean

value of 4.57. Specifically, the modal responses in three individual indicators fall under the level category of very high, to wit, shows respect for Filipino customs and traditions and advocates for the revival of traditional Philippine arts (5.00), advocates the traditional value of cooperation (4.78), and engages in religious activities and participates in celebrating community festivities (4.58). The findings manifest that our culture is a big reflection of our great and complex history, as it is influenced by most of the people we have interacted with. A blend of the Malayo-Polynesian and Hispanic culture with the influence from Chinese, Indians Arabs, and other Asian cultures really contribute to the customs and traditions of the Filipinos. And Filipino culture is unique compared to other Asian countries, and beliefs apply every day in the life of the Filipinos and reveal how rich and blessed the culture the people have.

This notion supports Bennett's [10], in his research paper is to complicate the genealogies of the concept of culture as a way of life that have held sway within cultural studies, reviewing key aspects in the development of this concept within the tradition of anthropology focus on three issues: the respects in which the 'culture concept' was shaped by aesthetic conceptions of form; its spatial registers; and its functioning as a new surface of government, partially displacing that of race. In relating these concerns in the processes through which culture is 'made national', it indicates on how the spatial registers of the culture concept anticipate contemporary approaches to these questions, it also outline what cultural studies has to learn from the evolution of the culture concept in view of the respects in which the latter was shaped by the racial dynamics of a 'settler' society. It concluded that the broader implications of the fusion of aesthetic and anthropological forms of expertise that informed the development of the culture concept.

The two task indicators that has least weighted mean values were, advocates the preservation of Philippine culture and tradition (4.33), and transmits the nation's cultural heritage, resolving past accomplishments and insights (4.13). The results indicative that DepEd advocacy groups do not much promote or support Filipino Heritage considering that Heritage Conservation Society are highly technical in nature and their membership is limited to professionals such as the regional museum associations for museum workers, professional historical associations, and librarian associations.

The table discloses the secondary school teachers' responses on their level of social sensitivity in terms of customs and tradition. The overall weighted mean value of

3.49 falls under the level of moderately high which indicates that the teacher-respondents, in general, are moderately high in relation to customs and tradition. The computed average weighted mean and majority of the public secondary school teachers' responses fall in the level of either high or moderately high. The three task indicators that were rated high were, shows respect for Filipino customs and traditions and advocates for the revival of traditional Philippine arts (3.93), engages in religious activities and participates in celebrating community festivities (3.83), and advocates the traditional value of cooperation (3.59). This result under this social sensitivity on customs and traditions was surprising because enhancing the social fabric requires promoting cultural awareness, identifying and inculcating values for the common good, cultivating creativity, and promoting culture-sensitivity in governance and development efforts. In the first year, limited strategies were employed, mostly focusing on consolidation and systematization of efforts or "putting the pieces in place" in preparation for bigger and broader reforms and actions. These primordial strategies of the culture sector include institution-building; systematic documentation and monitoring of on-going programs; and identifying and addressing data gaps.

The means of the two remaining tasks related to social sensitivity on customs and traditions fall under the level, moderately high. These two tasks were, advocates the preservation of Philippine culture and tradition (3.33), and transmits the nation's cultural heritage, resolving past accomplishments and insights (2.76). Despite these two latter task whose means fall under moderately high level, the overall mean of 3.49 signifies that on the whole, the public secondary school teachers generally perceived that they were moderately high in social sensitivity along customs and traditions.

It is reflected on the table, it can be observed from the overall responses of the school principal- administrators that they generally perceived themselves to be high in social sensitivity along community development. Majority of them generally perceived that they were high in community development having a weighted mean of 4.38. However, the highest mean percentage to this task-indicator, i. e., Cooperates with the development units of the province or the people for developing villages/barangays (3.70). While the computed mean values of other task indicators fall under the level, high, and these task were, takes the initiative of planning and organizing school sponsored community projects such as cleanliness, beautification and technology transfer (4.45), and allows himself to serve as an adviser/ consultant with the people on matters involving community evelopment (4.42).

On the other hand, referring to the same ble, the computed mean percentage and majority f the public secondary school teachers' responses ll under the level, moderately high. However, the nly task indicator where majority of responses .61) falls under the level, high, that is, cooperates ith the educational, social, religious, and civic aders of the community to discuss ways and eans for the promotion of the social welfare and mprovement of community life.

Specifically, means of four out of five dividual tasks related to community development ll under the level, moderately high. These were s follows, cooperates with the development units f the province or the people for developing illages/barangays (3.32); allows himself to serve s an adviser/ consultant with the people on atters involving community development (3.17); nd takes the initiative of planning and organizing chool sponsored community projects such as eanliness, beautification and technology transfer .03). Table 4d illustrates the general perception of the school principal-administrators and teachers on their level of social sensitivity along the area of environmental consciousness.

A closer look at the table reveals that in all task-indicators related to social sensitivity on environmental consciousness, the computed mean percentages and majority of the public school principal-administrators' responses fall under the level, Very High. The two highest task indicators that obtained higher mean percentages were, allows individuals to keep the sustainability of the environment to raise the awareness of individuals to protect from all hazards activities; and cooperates with the whole community including, educators.

Relationship between the Level of Social Sensitivity of the School Principals and Teachers and Their Profile Variables

The Point Biserial, and Spearman's Rho Correlation Statistical Test is the most appropriate statistical tool to use in finding its relationship with the level of social sensitivity of the school principal-administrators and teachers in relation to social welfare, customs and traditions, community development, environmental consciousness and their profile variables. As reflected on the Table 5a presents the summary of computed Point Biserial and Spearman's Rho Correlation Statistical Tests, its relationship between the level of social sensitivity along social welfare of the school principal- administrators and the school and division levels' number of seminars and

trainings have computed Point Biserial values at 0.321 and 0.260* which have significance level of *0.012 and 0.045, respectively. This means that the relationships are significant at the 0.05 level. Therefore, the corresponding null hypothesis which state that there are no significant relationships that exist between the level of social sensitivity of the school principal-administrators and the school and division levels' number of seminars and trainings and social welfare are rejected.

Along environmental consciousness, its relationship with school principal-administrators and place of residence, has computed Point Biserial value at -0.3118* which have significance level of 0.016, and likewise significant at the 0.05 level. In terms of environmental consciousness, its relationship with school principal-administrators' place of residence, the Point Biserial value was computed at -0.311* which have significance level of 0.05.

And lastly, in the overall weighted mean of principal-administrators, its relationship with the place of residence, the Point Biserial value was computed at -0.283* which have significance level of 0.029., and thus, significant at the 0.05 level. This may be attributed to the fact that the place of residence might influence every principal- administrator as educators to provide the conditions under which people's learning curves go off the chart. Place of residence, within schools, the principal-administrator is in a unique position to influence the implementation of these guiding principles and to affect the overall quality of teacher professional development. One of the primary tasks of school principal-administrators is to create and maintain positive and healthy teaching and learning environments for everyone in the school, including the professional staff.

Test Relationship between the Level of Social Sensitivity of the Teachers and their Profile Variables

Table 5b depicts the summary of Point Biserial and Spearman's Rho Correlation Statistical Test obtained between the level of social sensitivity of the secondary school teachers across the profile variables. As could be gleaned from the table, the relationship between the social sensitivity along social welfare and the public secondary school teachers' position the Spearman's Rho have computed value at 0.112* which have significance level of 0.048. It follows that the corresponding null hypothesis is rejected at the 0.05 level of significance. This implies that in determining the relationship between the social sensitivity along social welfare and the public secondary

school teachers' position significantly affects teacher's position, the fact that teachers play a critical role in schools and educational settings whose immediate concerns is. provide services to students to enhance their emotional well-being and improve their academic performance, having such multiple roles, they extended help students, families, and teachers address problems such as truancy, social withdrawal, overaggressive behaviours, rebelliousness, and the effects of special physical, emotional, or economic problems.

The result above can be related to the study of Baker [12], that teachers as school social workers play a vital role in addressing the various needs of students in an educational setting. Through the roles social workers assume, they have the opportunity to collaborate in the improvement of the lives of those they serve. Social workers who provide mental health services are required to be licensed by the state in which they practice. Their roles can vary from student to student, providing a variety of experiences on a daily basis. However, like many social workers, the caseloads of school social workers are often high. School social workers can be assigned to more than one school, requiring time to travel between locations. Often the school social worker performs in isolation and may not have access to consistent supervision. There also may be limited resources to support service delivery such as a lack of confidential and private space, supplies, and training.

Significant Difference in the Level of Social Sensitivity in the Perceptions of the School Principals and the Teachers

Social sensitivity, which has been defined as the ability to accurately perceive and comprehend the behaviour, feelings and motives of other individuals, is generally viewed by personality theorists, social psychologists and clinicians alike to be a psychological variable of major importance for the understanding of such basic phenomena as the development of a conception of self, the acquisition of roles and the interaction within and between groups.

To substantiate and strengthen the general findings in determining the significance difference on the level of social sensitivity in the perceptions of the public

school principal-administrators and teachers, the Multivariate Statistical Test result was utilized and is hereby tabulated in Table 6.

Result of Multivariate Test in Table 6 revealed that the public school principal-administrators and teachers have higher level in all social sensitivity related to social welfare, customs and traditions, community development and environmental consciousness. All the Multivariate Test F- values which range from 68.861 to 137.846 reach the critical value at 0.05 level of significance. This indicates that whatever the difference that exist between the public school principal-administrators and the teachers and their level of social sensitivity are considered statistically significant. Therefore, the corresponding null hypothesis which state that there are no significant differences that exist between the public school principal-administrators and the teachers and their level of social sensitivity are rejected. These results lend support to Sullivan's [13] notion that an understanding of others' feelings toward oneself as well as the reasons for these feelings are crucial for the development of good interpersonal relations. Moreover, Horowitz [14] has shown that individuals who relate successfully to others tend to feel more positively about themselves than individuals whose interpersonal relations are less - 2- successful" Thus it would appear that feelings about oneself, one r S ability in interpersonal relationships, and one's skill in social sensitivity are closely related, although there is relatively little evidence on these relationships.

Relationship between the Level of Social Sensitivity of Principals and The Teachers in each of the School Related Factors

This portion answers the problem which states that "Is there a significant relationship between the level of social sensitivity of principals and the teachers in each of the school related factors?" To provide a more valid and reliable value, the Pearson Product-Moment Correlation Coefficient or known as Pearson r were used in determining the significance in the differences between the level of social sensitivity of school principal- administrators and teachers across each of the school related factors. From the correlation table, it can be seen that the correlation coefficient (r) equals 0.208 (Social Welfare), -0.024 (Customs and Traditions), -0.043 (Community Development) and 0.059 (Environmental Consciousness) indicate weak relationship and coefficient are not significant at $p<0.05$. These suggest that the social sensitivity of the School Principal in terms of Social Welfare, Customs and Traditions, Community Development and

Environmental Consciousness have nothing to do with enrolment sizes. Likewise, the overall correlation coefficient (r) of 0.080 shows weak relationship and not significant, hence, it could be concluded that the Social Sensitivity of the School Principals has no relationship with the enrolment sizes.

The correlation coefficient (r) along with the number of teachers equals 0.217 (Social Welfare), -0.020 (Customs and Traditions), -0.036 (Community Development) and 0.099 (Environmental Consciousness), also signify weak relationship and coefficient are not significant at $p<0.05$. The same goes to its overall correlation coefficient of 0.087. These data show that there is no evident relationship between the number of teachers and to the Social Sensitivity in Social Welfare, Socio-economic, Political and Customs and Tradition of the School Principals.

In the variable of average number of students per teacher the computed correlation coefficient (r) equals to -0.085 (Social Welfare), -0.039 (Socio- economic), -0.033 (Political) and 0.120 (Customs and Tradition) imply weak relationship and not significant at $p<0.05$. These mean that average number of students per teachers have nothing to do with the Social Sensitivity in Social Welfare, Socio-economic, Political and Customs and Tradition of the School Principal. Even the overall coefficient of -0.049 shows that the Social Sensitivity of the School Principals has no relationship with the average number of students per teachers.

In the same manner the correlation coefficient (r) along with the classroom suggests weak relationship with the Social Sensitivity and its different level as the computed r equals 0.216 (Social Welfare), -0.015 (Customs and Traditions), -0.032 (Community Development) and 0.080 (Environmental Consciousness), and the overall correlation coefficient of 0.096. These data imply no evident relationship between the classrooms in all level Social Sensitivity, Customs and Traditions, Community Development and Environmental Consciousness of the School Principals.

The school factor of Laboratory Room the obtain correlation coefficient (r) equals to 0.113 (Social Welfare) no relationship, 0.730 (Customs and Traditions) strong relationship, 0.322 (Community Development) weak relationship and 0.640 (Environmental Consciousness) moderate relationship. These means that Laboratory Room has nothing to do with the Social and Political level of Social Sensitivity of the Teachers, while if the number of the Laboratory room increases the Customs and Traditions concern of the teachers also increases. The overall coefficient of 0.789

indicates strong relationship, that is if the number of Laboratory rooms increases the Social Sensitivity of the Teachers also increases.

Likewise, Books as school factor is not significant to School Principals' Social Sensitivity as the correlation coefficient (r) equals 0.149 (Social Welfare), -0.042 (Customs and Traditions), -0.140 (Community Development) and 0.141 (Environmental Consciousness) indicate weak relationship and coefficient are not significant at $p<0.05$. These suggest that the social sensitivity of the School Principal in all levels have nothing to do with the Books. In the same manner, the overall correlation coefficient (r) of 0.021 shows weak relationship and not significant, hence, it could be concluded that the Social Sensitivity of the School Principals has no relationship with the books in the school.

Meanwhile, the computer units' correlation coefficient also suggests weak relationship with the Social Sensitivity and its different level as the computed r equals 0.280 (Social Welfare), 0.093 (Customs and Traditions), -0.045 (Community Development) and 0.169 (Environmental Consciousness), and the overall correlation coefficient of 0.222. These data imply no evident relationship between the computer units in all level of Social Sensitivity, Social Welfare, Customs and Tradition, Community Development, and Environmental Consciousness of the School Principals. All coefficient under this factor are not significant except the coefficient of 0.280 under the level of social welfare which significant in the $p<0.05$.

On the other hand, the teachers Social Sensitivity correlation coefficient (r) equals 0.112 (Social Welfare) has weak relationship to enrollment sizes, 0.858 (Customs and Traditions) and 0.745 (Community Development) found to have a strong relationship with the enrolment sizes and while r of 0.656 (Environmental Consciousness) shows moderate relationship. These means that the social sensitivity of the Teachers in terms of Social Welfare has no or weak relationship with the enrolment sizes. The Customs and Traditions and Community.

Development factors have strong relationship with the enrolment sizes this suggest that as the enrolment sizes become bigger the level of social sensitivity in the Socio-economic and Political of the Teachers also increase. While the level of Customs and Tradition has a moderate relationship with enrolment sizes, as the enrolment sizes increase there is a moderate increase of the Teachers' Social Sensitivity in the level of Environmental Consciousness. Likewise, the overall correlation coefficient (r) of 0.544

has a moderate relationship, hence, it could be concluded that the Social Sensitivity of the Teachers moderately increase as the enrolment sizes increase.

The correlation coefficient (r) in the number of teachers equals 0.095 (Social Welfare) signifies weak relationship, 0.879 (Customs and Traditions), 0.785 (Community Development) and 0.712 (Environmental Consciousness) show strong relationship. These mean that the number of teachers' factor has nothing to do with the Social Welfare of the Teachers. On the other hand, as the number of teachers increases the level of social sensitivity in Custom and Traditions, Community Development and Environmental Consciousness also increases. The overall correlation coefficient of 0.509 has a moderate relationship, generally, these data suggests that as the number of Teachers increases the Social Sensitivity of the Teachers also moderately increases.

The school variable under average number of students per teacher the computed correlation coefficient (r) equals to -0.516 (Social Welfare) express moderate relationship which says that an increase in average number of students per teacher will have a moderate increase in the Social Welfare of the Teachers. The correlation coefficient (r) equals 0.769 (Customs and Traditions) and 0.800 (Community Development) obtained shows that there is a strong relationship between average number of students per teacher, hence, an increase in the number of average of students per teacher, the Customs and Traditions and Community Development level of Social Sensitivity of teachers also increases. While the r equals to 0.362 (Environmental Consciousness) imply weak relationship, This mean that average number of students per teachers have nothing to do with the Environmental Consciousness of the School Principal. In general, the overall coefficient of 0.711 shows that the Social Sensitivity of the Teachers have a strong relationship with the average number of students per teachers, such as this school factor increases the Environmental Consciousness of the teachers also increases.

The correlation coefficient (r) along with the classroom suggests weak relationship with the Social Sensitivity as the obtained coefficient equals to 0.465. But in its different level the coefficient equals 0.098 (Social Welfare) means has no relationship, 0.910 (Customs and Traditions) and 0.810 (Community Development) have strong relationship, and 0.544 (Environmental Consciousness) is moderate relationship. These data imply that there is no evident relationship between the classrooms and Social Welfare, but as the number of classroom increases the Teachers' Social Sensitivity to Customs and Traditions and Community Development also increases. Lastly, as the

number of classes increases the Environmental Consciousness of the Teachers moderately increases.

The school factor of Laboratory Room the obtain correlation coefficient (r) equals to -0.207 (Social Welfare), -0.045 (Customs and Traditions), -0.130 (Community Development) and 0.062 (Environmental Consciousness) also imply weak relationship and not significant at $p<0.05$. These propose that Laboratory Room has nothing to do with the Social Sensitivity of the School Principals, specifically in Social Welfare, Customs and Traditions, Community Development and Environmental Consciousness of the School Principal. Even the overall coefficient of -0.035 shows that in general, Social Sensitivity of the School Principals has no relationship with the Laboratory Room.

Likewise, Books as school factor is not significant to School Principals' Social Sensitivity as the correlation coefficient (r) equals 0.255 (Social Welfare), 0.286 (Community Development) and 0.281 (Environmental Consciousnesss) indicate weak relationship. These suggest that the social sensitivity of the Teachers in the Social Welfare, Political and Custom and Tradition have nothing to do with the number of Books. While the coefficient in Customs and Traditions r equals 0.749 indicates strong relationship, where the number of books increases the Customs and Traditions of the teachers increases as well. The overall correlation coefficient (r) of 0.875 shows strong relationship hence, it could be concluded that the Social Sensitivity of the Teachers, in general, has strong relationship, that as the number of books increases the Social Sensitivity also increases.

Meanwhile, the computer units' correlation coefficient suggests weak relationship with the Social Sensitivity as the overall coefficient r equals to 0.088. In its different level the table presents r equals 0.030 (Social Welfare) no relationship, 0.479 (Customs and Traditions) weak relationship, 0.735 (Community Development) strong relationship and 0.197 (Environmental Consciousness) weak relationship. The results suggest that number of computer units have no relationship or nothing to do with the Social Welfare, Customs and Traditions and Environmental Consciousness. While as the number of computer units increases the Political welfare of the Teachers also increases.

After the analysis and interpretation of the data, the results were scrutinized closely and thoroughly, and the areas of improvement were identified for possible development plan which are all stated in the specified matrix which consists of six

columns. It is also considered the significant differences that were found out which may have an impact on the

CONCLUSION AND RECOMMENDATION

Based on the foregoing significant findings, the following conclusions were drawn:1) Majority of the principal-administrators in Region III are female ,generally belong to the age bracket of 41- 50 years old, married, Roman Catholics, residing in either urban and/or rural areas and have dependents. They occupy the position of Head Teacher II and Principal I, holders of doctorate degrees, have administrative experience within the range of five to 8 years, belong to the professorial level, members of professional, social and religious organizations. They attended international, national, regional, and locally sponsored seminars and conferences. 2) Majority of the secondary school teachers in Region III are females, fall within the 41-50 age bracket, married, Roman Catholics, have two dependents, and living in the rural areas. They are bachelors' degree holders with master's units concentrated on the social sciences, teacher education, mathematics and communication arts; have been in the service for 8 to 14 years; and graduated from SUCs and are level of implementation of the social sensitivity public school principal-administrators and teachers. Other columns include objectives and activities that could possibly solve the problems. Materials needed, persons involved and the timeframe were integrated to surely address the problems.

Therefore, based on the findings and conclusions arrived at, the following suggestions and recommendations are hereby advanced: 1)Administrators who have not finished their post graduate studies should pursue in order to acquire more knowledge and be more equipped professionally in meeting and solving the difficulties to be met especially towards planning, implementing and monitoring and evaluating extension activities. They will also serve as good examples to faculty members in pursuing higher educational levels. 2) More relevant school undertakings like conferences, trainings and seminars should be conducted to increase the level of social sensitivity of the administrators from high to very high.3) The level of involvement of the teachers in planning, implementing, and monitoring and evaluating extension programs should be enhanced. Faculty members should be more involved in planning and implementing extension activities. More financial assistance and moral support from the administration should be observed to increase their participation. 4) DepEd

should standardize the number of subjects handled by teachers or decrease the number of subjects to be taught from the eight regular classes to 6 classes to give more time for other activities like engaging in flexible instructional materials. 5) To encourage the involvement of administrators and teachers in conducting extension activities, more incentives should be given like monetary assistance and reduction in load. Likewise, constant recognition should be given to those who are always and dedicatedly involved in extension activities to keep their continuous participation and perhaps inspire others to get involve. 6) A similar study should be conducted using more or other variables to determine the level of social sensitivity of administrators, teachers and students of DepEd in Region III.

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Tracer Study on the Employability of Business Administration Graduates (2017-2019) of Pangasinan State University Lingayen Campus

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Abstract – This tracer study is conducted to assess the employment status of the graduates of the program from 2017 to 2019. A total of 782 individuals have graduated from the BS Business Administration program. 62 of them participated in the tracer study. The study employs the descriptive-exploratory correlational research design. 69.35% of the graduates are female and 93.33% if them come from low income and poor socioeconomic class. 87.10% of the graduates can be considered as employed, either formally or informally. The graduates rated program outcomes relating to integrity, excellent communication skills, and shared responsibility as the most relevant to their current/prospective employment. On the other hand, program outcomes relating to promotion of Filipino culture, application of ICT skills, and discussion of latest developments in the field of practice were rated as less relevant and important than other program outcomes. The average starting salary of the graduates is at 13,786.20 while their current salary is at 16,657.30. The graduates spent an average of 180 days before landing their first job after graduation. Currently, they have spent on average 484.40 days in their current employer. It was also found that graduates who received an academic award are more likely to get a job less than the number of days it takes for non-academic award receivers. Academic award receivers are also more likely to stay with their current employer longer than those who did not receive any awards. However, such difference does not exist in terms of starting salary or current salary. The researcher recommends that the BSBA program should integrate into its curriculum theories, concepts and practical application of information and communications technology, innovation and systems thinking in the field of Business Administration, to prepare the graduates equip them with skills necessary for the industry 4.0 workplace.

Introduction

The Pangasinan State University was founded in 1979 through the signing of Presidential Decree No. 1497, although its origins trace back to the 1920s. [1][2] It is mandated to provide advanced instruction in the arts, agricultural and natural sciences as well as in technological and professional fields. Its main campus is located in Lingayen, Pangasinan. [2] One of the programs offered in the university is Bachelor of Sciecne in Business Administration. The Business Administration program is offered across six of the nine campuses of the University namely Alaminos, Lingayen, Bayambang, San Carlos, Asingan, and just recently, Infanta. The Business Administration program in Lingayen Campus was offered first as BS Business Management in the year 2003 upon the approval of Board Resolution No. 25 s. 2003. [3] Eventually, the program was renamed into BS Business Administration in the year 2013. Since its inception, the BSBA program in Lingayen Campus has produced over 2,500 graduates.

Business Administration program covers the integrated approach and interrelationship among the functional areas of business as well as sensitivity to the economic, social technological, legal and international environment in which businesses must operate. The objective of the program is not to simply impart basic business knowledge, but to instill and nurture important qualities, and skills in our students that are essential for future business leadership and organizational success. [4]

The Business Administration program offered in Lingayen Campus majors in Operations Management which aims to prepare students for the acquisition of competencies and skills needed as managers in manufacturing and service-oriented businesses. It focuses on managing the processes to produce and distribute products and services. It covers all operations within the organization and related activities including managing purchases., inventory control, quality control, storage, logistics, and evaluation. A great deal of focus is on efficiency and effectiveness of processes. This often includes substantial measurement and analysis of internal processes. The objectives of the program are to : (1) equip the students with concepts, principles and the theories of operations management; (2) prepare the students in organizing and managing activities in manufacturing and service related industries; (3) develop in the students competencies and skills as entrepreneurs and managers; and (4) prepare the students to pursue a teaching

career or graduate studies in business. [4]

In 2016, the CHED prescribed additional electives on service management for business process outsourcing, recognizing the Philippine BPO industry as a sunshine industry generating $8.9 billion in revenues as of 2010. In 2012, the Commission on Higher Education adopted a competency-based learning standards and outcomes-based education [5] The minimum standards for business administration program are expressed in a minimum set of learning outcomes outlined in CMO No. 17 s. 2017.

In order to assess the effectiveness of the program in meeting its commitment to the University's mission to "develop highly principled, morally upright, innovative and globally competent individuals capable of meeting the needs of industry, public service and civil society", [6] a tracer study is conducted to explore what happens to its alumni right after graduating from the University. A tracer study or graduate survey is a standardized survey (in written or oral form) of graduates from education institutions, which takes place sometime after graduation or the end of the training. The subjects of a tracer study can be manifold, but common topics include questions on study progress, the transition to work, work entrance, job career, use of learned competencies, current occupation and bonds to the. [7] The concept of tracing the employability rate of the PSU is to determine how programs and curriculum are implemented that serves as a program indicator to determine the quality of education being offered. Furthermore, CHED requires every HEIs to conduct a tracer study for it is being needed by higher education accrediting body such as the Accrediting Agency of Chartered Colleges and Universities in the Philippines (AACCUP), Inc. [8]

Objectives of the Study

The purpose of this study is to assess the employability of graduates of the Business Administration program from 2017 to 2019.

Specifically, the study has the following objectives:

- What is the profile of the graduates in terms of age, sex, civil status, year graduated, academic award received, leadership experience, higher education pursued, employment status?
- What is the profile of the employed graduates in terms of location of employer, type of employer, starting salary, current salary, time to first

employment, and time spent in current employment?

- What is the perceived level of importance of the program outcomes required of the Business Administration program as perceived by the graduates to their prospective/current employment?
- Is there a significant difference among employed graduates in terms of starting salary, current salary, time to first employment, and time spent in current employment along their profile?

Research Methodology

This tracer study employs the correlational research design making use of both descriptive and exploratory research methods to describe a certain phenomenon and people who experience it and to determine whether a relationship exists among several variables. [9]

The survey questionnaire was constructed by the researcher. Program outcomes were taken from the CHED Memorandum Order No. 17, s. 2017 which contains the Revised Policies, Standards and Guidelines for Bachelor of Science in Business Administration. [5] The questionnaire is divided into three sections, the first part asks for their profile along age, sex, civil status, year graduated, academic award received, leadership experience, and higher education pursued. The second part asks for their perceived level of importance of the different program outcomes or competencies of the BSBA program, and the third part extracts details on their current employment status. The form is uploaded into Google Forms and sent through social media channels and key focal person coming from each batch of graduates included in the study.

Table 1 show the percentage of graduates who have responded to the survey per school year. Data from the registrar shows that there has been a total of 782 graduates from SY 2016-2017 to the present. The data does not include the recent graduates whose ceremony has been delayed due to the CoVID-19 pandemic. A total of sixty-two (62) alumni or 7.93% have responded to the survey. A response rate of less than 25% among the graduates is expected as per standards. [7] Upon the culmination of the survey, the data collected was exported from Google Forms into Microsoft Excel for data cleaning. Duplicate entries were removed and considered the initial responses of the graduate who made such entries, similarly invalid data inputs for some of the responses were also removed and corrected for

analysis. Upon cleaning the data, it was imported into IBM SPSS for analysis. To describe the profile of the graduates and employed alumni, frequency counts, percentages, and descriptive statistics were employed. In order to measure the perceived level of importance of the program outcomes to the employment of the graduates, a Likert-scale rating was constructed and the average weighted mean, descriptive ratings, and ranking were used to present the results of the data. Table 2 below presents the Likert-scale and the descriptive ratings used to analyze the responses. In order to determine whether there is a difference in terms of employment metrics of current salary, starting salary, time spent to get a job, and time spent in current job along the profile of the employed graduates, independent samples t-test and One-Way ANOVA were used. The hypothesis was tested at the 0.05 significance level Results and Discussion The profile of the graduates along year graduated, age, gender, civil status, income group, academic award received, leadership experience, higher education, and employment status are presented in Table 3.

The results indicate that fifteen (15) or 24.19% of the respondents graduated in the year 2017, twenty (20) or 32.26% of the respondents graduated in the year 2018, and twenty-seven (27) or 43.55% graduated in the year 2019. The mean age for the graduates was 23.37 (SD=2.24). Forty-four (44) or 70.97% of the respondents fall below the mean age, while the rest are above (29.03%). Forty-three (43) or 69.35% of them are female which is a lopsided majority of the BSBA students compared to only eighteen (18) or 30.65% male BSBA graduate respondents. This reflects the proportion of BSBA students of PSU Lingayen. Only three (3) or 4.84% of the respondents are married and the rest remains to be single. Majority (53.33%) of the BSBA graduates fall under the less than 10,500 income group. A sizable group (40.00%) belongs to the low-income socioeconomic class which earns 10,500-21,000 in a month. A small group (6.67%) belongs to the lower middle-income class which earns 21,000-42,000 a month. Fourteen (14) or 22.95% of the respondents graduated with an academic award and twelve (12) were involved in various school and youth organizations during their time as students. Two of the graduates pursued higher education.

The current employment status indicates that fifty-one of the graduates are currently employed (82.26%). Three of them (4.84%) are currently self-employed. That means that 87.10% of the graduates fall under the definition of employed.

This employment is at the same level as that of the other programs in the campus, the BS Hospitality management which has 84% of its graduates employed [2] and Bachelor of Secondary Education which has 87% [8]. This is well within the indicator set by the Commission on Higher Education SUC Leveling instrument which provides maximum allocation point for achieving 80% and above employment for its graduates two years after graduation [10] Five (5) or 8.06% of the graduates are currently unemployed while three (3) or 4.84% of them were never employed. Half of the unemployed graduates which includes those who are currently unemployed and never employed cited the pandemic for being laid off or inability to apply for a job, two cited personal reasons of health and family problems, while one of the currently unemployed blamed workplace conflict for departure while one declared resignation as reason without specifying the reason.

The average starting salary for the employed graduates was found to be at PhP 13,786.20 (SD=10,115.43). The average current salary of the employed graduates was at PhP 16,657.30 (SD=12,120.79). This means that from the time they were first employed to the present day, the employed graduates as a group has gained over 20.83%. From the time of their graduation, an average BSBA graduate has spent 180 days or six months before they were able to get a job. At the moment, the batch of graduates who are employed have spent over 480.40 days at their current employment which roughly translates to 1 year and 3 months.

There are fifty-four graduates who can be considered to be employed which includes those who currently have formal employment and those who are self-employed. Based on the survey conducted, 51 out of 54 or 94.44% of those who are employed ae employed locally, while three or 5.56% have found employment abroad. Fifty (50) or 92.59% of the graduates are employed in private or commercial establishments, while the rest (7.41%) are employed in government agencies.

Based on their initial salary, twenty-nine, (29) or 61.70% of the graduates are earning a monthly income of less than the average of PhP 13,786.20 while eighteen (18) or 38.30% are earning above the mean starting salary. Fifteen (15) or 31.25% of the employed graduates have current salaries that are above the mean of PhP 16,657.30, while thirty-three (33) or 68.75% of them are earning below the mean salary. Thirty-three (33) of the employed graduates or 66% of them have found employment less than the average of 180 days.

Seventeen (17) of them or 34% have found a job after six months. Thirty-three (33) or 61.11% of the graduates have spent time at their current job for less than the average of 480.4 days. 38.89% of the graduates have stayed in their current job for longer than the average. Table 6 presents the results of the level of importance of program outcomes as perceived by the graduates in their employment. The results indicate that all of the program outcomes were rated as "very important" by the graduates ranging from 3.92 to 4.24. Further it shows that among the program outcomes, it was found that "Exercise high personal moral and ethical standards", "Effectively communicate orally and in writing using both English and Filipino.", and "Act in recognition of professional, social, and ethical responsibility." Each incurring an average weighted mean of 4.24, 4.18, and 4.18 respectively.

This indicates that graduates should possess integrity, excellent communication skills, and shared responsibility in order to become competent in their employment. On the other hand, the graduates did not find the program outcomes of "Preserve and promote "Filipino historical and cultural heritage.", "Apply information and communication technology (ICT) skills as required by the business environment.", and "Articulate and discuss the latest developments in the specific field of practice" with average weighted mean of 3.92, 3.95, and 3.97. the first program outcome on preserving and promoting Filipino historical and cultural heritage may probably indicate a desire among the graduates to be employed abroad but to gain experience first in the local industry. The following program outcomes are geared towards innovation and development.

It can probably indicate that most of the graduates are employed in firms which do not place particular importance on innovation particularly in the field of information and communications technology. The results reflect that of the study conducted by Cervantes, et. al. which also found similar regard for all competencies, giving high marks for oral and written communication while placing ICT skills among competencies that are not as important. [11] Table 7 presents the results of the independent samples t-test and One-Way ANOVA to determine whether there is a difference in starting salary among employed graduates along age, gender, civil status, monthly income, academic awards received and leadership experience. Based on the results it was found that none of the mentioned variables have exhibited significant difference in terms of the

graduates' starting salary with p-values all exceeding 0.05.

Table 8 presents the results of the independent samples t-test and One-Way ANOVA to determine whether there is a difference in current salary among employed graduates along age, gender, civil status, monthly income, academic awards received and leadership experience. Based on the results, it was found that none of the mentioned variables have exhibited significant difference in terms of the graduates' current salary with p-values all exceeding 0.05.

Table 9 presents the results of the independent samples t-test and One-Way ANOVA to determine whether there is a difference in the time to get first job among employed graduates along age, gender, civil status, monthly income, academic awards received and leadership experience. Based on the results, it was found that difference in days to find job among graduates who received an academic award and who did not was statistically significant with p-value of 0.01. This means that graduates who received an academic award upon graduation are more likely to be immediately hired than those who did not Table 10 presents the results of the independent samples t-test and One-Way ANOVA to determine whether there is a difference in the time to get first job among employed graduates along age, gender, civil status, monthly income, academic awards received and leadership experience. Based on the results, it was found that difference in days spent in current job among graduates who received an academic award and who did not was statistically significant with p-value of 0.04. This means that graduates who received an academic award upon graduation are more likely to be retained and permanently employed upon graduation.

Conclusion and Recommendations

The conduct of the tracer study yielded a 7.93% response rate among BSBA graduates from 2017 to 2019. The respondents reflect the gender distribution of the program with majority (69.33%) of the graduates being female. 93.33% of the graduates belong to the poor or low-income group which are families earning less than 21,000 in monthly income. 82.26% of the graduates are currently employed. Three (3) of them are self-employed and fifty-one (51) are formally employed. An overwhelming majority of the graduates (92.59%) are employed in private/commercial establishments, while 7.41% are in government agencies. The impact of CoVID-19 pandemic is very evident among the graduates with half of

those who are unemployed citing the pandemic as the reason for being laid off or inability to apply for a job.

Based on the importance of program outcomes, the graduates rated each of them as Very Important. The graduates put particular importance on integrity, communication skills, and shared responsibility in terms of the program outcomes of BSBA that are relevant to their employment. This means that BSBA graduates put so much importance on values and work ethic more than anything else in order to excel in one's job. On the other hand, program outcomes on promoting Filipino culture, ICT skills required, and knowing and articulating latest developments in fields of business are not given that much of an importance as the other outcomes. It could be possible that this can be attributed to the desire of the graduates to work abroad for better pay and merely earn experience locally. The reason for low importance placed on ICT skills and knowing the latest trends in fields of study could be attributed to the attitude of their employers towards ICT and innovation and development in particular.

The average salary of the BSBA graduate upon being hired is PhP 13,786.20. Currently, the salary of the BSBA graduates is at PhP 16,657.30. It was found that on average it takes 180 days or approximately 6 months before a graduate gets employed. Further, the graduates have stayed an average of 480.40 days in their current employer. It was also found that a significant difference exists in terms of employment metrics among the graduates who received and did not receive an academic award. Graduates who have received an academic award are more likely to be employed immediately than those that did not receive an award. Further, these graduates tend to have stayed longer in their current employer. Despite this, receiving an academic award does not guarantee the graduate of a higher pay upon hiring.

The researcher recommends that the BSBA program should integrate into its curriculum theories, concepts and practical application of information and communications technology, innovation and systems thinking in the field of Business Administration, as it is a multidisciplinary field and the industry is undergoing a paradigm shift with the emergence of technologies brought about by the fourth industrial revolution. This could prepare graduates of the program and equip them with skills necessary for the industry 4.0 workplace. Further, particular focus should be given on student development, training students who

excel academically to engage themselves in leadership positions and extracurricular activities in order to make them more immediately viable for supervisory and managerial positions.

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Vocabulary Development Thru Pangasinan Songs among Kindergarteners

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Abstract

This study was conducted to determine the effectiveness of Pangasinan songs in the development of vocabulary among kindergarteners of Mendoza Memorial Elementary School during the school year 2019-2020. The one-group pretest-posttest experimental design of research and a questionnaire checklist was used in data collection. Frequency count, percent, descriptive rating based on DepEd Order No. 73, s. 2012, t-test correlation/dependent variables and MANOVA were used in the treatment of data.

The study reveals that majority of the respondents are male, have high school graduate parents, mostly of the fathers are into blue-collar jobs while the mothers are mostly self-employed, and most of them have average monthly family income of Php 5,000.00. Majority of the respondents were mix Pangasinan, Ilokano and Tagalog speakers. All of them appeared to have available print and non-print reading materials at home. Prior to the experiment, it reveals that the pupils are all on the Beginning level of proficiency which only means that they do not possess the needed vocabulary to achieve a higher level of vocabulary development. It further reveals that the use of Pangasinan songs in developing pupils' vocabulary is effective and is proven by the number of the pupils placed under the Advanced level of proficiency right after the exposure in Pangasinan songs. The profile variables of the kindergarten pupils have no significant difference except on the highest educational attainment of the parents and the availability of print and non- print reading materials at home.

It is recommended that the use of Pangasinan songs should be made used as teaching strategy in improving pupils' vocabulary development among kindergarteners and primary level learners and enhancing teacher's professional development by attending LAC sessions on the new trends in teaching and other teaching strategies in teaching vocabulary and other skills and encourage them to develop Pangasinan songs.

Keywords **–** *effectiveness, level of performance, mother tongue, performance, Pangasinan, songs, vocabulary, vocabulary development,*

INTRODUCTION

Communication is crucial for man to learn and understand the world around him. Through oral and written communication, man can express what is in his or her mind. Through it, he/she, too, will understand other people. It is, therefore, essential that man should be equipped with adequate vocabulary. When one has inadequate vocabulary, he/she could hardly communicate with others. In addition, he/she finds difficulty comprehending what he/she hears or reads.

In order to communicate with others, may it be written or oral, pupils should prepare themselves with vocabulary mastery. Vocabulary mastery, as one of the language components, will support both oral and written communication. Vocabulary is one of the core components of language proficiency and determines how well learners speak, listen, read and write [1]. These points of view are supported by Wilkins, [2] said that "without grammar very little can be conveyed, without vocabulary nothing can be conveyed."

Vocabulary is generally defined as the knowledge of meanings of words. Knowledge of words [3], comes in at least two forms, receptive, that which we can understand or recognize (listening or reading) and productive, the vocabulary we use when we write or speak. It is a fact that cannot be denied that vocabulary plays a crucial role in supporting an individual's mastery of the four language skills which are: listening, reading, speaking and writing.

In order to communicate well in language, students should acquire an adequate number of words and should know how to use the accurately. The vocabularies that they develop or acquire support the children's learning. The words in their vocabulary are the building blocks for understanding and expressing ideas. As they are exposed to complex language, they begin to use more advantaged vocabulary. They also begin to use more complex words to explain concepts, describe their observations, and make predictions [4].

Aware of the importance of developing adequate vocabularies to children, it is essential that they be nurtured and are placed in an interacting learning experiences with supportive adults and peers. The acquisition of vocabulary among children depends much on the provisions and support he/she receives at home and in school.

The school, being the second home of the child, must exert extra effort to help the child acquire vocabularies which are vital in learning about the world he/she lives in. the teacher plays a crucial role in the acquisition of vocabularies of children. It is for her or for him to search for the strategies and/or modes of teaching that can be used effectively in developing vocabulary among children.

The National Reading Panel believes that there is no one best method for vocabulary instruction, and that vocabulary should be taught both directly and indirectly [5]. One of these methods that could be used by teachers in building vocabulary among young children is the use of songs.

Children in their young age love to be sung. They find singing as an enjoyable activity. They make them move and sway their bodies with the rhythm. Without realizing it, they learn a lot through the songs they love to sing. It is believed that the young children are by nature inclined to hum or to sing a tune. Howard Gardner's Theory of Multiple Intelligences cites music as the first intelligence to emerge in young learners [6]. As such, it is vital to take advantage of their musical interest to enhance their literacy development and that includes vocabulary development.

The melody, strong rhythm, and simple vocabulary that songs use can arouse the interests and attention of young children. These songs may create a situation which may pave the way for children to learn unconsciously the target language or vocabulary. In addition, the songs they sing may make children to learn the lyrics with ease because the words and phrases they contain have a memorable rhythm, end with rhyming words, and with a musical effect.

Mother Tongue-Based Multilingual Education (MTB-MLE) is one of the programs implemented by the Department of Education. Schools, public or private, are ordered to implement he use of mother tongue as a mode of instruction and as a learning area in the preschool up to Grade 3. Mother Tongue as a subject is encouraged to develop among the learners the deep appreciation of their locality's language. In Pangasinan, most children do not already speak the language Pangasinan. They often use Filipino in communicating with their parents, other adults in the community, and their peers or classmates. Aware of the scenario, DepEd was then prompted to issue an order on the implementation of MTB-MLE.

Various modes of teaching Mother Tongue as a subject have been suggested by DepEd, one of which is the use of songs. It is in this regard, that the researcher was motivated to conduct a study whose findings may support concepts on the

effectiveness of songs as a mode of teaching. Moreover, the findings of the proposed study may prove of disapprove results of studies conducted along this line. The results of the study may serve as basis for teachers, especially those in the preschool and primary levels, to make use of songs in teaching the concepts and skills in the different learning areas.

OBJECTIVES OF THE STUDY

The main purpose of this study is to determine the effectiveness of Pangasinan songs in developing vocabulary of kindergarteners in Mendoza Memorial Elementary School, Malasiqui District II, Division of Pangasinan I during the school year 2019-2020.

1. To determine the profile of the kindergarten pupils in terms of sex, parents' highest educational attainment, parents' occupation, average monthly family income, language spoken at home and print and non-print reading materials available at home.
2. To determine the level of performance of kindergarteners in the sub-domain vocabulary development before the experiment.
3. To determine the level of performance of kindergarteners in the sub-domain vocabulary development when taught
4. using Pangasinan Songs.
5. To determine the significant difference in the kindergarteners' level of performance in the sub- domain vocabulary development before and after the experiment.
6. To determine the significant difference in the level of performance of kindergarteners in the sub-domain vocabulary development across their profile variables.

Research Hypotheses

The following hypotheses were tested in their null form at the 0.05 level of significance.

1. There is a significant difference between the level of performance in the sub-domain vocabulary development of kindergarteners before and after the experiment.
2. There is a significant difference in the kindergarteners' level of

performance in the sub- domain vocabulary development across their profile variables.

MATERIALS AND METHODS

The one-group pretest-posttest experimental design was used in this study since it aimed to determine the effectiveness of Pangasinan songs in developing vocabulary of kindergarteners. A one-group pretest–posttest design is a type of research design that is most often utilized by behavioral researchers to determine the effect of a treatment or intervention on a given sample. This research design is characterized by two features. The first feature is the use of a single group of participants (i.e., a one-group design). This feature denotes that all participants are part of a single condition—meaning all participants are given the same treatments and assessments. The second feature is a linear ordering that requires the assessment of a dependent variable before and after a treatment is implemented (i.e., a pretest–posttest design). Within pretest–posttest research designs, the effect of a treatment is determined by calculating the difference between the first assessment of the dependent variable [7].

Respondents of the study

The subjects of the study are the fourteen (14) kindergarteners of Mendoza Memorial Elementary School, Malasiqui District II, Division of Pangasinan I who enrolled during the school year 2019-2020. The pupils were taught by the researcher during the morning session.

Research Instrument

Data pertinent to this study were gathered through the use of a questionnaire checklist and a 30-item multiple choice type of test constructed by the researcher. The questionnaire checklist was used to determine the profile of the kindergarteners. The 30-item multiple choice type of test was used as pretest and posttest. The test was administered to the respondents to determine the level of performance of kindergarteners in the sub-domain vocabulary development before and after the experiment. To ensure that lessons covered by the experiment are proportionately represented in the test, a table of specification is

constructed. The test was submitted to a pool of evaluators to establish its content validity.

RESULTS AND DISCUSSION

Profile of Kindergarten Pupils

The profile of the respondents was summarized in Table 1 according to the different profile variables such as sex, parents' highest educational attainment, parents' occupation, average monthly family income, language spoken at home, and print and non-print reading materials available at home.

Sex

As what is shown from the table, out of the 14 respondents, there are more males, 8 or 57.1%, than females (6 or 42.9%). The Philippine Statistics Authority and as reflected in the Philippines Population Clock live-Countrymeters that males dominated the population.

Parents' Highest Educational Attainment

The table shows that 12 or 85.7% of the learners whose fathers are high school graduates. Only 2 or 14.7% have fathers who have completed vocational courses. Ten (10) pupils or 71.4% have mothers who completed high school. Three (3) of them or 21.4% have mothers who are college graduates. Only 1 or 7.1% have mothers who have completed vocational courses.

Parents' Occupation

The table shows that all the kindergarteners, 14 or 100%, have fathers who have blue collar jobs (construction workers, domestic helpers, laborer, handicraft maker, farmer etc.). As to their mothers, 10 or 71.4% indicated that they are self-employed. Only 4 or 28.6% of the mothers have blue collar jobs (domestic helpers, handicraft maker, farmer etc.). These findings are supported by the parents' highest educational attainment. Since most of the parents are high school graduates, the tendency is they will be hired as construction workers, laborers, farmers for the fathers or in other blue-collar jobs and are self-employed for the mothers.

Average Monthly Family Income

As shown on the table, half of the learners, 7 or 50%, whose average monthly family income is P5 000. The same number of learners, 2 or 14.3%, have families whose average monthly family income are P10 000 and P8 000, respectively. Also, the same number of learners (1 or 7.1%) have parents whose average monthly family income are P30 000, P15 000, and P2 000, respectively.

The findings of the study can be related to the parents' highest educational attainment. Since most of them are high school graduates and only a few have mothers who are college graduates, then they cannot land in white collar jobs. Most of the parents of the learners have blue collar jobs. This further means that most of the learners' families have income which is below the poverty line. The current official poverty threshold in the Philippines is PHP 10, 481, which is the minimum amount a family of five needs in a month to buy their food and other basic items. Therefore, based on the data from the Philippine Institute for Development Studies (PIDS), the monthly income of most parents which is Php 5 000 falls less than the official poverty threshold and they are classified as poor.

Language Spoken at Home

Most of the kindergarteners, 6 or 42.9%, are multilanguage speakers (Pangasinan, Ilokano, and Tagalog). There were 4 or 28.6% of them who speak in Tagalog. There were 3 or 21.4% of them who are bilingual speakers (Ilokano and Tagalog) speakers and 1 or 7.1% speaks pure Ilokano. The findings imply that most of the pupils were not taught by their parents with only one language. While it is true, that they live in barangay Lareg-Lareg, a barangay which is dominated by Ilokano speakers, parents taught their children to speak Tagalog and Pangasinan. Moreover, their exposure to media such as television and radio, could be a great factor why most of the children speak Tagalog.

Print and Non-Print Reading Materials Available at Home

The table shows that 14 or 100.0% of the kindergarteners have Story Books, Magazines/Brochures, Big Books, Newspaper, Software/Educational Applications, Bible, and other available resources like radio, TV stations for kids and android phones in their homes.

Based on the study conducted by HP Inc. entitled HP New Asian: Earning Experience Study it shows that majority of parents in the Philippines are willing to spend a part of the family's income on activities to give their children an edge. They believe that a combination of print materials and digital tool (in the study falls under non-print reading materials) are the best approach, and delivers the most benefit, [8]. The greater number of kindergarteners who are exposed to print and non- print reading materials could be attributed to the fact that parents are ready to invest in their children's education. Furthermore, in an interview conducted by the researcher to the parents, learners' family are eager afford print and non-print materials to support their children's learning despite the fact that most of them are earning below poverty line. The reasons given by the parents were the availability of private lending institutions, extended family members who works abroad and render support, most of them have only one child to support, they expose their children to print and non-print materials more often to pacify their children's tantrums and make more time for earning when children are busy with print and non- prints and lastly with the age bracket of the parents, they are more into spending for print and non-print materials specially TV and android phones.

Level of Performance of the Kindergarteners in the Sub-Domain Vocabulary Development Before the Experiment (Pre-Test)

Table 2 (found in the original article) presents the summary of the computations on the level of performance of the kindergarteners in vocabulary development before the experiment. As seen in Table 2, all of the kindergarteners, 14 or 100% are classified as **Beginning** learners in terms of vocabulary development. The computed standard deviation which is 0.000 indicates that the scores of the kindergarteners are not widely dispersed around the mean which is 1. Furthermore, the value of the computed skewness value which is 0.597 indicates that the score distribution is positively skewed. This means that there are more kindergarteners who scored lower than the mean during the pretest. The computed kurtosis value is 1.154 is lower than 3.00 (the kurtosis value for a normal distribution) indicates that the scores of the pupils is platykurtic.

This indicates further that only a few of the kindergarteners' scores in the pretest fall in the extremes of the distribution. The findings of the study goes to

show that before the experiment, the kindergarteners are not yet adequately equipped with the required vocabulary to understand and comprehend the questions they have answered based from the selection they listened to. The result is supported by the idea of Anderson and Freebody [9], that the size of person's vocabulary is the best predictor of how well that person can understand text.

Level of Performance of the Kindergarteners in the Sub-Domain Vocabulary Development When Taught Using Pangasinan Songs (Posttest)

Table 3 presents the summary of the computations on the level of performance of kindergarteners in the sub-domain vocabulary development when taught using Pangasinan songs. The table reveals that majority of the kindergarteners (8 or 57.1%) were classified as Advanced in vocabulary development. There are 3 or 21.4% which are classified as Approaching Proficiency. Two (2) or 14.3% remains to be Beginning level 1 or 7.1% is in the Developing level. Further, the mean of the scores of the kindergarteners (3.79) in the posttest increased when compared to their pretest mean score which is

1. The scores of the pupils in the posttest is more widely scattered around the mean than in the pretest as evidenced by the computed standard deviation of 1.578. The computed skewness value which is - 0.824 indicates the scores of the kindergarteners in the posttest are negatively skewed. This means that there are more pupils who scored higher than the mean. The computed kurtosis value which is -0.895 indicates that the scores of the kindergarteners in the posttest are platykurtic, meaning there are few scores in the extremes of the distribution.

It is worthy to note from the findings that majority of the pupils improved in their performance in vocabulary development when taught using Pangasinan songs. However, there are still two kindergarteners who are still classified to be in the Beginning level. This implies that these kindergarteners are quite slow. Had the experiment been conducted in a much longer period, they may have improved, too.

The findings of the study conform to the findings of the study of Ortiz [10], which found out that the use of songs promotes vocabulary development. Songs have been a common feature of young learner classroom for decades, and numerous publications describe how songs should be employed in order to

improve motivation and facilitate the acquisition of various aspects of language, including vocabulary, grammar, pronunciation, and listening skills [11].

Comparison of the Kindergarteners' Levels of Performance in the Sub-Domain Vocabulary Development Before and After the Experiment

Table 4 presents the summary of the computations on the significance of the difference between the levels of performance of the kindergarteners in vocabulary development before and after the experiment. It could be gleaned on the table that the computed t-value is -14.508 with a p-value of 0.000 which is less than 0.05. These values indicate the rejection of the null hypothesis which states that the levels of performance of the kindergarteners in vocabulary development before and after the experiment do not differ significantly. This goes to show that the kindergarteners showed a significant improvement in their levels of performance in vocabulary development after they were taught using Pangasinan songs. The findings of this study affirm the statements made by Coyle and Gomez [12], that teaching new language through song can lead to the development of children's receptive knowledge of vocabulary. Songs is one effective way of teaching vocabulary to children since songs are said to be the language of children. Learning and understanding new words is easier for children if introduce in an enjoyable way. Comparison of the Levels of Performance of Kindergarteners in the Sub-Domain Vocabulary Development across their Profile Variables

Table 5 presents the summary of the MANOVA computations used to test the significance of the difference of the kindergarteners' levels of performance in vocabulary development across their profile variables.bThe table reveals that among the kindergarteners' profile variables, only the variable parents' educational attainment and print and non-print reading materials available at home that their levels of performance differed significantly. This is evidenced by their computed F-values and p-values which are less than 0.05. Their levels of performance in vocabulary development on the other profile variables do not differ significantly.

The findings affirm Ahmed et. al. [13] statements that a parent with good educational background would be in good position to be second teachers to their

child. Thus, as found out at the start of the experiment, the kindergarteners were just beginning to acquire vocabulary which they need in comprehending a selection listened to. They may not have been assisted by their parents while at home due to lack of time. Their parents may have been busy in their work in order to earn a living. However, after, being taught by the teacher through songs, they have acquired vocabulary that helped them comprehend selections they heard. In addition, the findings of this study affirms Heinich, Molenda & Russel's [14] argument that media (print and non-print materials) can improve student's level of activity and effect on improving the quality of learning. These only prove that having an educated parent paired with available print and non-print materials for children to work and manipulate with has a great impact on their learning.

CONCLUSIONS AND RECOMMENDATIONS CONCLUSIONS

Based from the findings of the study, the following conclusions were derived:

1. The Kindergarten class is male-dominated, most of whom have parents who are high school graduates, their fathers have blue-collar jobs and mothers who are self-employed, with an average monthly family income which is below the poverty line, engage in mix languages and readily available print and non- print reading materials at home. The level of performance of pupils before the experiment is beginning but most of them improved after the experiment.
2. The levels of performance of pupils in vocabulary development improved when exposed to Pangasinan songs.
3. Kindergarteners' level of performance in vocabulary development is influenced by parents' educational attainment and availability of print and non-print reading materials at home.

RECOMMENDATIONS

Based on the abovementioned, the following recommendations are hereby presented:

1. Teachers are encouraged to make use of Pangasinan songs in teaching vocabulary skills among the kindergarteners or learners in the primary levels.

2. The school shall conduct regular parent conferences where the role of the parents in vocabulary and in other aspects of development be emphasized.
3. Parents should be encouraged to continuously provide their children with print and non-print reading materials at home and find time to communicate and read with them.
4. School administrators should encourage their teachers to develop Pangasinan songs which they can use to teach vocabulary skills to kindergarteners and primary level learners.
5. Teachers should be encouraged to regularly attend LAC sessions to equip themselves on the new trends in teaching and other teaching strategies in teaching vocabulary and other skills.
6. Parents should be encouraged to communicate with their children in Pangasinan language.
7. A similar study be conducted in another setting, randomly selecting the subjects of the study, to be conducted in a longer period of time, and include other profile variables which the researcher deems it vital to his/her study.

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Students' Attitude and Learning Satisfaction Towards Science and Its Effects on Academic Performance

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Abstract

This study envisioned to explore students' attitude toward Science as a subject and their learning satisfaction. The respondents of the study were 150 senior high school students of the San Josef National High School, Purok 1, San Josef Sur, Cabanatuan City, Nueva Ecija during the academic year 2018-2019. Both grades 11 and 12 students were considered taking into account their exposure to more varied academic activities in their subject in Science. Focus of the study were on two constructs: students' attitude toward Science and three measures of learning contentment: motivation, impressions towards formidable tasks, and comprehensibility of lessons. Socio-demographic of the learners were the profile variables for correlation. Academic learning performance was based on the grades obtained by the students in Science during the preceding school year. The Descriptive method of research was used in this study. The researcher used checklist and survey questionnaires as mean of gathering data. The data were treated by all of the formulas embedded in the trial version of SPSS (Statistical Package for Social Sciences). Students' attitude toward Science was found to be significantly related to the three aspects of learning satisfaction. Also, students' attitude towards Science and the three aspects of learning satisfaction had significant relationship to students' academic learning performance in Science. Since learners already had high learning gratification in terms of motivation, comprehensibility, and impressions towards formidable tasks, teachers of Science may incessantly monitor students' satisfaction and gratification in their quest for knowledge and in their desire to come up with competencies relative to Science.

Keywords: Academic Performance, Learning Satisfaction, and Students' Attitude.

INTRODUCTION

Attitudes towards Science, scientists, and learning Science have always been a concern for Science educators. Attitude is very broadly used in discussing issues in Science education and is often used in various contexts. Two broad categories are distinguishable. The first one is attitude toward Science (e.g., interest in Science, attitude toward scientists, or attitudes toward social responsibility in Science). *Attitude towards Science* can be defined as the feelings, beliefs, and values held about an object that may be the endeavor of Science, school Science, the impact of Science and technology on society, or scientists. The second one is scientific attitude (i.e., open-minded, honesty, or skepticism). *Scientific attitude* is the desire to know and understand, questioning to all statements, search for data and their meaning, search for verification, and consideration of consequences (Gardner, 2005; Osborne, Simon & Collins, 2009).

Research studies that indicate positive correlations between achievement in science courses and positive attitudes toward science, attitude and certain characteristics of the classroom environments that include personal support, use of a variety of teaching strategies, innovative learning activities, and student-centered instructional designs have all been reported in recent research journals (Osborne, Simon & Collins, 2003; Russell & Hollander, 2008; Shrigley, Koballa & Simpson, 2008; French & Russell, 2006). Attitudes towards science and scientists influence views of science, future career awareness, and classroom participation. Students who have positive attitudes show increased attention to classroom instruction and participate more in science activities (Germann, 2011; Jarvis & Pell, 2005).

MATERIALS AND METHODS

Respondents of the Study

The participants of the study were 150 senior high school students of San Josef National High School, Division of Cabanatuan City, Nueva Ecija during the academic year 2018-2019. Grades 11 and 12 students were the respondents.

Instrumentation

Students' Attitude Toward Science Checklist. This instrument to gather data was developed by the researcher with the assistance of her adviser. Her readings of professional books, magazines, literature, and her many years of teaching Science are of great help to come up with the various item-statements.

The checklist consists of 20 items to gain valuable information about a student's viewpoint towards Science as a subject. The respondents were offered five options for an answer which are the following: 5 – always; 4 – often; 3 – sometimes; 2 – rarely; and, 1 – never.

Verbal descriptions of each of the item-statements were arrived at using the arbitrary numerical guide which are the following: 4.2 – 5.0 – always; 3.4 – 4.1- often; 2.6 – 3.3- sometimes; 1.8 – 2.5 – rarely; and, 1.0 – 1.79 – never.

Learning Satisfaction Checklist. The checklist was adapted from Jones (1999) with some modifications to suit the direction of the study. While the original checklist was very general, the researcher specifically cited the subject of Science to enable respondents to associate with ease that this is the frame of reference for the evaluation.

The checklist consisted of three (3) parts with five (5) items each. Part I focused on motivation; Part II dealt with comprehensibility of lessons; and, Part III centered on impressions towards formidable tasks. Six alternative answers to select from were offered to the respondents, namely: 6 – totally agree; 5 – agree; 4 – slightly agree; 3 – slightly disagree; 2 – disagree; and, 1 – totally disagree.

To arrive at a verbal description of each of the item-statements, the following arbitrary numerical guide was followed: 5.16 – 6.00 - strongly agree; 4.32 – 5.14 - agree; 3.49 -4.31 - slightly agree; 2.66 – 3.48 - slightly disagree; 1.83 – 2.65 – disagree; and, 1.0 – 1.82- totally disagree.

Data-gathering Procedure

Permission from the Schools Division Superintendent, coursed through the Principal of the school was sought to allow the researcher to administer the instruments to the students. The researcher personally administered the checklist among the students. Teachers of Science were not around during the administration. The cooperation of fellow teachers not handling Science subjects was solicited to ensure success in the retrieval of the instruments. The objective of the research was explained to the students.

This study used the Complete Enumeration in collecting data from the student-respondents. According to Rao (2007), complete enumeration collects data from each and every unit (person, household, field, shop, etc.) as the case may be of the population or universe which is the complete set of items which are of interest in any

particular situation. Hence, all senior high school students of San Josef National High School served as the respondents of the study.

Statistical Treatment

Frequency distribution was used to describe the profile of the students. It refers to a table that shows a body of data grouped according to numeric values (de Belen, 2015). It was a tabulation of the values that one or more variables take in a sample. Each entry in the table contains the frequency or count of the occurrences of values within a particular group or interval, and in this the table summarizes the distribution of values in the sample. Kendall's tau-b and Spearman's rho formula were used to test the hypothesis. All statistical computations carried out used the Statistical Package for Social Science (SPSS) v.21. Please note that in the Results and Discussion, tables are deleted – they are found in the original article.

RESULTS AND DISCUSSION

Socio-Demographic Profile of Learner-respondents

Sex. There were 75 (50%) male of the learner respondents and 75 (50%) female.

Age. Age was distributed in three categories: 15-17 years old, 18-20 years old and 21-23 years old. Age bracket of 15-17 years old had the greatest number of respondents with 97 or 64.7%; 51 respondents or 34.0% were between 18-20 years old, and the age bracket between 21-23 years old had the least number of respondents.

Track. Majority of the respondents, 70 or 46.7% were General Academic Strand or GAS, 50 or 33.3% of the respondents were under Technical Vocation specifically ICT and EPAS and 30 or 20.0% were under Humanities and Social Science.

Combined Monthly Income of the Family . Most of the respondents or 30.0% were classified as poor income (Php 5,000-below); 24.0% were below average income (Php 5,001-10,000); 21.3% had an average monthly income (Php 10,001-15,000); 10.7% had above monthly income (Php 15,000-20,000); 8.0% had high income (Php 20,001-25,000); and only 6.0% or nine out of 150 respondents had above high income (Php 25,001-above). It implied that there were more poor families than rich ones in this study.

Parent's Highest Educational Attainment. Majority (58.7%) of the mothers of the respondents were graduate of secondary level; 22.7% were graduates of college level; 17.3% were graduates of elementary level and 1.3% or two out of 150 were graduates of their Master's and Doctoral Degrees.

Majority (55.3%) of the fathers of the respondents were graduates of secondary level; 24.7% were graduates of college level; 19.3% were graduates of elementary level and 0.7% or one out of 150 was a graduate of their Master's and Doctoral Degree.

Parent's Occupation. Both mothers and fathers of the respondents were mostly laborers, 87.3% for mothers and 79.3% for the fathers, respectively. It implied that since most of the parents of the respondents were in secondary level in terms of educational attainment, their occupation was usually in least category.

Sixteen out of 150 mother-respondents were employed while 10.7% of the father-respondents were self-employed. Only 2.0% of the mother- respondents were self-employed while 8.0% of the father-respondents were employed. Civil servant occupation had the least percentage of all.

Academic Performance of the Learner-Respondents (in previous academic year). Majority of the respondents were fairly satisfactory in their academic performance or 61.3%; 23.3% were satisfactory; 10.7% were very satisfactory; and 4.7% of the population were outstanding in their academic performance.

Learner-Respondents Attitude Towards Science as s Subject. Table 1 shows the attitude of the respondents towards Science. Majority of the students were found to be favorable in their attitude towards Science. It was noteworthy to observe that no student was found to have unfavorable attitude. Result suggests that a big number of the students feel the many advantages of becoming skilled in Science. The students were optimistic on the value of Science. Finding gives the impression that the students were reasonably aware of the advantages and benefits of the subject and the positive prospects of the subject in any profession they may desire to pursue.

Always to the respondents were the following: they appreciate the efforts of their teacher in Science in the manner he/she presents the lessons; and escalate the uses of different materials by their teacher to make them easy to understand the Science subject.

Also, often to the respondents were the following: they do their projects and assignments diligently; they show eagerness and interest in the subject; learning new concepts in Science is something they enjoy; they do not feel any boredom; they are very attentive in listening; they feel satisfied in their accomplishment and the way they interact with their classmates during Science class; they love Science; and they are not complaining about the difficult projects/activities that the teacher requires them to do.

Furthermore, the average weighted mean (3.9), showed that the respondents had fairly positive attitude towards Science.

According to Sheeba (2013), students were cognizant of how useful the subject Science is for them. They firmly believe that facts, theories, and concepts and information of the subject may help students appreciate what goes on in their homes and in other environments. Teachers avowed that students will need Science for their future work and life in many ways and in whatever jobs the students will have in the future. How important Science is as a subject from students' evaluations, Science as a subject has an impact on their learning. When students feel that what they are doing are important, the more they will be motivated to bring out the best in them. The earnestness and enthusiasm of students to acquire knowledge becomes more fulfilling when they feel that the subject is very valuable to them. Learning Science as a subject can become a source of inspiration for the students. Itis noteworthy to observe that the students' self-worth is very positive arising from their evaluations that they can be a success in the acquisition of knowledge. This is a manifestation of their feelings of being plausible as a consequence of their familiarity in Science.

Learner-Respondents Learning Satisfaction in terms of Motivations. Table 2 shows learning satisfaction of the respondents in terms of motivations. It implied that all respondents were motivated towards Science as a subject. Respondents all agreed in the different statements of motivations. In terms of learner's motivation, respondents were mostly satisfied in the different statements given.

Miller (2004) says that motivation to learn depends upon such factors as the learner's purpose or interest, objectives and goals, his self-confidence, his levels of aspiration, his knowledge and appraisal of how well he is doing in relation to his goals. It is thus, the job of the teacher to create an atmosphere which provides desirable outlets for students' needs in the direction of worthwhile incentives – an atmosphere in which interests will, as a consequence, flourish.

Learner-Respondents Learning Satisfaction in terms of Impressions towards Formidable Tasks. Table 3 presents the learning satisfaction of the respondents in terms of impressions towards formidable tasks. Respondents escalate formidable tasks in positive ways. They were mostly satisfied in all areas.

The students agreed to the following item-statements: they experience

challenges on their abilities, skills, and expertise in their Science classes; they had opportunities to use their unique abilities; their performance in Science is a product of the efforts they exerted; they felt excitement in their class in Science; and, they encountered various challenges in their subject in Science.

Panitz (2015), stated that students find fulfillment in things they do and learn when they feel that the tasks assigned require the utilization of their abilities, skills, and expertise. When students experience and feel that their potentials are challenged, they feel more energized. Whatever formidable tasks that come their way can be easily and comfortably achieved as they feel these are challenges. In Addition, Montenegro (2020), stated that collaborative and competitive learning styles are the most dominant learning style of the students finding formidable task to do effortlessly and contentedly.

Learner-Respondents Learning Satisfaction in terms of Comprehensibility of Lessons. Table 4 shows the learning satisfaction of the respondents in terms of comprehensibility of the lessons. The students agreed that they were very much aware of what they expect in their class in Science; likewise, they know their duties and responsibilities as they enter the class; they were fully aware of their limitations in Science; they had a clear idea of who they were in their class in Science; and, that every subject in Science seems clear to them. Respondents considered their Science subject as something very valuable although they know their limitations in Science.

Philips (2011), stated that students' self-esteem is commendatory as they feel they had a clear idea of who they were in their class in Science. Boredom and tediousness among students were not in attendance as they were conscious that every subject matter in Science seems comprehensible and understandable to them. Conscientiousness characterizes the students as they were acquainted with whatever duties and responsibilities they had to undertake as they enter their class in Science.

Socio-Demographic Profile and Attitude towards Science. Table 5 shows the relationship between the socio-demographic profiles of the respondents to its attitude towards Science. It revealed that sex, age, combined monthly income of the family, parent's educational attainment and occupation had no significant correlation to the attitude of the respondents towards the Science subject. This means that these factors do not influence the attitude of the respondents toward Science as a subject. Thus, results accept the null hypothesis, "There is no significant relationship between the

socio-demographic profile of the students and their attitude toward Science as a subject". Contrary to the study of Slaughter (2007), he found out that there was a correlation between socio – demographic like income of the family and parent's occupation to the attitude and academic performances of the learners. There could be several reasons for this correlation between income and attitude and academic performance. "Many times, parents do not take the time to read out loud to their children, and some parents cannot read themselves. This impacts student achievement" (Evers & Peter, 1996, p. 2). If parents were not successful in school themselves, chances are that their children will not be successful either.

Table 6 presents the relationship between socio-demographic profile of the students and learning satisfaction along motivation, impressions of formidable tasks and comprehensibility of lessons. Among the socio-demographic profiles of the respondents correlated, only the mother's educational attainment was found to have significant relationship (0.169*) with the learning satisfaction of the respondents in Science subject in terms of motivation.

Mother's educational attainment had r value of 0.169*, it implies that mother's educational attainment was significantly related to the learning satisfaction of the respondents in Science subject in terms of motivation. Consequently, this result rejected the null hypothesis, "There is no significant relationship between the socio-demographic profile of the students and their learning satisfaction along motivation, impressions of formidable tasks, and comprehensibility of lessons".

Jacqulynm, (2005), pointed out the relationship of parents' education level to their children's academic achievements. A mother's education has more influence than a father, so mother's education is more important. Karshen (2003) says that students whose parents are well educated get higher positions than those whose parents are not educated. Educated parents help their children in school work activities.

Other studies have found out that there is a strong correlation between parents' educational level and students' learning satisfaction. Authors, such as Hushak (2003) say that students whose parents have bachelors or graduate degrees, in a sense have private instructors who are probably have more knowledgeable in one or more areas than any of the students' high school or college instructors.

According to Gooding (2001), there were slight but not statistically significant differences between parents' high school educational levels and parents' educational level of some college. There was a statistically significant difference between the great

significance between parental education category of high school and the parental educational level of graduate degree. Table 6 also reveals that there was no significant relationship between the socio-demographic profile of the students and their learning satisfaction along motivation specifically; sex, combined monthly income of the family, father's educational attainment and parent's occupation.

Along the impressions towards formidable tasks, socio-demographic profiles of the respondents had no significant correlation. Thus, the null hypothesis was accepted. Table 6 also shown that there was no significant correlation between the age, combined monthly income of the family, parent's educational attainment and parent's occupation to the learning satisfaction along comprehensibility of lessons. Thus, this means that the null hypothesis is accepted.

Sex had r value of 0.178*, it implies that sex has significant relationship to the learning satisfaction of the respondents along comprehensibility of lessons. Hence, the null hypothesis was rejected. Dilla (2007) found out that females perform better that males in English I. His findings supported Hibayas findings (2005) when he found out that female learners tend to attain higher degree of education than males do. The female students are more prominent in their discernment that their strong sense of self-determination enables them to come up with all requirements and assignments in Science. Besides, female students tend to see themselves more as individuals who persevere and do possess traits of self-motivation and will-power. Vicmudo (2001) in her study about scientific performance of common first year in CLSU found out that female students performed better than males. Boys are generally playful at their young age, while girls tend to be more serious for, they early mature than boys.

Attitude Towards Science and Learning Satisfaction

Table 7 shows the relationship between attitude towards Science and learning satisfaction along motivation, impressions of formidable tasks and comprehensibility of lessons. It presents the correlation coefficients to test the hypothesis. The obtained r- values: 0.558** for motivation; 0.624** for impressions towards formidable tasks; and, 0.561** for comprehensibility of lessons disclosed that students' attitude towards Science was highly significant related to their learning satisfaction.

In a study conducted by Chang and Chang (2012), learning attitude and satisfaction appears strongly correlated with learning motivation, emphasizing the importance that teachers must place on the educational efforts that are aiming to meet

the specific needs of learners. Such educational efforts are likely to lead to a state described by Flammger as a joy of fulfillment and feeling of sufficiency, in the sense that students' needs are met (and therefore temporarily deactivated) and the psychological tension resulting in active needs is diminished.

The more the students feel that they are the type of students who will do well in Science – the more the students will become highly motivated to come up with competencies in Science. The more intense the students are in the projection of self-confidence, the more conscientious they will become and be more aware of the effects and advantages of Science as a subject. Likewise, the more favorable the attitude of students have toward Science - the more the students feel that activities and learning scenarios in their classes in Science contribute much to their welfare and to their future. The less hostile the students are relative to the demands of rules in the use of correct Science and the challenges that come their way – the less anxious, confused, and apprehensive students will be. Furthermore, the more self-assuring students are – the more favorable their perceptions and convictions will be that they can go through all the requirements of their subject in Science.

The hypothesis was rejected. Students' attitude toward Science is significantly related to the three measures of learning satisfaction: motivation, impressions towards formidable tasks, and comprehensibility of lessons.

According to Topala (2014), those who declare themselves interested and enthusiastic about learning at higher levels of intensity also find high satisfaction in the aspects regarding the teaching act.

Attitude Towards Science, Learning Satisfaction and Academic Performance

Table 8 presents the coefficients of correlation to test the hypothesis: "Students' attitude toward Science and their learning satisfaction along motivation, impressions towards formidable tasks, and comprehensibility of lessons did not have significant relationship with their academic performance in Science".

Obtained coefficient of correlations showed that students' attitude towards Science and the three aspects of learning satisfaction had significant relationship on students' academic performance in Science.

Obtained coefficient of correlations were: attitude (0.337**); motivation (0.261**); impressions towards formidable tasks (0.346**); and, comprehensibility of lessons (0.370**). Results suggest that the more favorable the attitude of the students

were in Science, the more will the possibility for students to improve on their academic learning performance be. The degree or level of students' attitude towards Science has significant relationship to their academic learning performance. Findings imply that the following circumstances associated with students' attitude had an impact on their academic learning performance.

Learning satisfaction plays a major role in shaping a student to become successful in pursuing their education. On the other hand, high academic performance of students is an outcome of their learning satisfaction. Previous studies indicated that learning satisfaction of students does not influence their performance, but academic performance influences the learning satisfaction of the students (Lee, 2008.)

Contrary to the findings of this study, according to Manarin and Nibaten (2013), students' learning satisfaction and academic performance had no significant relationship. Thus, one can conclude that satisfaction of students themselves does not guarantee a high or low grade. Earlier studies clearly stated that there are other factors that may affect students‟ academic performance. According to Grayson (2004), character is a factor that keeps a student highly motivated in achieving greater results in learning. Another factor is the effectiveness of the teacher, which can be one of the main factors that may influence the grade of a student. A teacher's effectiveness leads students to interact within the classroom, which may lead to higher academic performance. However, students‟ perceptions of interaction were not related to the grade they achieve (Maksoud and Fahmy, 2007.) It is acceptable that the said variable is one of the factors that can make a student satisfied but on the other hand, perception towards the class interaction itself is not enough for a student to perform. This statement readily lends support to the present study's claim that a student's perception toward academic staff does not influence academic performance.

Science is a very important subject. The excitement, pleasure, and enjoyment students experience when participating in different activities; and, their feeling at ease in their subject in Science can contribute to students' attainment of success.

Likewise, students' high motivation, self-confidence, and favorable perceptions of their accomplishments in the subject in Science are conditions that help propel students to achieve positive progression in the subject. Furthermore, the greater the students feel being challenged in Science, the more the students feel the benefits from the adversities and ordeals that will come their way. Challenges make students more determined to achieve. Intricacies and complexities of tasks to be undertaken help

students situate them into brighter perspectives as well as the stipulations of encouragement, motivation, and inspiration.

CONCLUSIONS AND RECOMMENDATIONS

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

1. There was an equal number of respondents in terms of sex, age bracket of 15-17 years old had the greatest number of respondents, Academic track (General Academic Strand or GAS), classified as poor income family, and parents were graduates of secondary level and were laborers. Meanwhile, majority of the respondents had an average grade in Science 10;
2. Majority of the respondents were found to have fairly satisfactory achievement in their academic performance;
3. Majority of the students were found to be favorable in their attitude towards Science;
4. Majority of the students were high in their learning satisfaction in terms of motivation; high to very high in their impressions towards formidable tasks; and, high in their learning contentment in terms of comprehensibility of lessons;
5. In terms of relationship, socio – demographic of the learner – respondents had no significant correlation to their attitude and learning satisfaction towards Science. Students' attitude toward Science was found to be significantly related to the three aspects of learning satisfaction. Also, students' attitude towards Science and the three aspects of learning satisfaction had significant relationship on students' academic learning performance in Science.

In view of the aforementioned conclusions, the following recommendations are hereby offered:

1. To improve the academic performance of the learners, teachers of Science may unceasingly exert efforts to intensify further students' activities that are more engaging and gratifying;
2. Since learners already had high learning satisfaction in terms of motivation, comprehensibility, and impressions towards formidable, teachers of Science may incessantly monitor students' satisfaction and gratification in their quest for knowledge and in their desire to come up with competencies relative to Science;

and

3. Teachers may always resort to motivation, provide challenging activities, and monitor students' success in school work.

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Development and Validation of Learning Material in Statistics and Probability

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Abstract

This study sought to develop a learning material in Statistics and Probability. It was conducted and involved by Education Program Supervisor in Mathematics, Chief of Curriculum Implementation Division, and Senior High School teachers teaching Mathematics of five mega schools and five non-mega schools of Schools Division Office I Pangasinan. The main instrument of the study was based from the existing learning material used in teaching Statistics and Probability. The data were collated and analyzed using frequency and percentage for profiling, average weighted mean on the computing the levels of data, chi-square for significant relationship where nominal data is involved, and comparing means for significant difference of the data. Based from the findings and results of the study, the researcher concluded that there are existing learning materials used by teachers in teaching Statistics and Probability but are not adequate and relevant. Also, the perception of mega and non-mega schools on the adequacy of the existing learning materials in Statistics and Probability has no difference. Therefore, there is a need to develop learning material to be used in teaching Statistics and Probability learners. The proposed learning material in Statistics and Probability was validated as very acceptable by the Schools Division officials, Mathematics teachers of mega and non-mega schools in SDOI Pangasinan across all criteria.

Keywords: Development, Validation, Learning Material, Statistics, Probability

INTRODUCTION

Teachers, as the primary molders of young people play one of the biggest roles in the development of the country's future, a role, next in importance to that of parents [1][2]. This is a responsibility, for in the hands of teachers lie the future of the students. From the guiding hands of teachers emerge the great achievers in all fields of human endeavor. The teacher is the most important figure in the classroom who is someone can effect change or learning because he or she is an expert in what he or she teaches, and in how he or she teaches.

In its desire to provide equity in access and quality education to all citizens, the Department of Education has implemented various ways to attain its vision, mission, goals, and objectives. The enactment for example of RA 9155 otherwise known as the Governance of Basic Education Act of 2001 mandated every sector of the educational system to implement reforms and ensure the schools' continuous improvement of learning outcomes all over the country. Added to this is the implementation of the K to 12 reform program whose objective is to produce graduates in the basic education who are equipped with the 21st century skills needed for productivity and global competitiveness [3]-[5].

Part of the program is making the curriculum relevant to learners through contextualization and enhancement. Activities, songs, poems, stories, and illustrations are based on local culture, history, and reality to make the lessons relevant to the learners and easy to understand. Students acquire in-depth knowledge, skills, values, and attitudes through continuity and consistency across all levels and subjects [6]-[10].

According to Right (2018), instructional material is a generic term used to describe the resources teachers use to deliver instruction [11]. Teaching materials can support student learning and increase student's success [12]. Ideally, the teaching materials will be tailored to the content in which they are being used, to the students in whose class they are being used, and the teacher who will utilize them. They come in many shapes and sizes, but they all have in common the ability to support student learning [13]. These materials are important because they can significantly increase student achievement by supporting student learning. Regardless of what kind, all have some functions in student learning. Interestingly, these materials add important structure to lesson planning and delivery of instruction, particularly in lower grades. Learning materials act as a guide for both the teacher and the student. They can provide a valuable routine. In addition to supporting learning more generally, learning materials

can assist teachers in an important professional duty: the differentiation of instruction [14]-[17]. Differentiation of instruction is the tailoring of lessons and instruction to the different learning styles and capacities within the classroom. Learning materials such as worksheets, group activity instructions, games, or homework/assignments all allow to modify assignments to best activate each individual student's learning style [18]-[20].

It is important for educators to adopt instructional design techniques to attain higher achievement rates in especially in mathematics [21]. Considering students' needs and comprehension of higher-order mathematical knowledge, instructional design provides a systematic process and a framework for analytically planning, developing, and adapting mathematics instruction. Based from the study, results revealed that instructional strategies and methods, teacher competency in math education, and motivation or concentration were the three most influential factors that should be considered in the design decisions [22].

Moreover, according to Camara (2016), a good learning material should be self-contained, self-pacing, and motivating. Also, its subject matter should be well-defined and short enough and should provide opportunities for learners to interact. The objectives and activities of a learning material should be properly sequenced, accurate, written in clear and correct language suitable to the level of the learners, and utilized every opportunity to achieve the learning outcomes of learning [23].

Factors contributing to poor performance include under staffing, inadequate teaching/ learning materials, lack of motivation and poor attitudes by both teachers and students, retrogressive practices. Improving on these factors and sensitization of the local community to discard practices which prohibit student's effective participation in learning mathematics could improve performance in Mathematics [24][25].

The need today is for effective study of the actual teaching and learning situations. The students must be given more time and appropriate learning tools to master thoroughly concepts of subject matter especially in Mathematics. With the innovation seen every day, the mission of the teacher still remains the same: to educate the youth and provide them the abilities and skills to become capable, literate and productive citizen. With the new and ever-changing technology, it is still generally believed that no machine can ever take the place of a human brain, thus a teacher is always in the position to provide and to meet the needs of his or her students.

OBJECTIVES OF THE STUDY

This study sought to develop and validate a learning material in Statistics and Probability.

Specifically, it sought to answer the following sub-problems:

1. How adequate and relevant are the existing instructional materials in Statistics and Probability in the mega and non-mega Senior High Schools in Schools Division Office I Pangasinan?
2. Is there significant difference between the perception of the mega and non-mega schools?
3. What innovative learning material in Statistics and Probability can be developed to address the need of Senior High School learners?
4. How acceptable is the proposed innovative learning material based on the following criteria?
    a. Objectives
    b. Contents
    c. Clarity

MATERIALS AND METHODS

Respondents of the Study

The respondents of this study include 24 and 16 Senior High School teachers teaching Mathematics in mega Schools and non-mega schools respectively in Schools Division Office I Pangasinan. This study also includes the evaluation of officials of the division such as the Chief of the Curriculum Implementation Division and Education Program Supervisor of Mathematics. Table 1 and 2 show the distribution of respondents of this study according to the classification of schools.

Instrumentation

The validated questionnaires were the main data gathering of this study.

The researcher used two sets of questionnaires. The first one is used to validate the adequacy and relevance of existing learning material used in teaching Statistics and Probability. The second set is used for the validation of the acceptability as perceived by the respondents of proposed learning material formulated by the researcher.

Data-gathering Procedure

To gather the data needed, the researcher sought the approval of the Schools Division Superintendent of Schools Division Office I Pangasinan to administer the questionnaires and then asked permission to respective school heads of target schools.

The researcher personally administered and retrieved said questionnaires to the target respondents.

Statistical Treatment

The data were all encoded and analyzed in SPSS 20. Frequencies, percentages, and independent sample t-test were utilized in the study. Please take note that tables are deleted from this full issue – tables are found in the original article.

RESULTS AND DISCUSSION

This section discusses the presentation of the data gathered, their analysis and interpretation to answer the sub-problems raised in this study.

Table 3 and 4 show answers sub-problem number 1, asking how adequate and relevant are the existing learning materials in Statistics and Probability in the mega and non-mega Senior High Schools in Schools Division Office I Pangasinan.

Table 3: Adequacy of Existing Learning Materials in Statistics and Probability of Mega Schools

Table 4: Adequacy of Existing Learning Materials in Statistics and Probability of Non-Mega Schools

Based on findings, 2 out of 24 mathematics teachers in mega schools are using text book as learner's material in teaching Statistics and Probability but finds its fairly available; 1 out of 24 mathematics teachers in mega schools is using other materials in Statistics and Probability and finds it fairly available; and 2 out of 16 mathematics teachers in non-mega schools are using text book in teaching the subject and finds it is fairly available.

Table 5 displays the answers to the sub-problem 2 which is on the significant difference between mega and non-mega schools in terms of adequacy of the existing learning material in teaching Statistics and probability.

The result using t-test revealed that there is no significant difference on the perception of mega and non-mega schools in terms of the adequacy and relevance of learning material used in teaching Statistics and Probability.

Table 5: Difference of Perception of Mega and Non-Mega Schools on the Adequacy of Existing Learning Material in Statistics and Probability

The table 6 shows the result of relevance of existing learning materials in Statistics and Probability.

The result with a mean of 1.84 shows that the respondents do not agree that the existing learning materials which are textbooks and downloaded materials from internet are relevant in teaching Statistics and Probability

Table 6: Relevance of Existing Learning Materials in Statistics and Probability

The result in problem 1 where there is a very small number of schools that have a readily available learner's material and are not relevant in teaching the subject suggests that there is a need to develop learning material for the said subject. Furthermore, the result showed that none of the school makes use of Strategic Intervention Material and Course Book as a learner's material thus there is a need to develop such material for the use of the students.

Table 7 to 10 on the next page answer the sub-problem number 4 which is how acceptable is the proposed learning materials in Statistics and Probability base on the following criteria: a. objectives; b. contents; and c. clarity.

The result shows that the proposed learning material is very acceptable when it comes to its objectives, contents, and clarity across mega, non-mega schools and officials of Schools Division Office I Pangasinan. The results satisfied Camara (2016) and Funa & Ricafort (2019) claim that a learning material should include objectives which are described to be specific, measurable, attainable, reliable, and time-bound. A learning material should contain activities which are manageable, logically, and properly sequenced, and useful in helping learners to understand and apply concepts in the subject area and evaluation which can reinforce learners' mastery of concepts and reflects behavioral objectives in each activity. Moreover, the use of language which is clear and the discussion for each lesson is simple enough [23][26].

Table 7: Acceptability of Proposed Learning Material in Statistics and Probability (Mega Schools)

Table 8: Acceptability of Proposed Learning Material in Statistics and Probability (Non-Mega Schools)

Table 9: Acceptability of Proposed Learning Material in Statistics and Probability (Division Officials

Table 10: Acceptability of Proposed Learning Material in Statistics and Probability (Overall)

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Development of Standardized Module Template for Outcomes-Based Teaching and Flexible Learning in HEI

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ABSTRACT

The main purpose of the study was to design a collaborative module based on the requirement of the Commission on Higher Education (CHED) on outcomes-based teaching and flexible learning due to the emerging issues on pandemic that started this year all over the world. Because of this unresolved global issue, most tertiary levels resorted to flexible learning as an alternative mode of face-to-face classroom. Admittedly, not all colleges and universities could afford the flexible learning environment, however, one of the solutions is to come up with a collaborative module that will continuously sustain and maintain the teaching and learning process. To achieve this objective, the researcher used the qualitative approach and documentary analysis to review and assess the document's points and arguments in developing a module applicable in HEI's, to determine the various phases of module development, to enumerate the personnel involved in writing modules, and to identify the process of dissemination and distribution. It was found out that there were no modules developed in the past in college under study. Thus, this proposed module will lead to an easy monitoring of instruction, aligned Intended Learning Outcomes (ILO's), Teaching and Learning Activities (TLA), and Assessment Tasks (AT's). It was found that the college under study could employ the standardized module template for development of various courses. This study implies that the presence of collaborative course modules in HEI's encourage teachers and students to improve the flexible learning system, the strategies of teaching, and the impact on student learning development. The researcher recommends that the standardized module could be utilized in other colleges and universities for future collaboration and professional development.

Keyword:

teaching-learning process, documentary analysis, documents, instructional designs, Outcomes-based Education, Curriculum Development

Introduction

In the next academic year, the HEIs are now promoting the use of flexible learning, as suggested by the Higher Education Commission (CHED). It is one way for students to pursue their studies amid the unresolved global pandemic problem as the academic school year is about to start. Numerous educational institutions in Region IV-A have suspended their academic activities and classes because of the COVID-19 threat. All non-teaching workers had to stop working and have been told by the Philippine President to remain at home. COVID-19 is a disease that can quickly damage the immune system which can cause massive damage to infected persons [1].

To resolve the issue on how the teaching and learning process would be beneficial to learners, the researcher was tasked to develop a standardized module template for outcomes-based teaching and flexible learning in higher education. This module template would enable both the beginning and experienced teachers in highlighting their skills in creating their lessons. Pollard, et.al. [2] argued that there are common problems experienced by beginning teachers that include not knowing what to do when, having given an explanation, the students do not understand, other than repeating the same explanation; not knowing how to cope with students at different rates, ranging from those who finish early to those making little progress; not knowing which curriculum elements require more attention and emphasis in teaching; and not knowing what to do with students they cannot control. In this module template, new teachers could not possibly encounter this problem because the design was easy to follow. Teachers' creativity and skills of experienced teachers may have the opportunity to guide the new teachers in writing the module. Quality learning and teaching is also interdependent and interrelated. The researcher believes that a teacher should always be successful in movement, thus emphasizing pedagogical skills as they are crucial among the qualifications, competence, and adequacy of college teachers.

Teaching fosters accomplishment rewarding service. Proposing a standardized module is an offshoot of the institution's reflection as teachers to improve the situation in times of pandemic or other emergencies in order to improve teaching standards. Students are engaged in their studies because there is a guide, a reference that gives them some information during exams, and insights into successive advanced study lessons. Since there were no empirical studies related to this study, the researcher would like to create a module template for all courses that will prepare the curricula aligned with the requirements set by the OBE Higher Education

Commission in different disciplines. A teacher can also make a difference by developing and re-creating ideas such as using successful classroom instructional designs, structured and scheduled lessons, and an engaging teaching using the guide. The proposed structured course module would enhance the teaching and learning process in the classroom, and strengthens it. Designing the module template is never a simple job, however, a teacher should always find the most important knowledge students should be able to know and remember, the most important concepts students should understand and the most important skills students should acquire in a course.

This research delves into the development of a standardized module template intended for outcomes-based teaching and flexible learning. It highlighted the framework, the major roles of personnel involved in the processes of preparation, development, review, dissemination, and implementation. Kyriacou [3] argues that effective teaching skills require knowledge, decision-making and action crucially. It is critically relevant because skillful teaching is as much a thought-provoking practice as measurable behavior. Developing your skills as a teacher involves both the development and expansion of your knowledge and the decision you make in a particular situation, as well as the successful implementation of the observable action [3]. This study indicates that a teacher should possess teaching skills in developing a standardized and collaborative module for outcomes-based teaching and flexible learning.

The growth of the writing ability of students depends on the teaching strategy of the teacher and the materials used in the lesson for writing are also used. In the present research, the efficacy of a module for creative writing [4]. In the United States in public instruction, they consider the module as techniques techniques for the creation of powerful essays and provide examples of activities using the three-domain rubric of Virginia: composing; written expression; mechanics and use [5].

OBJECTIVES OF THE STUDY

The purpose of the study was to develop a standardized course module template that will facilitate the teaching and learning process by reviewing and assessing some documents, points and arguments in developing a module that is applicable in HEI's. The study highlighted the different phases of the module development, major roles of personnel involved in the planning, development, review and verification, dissemination and distribution process.

MATERIALS AND METHODS

Research Design

In creating a course module design, the researcher used the qualitative method and documentary analysis to analyze and assess the topics, principles, and claims of the paper. The Constructive Alignment as used as an instructional design model in constructing the module template 's content phases.

This research was restricted only to the proposed module creation which may be suggested in other higher learning schools or institutions in the Philippines for collaboration and professional development purposes.

Sampling Procedure and Participants

The researcher would like to highlight the importance of a standardized development of the module in one private Philippine institution. Some studies were scrutinized as the basis for content theories, but no studies on the course module development proposal had been conducted. Hence the researcher uses some literature to analyse the different theoretical constructs. These theories concerned only the intended learning outcomes and these were evaluated and summarized. An original plan or framework has been developed which will be uniform and consistent with all courses offered at the institution being studied. This module framework has been established which will be considered as its template in the production of the course modules in all discipline areas. The researcher had enumerated some personnel's different responsibilities in the stages of preparation, development, review, and dissemination.

Instrument

Given that this research uses qualitative approach and documentary analysis as its tool to analyze the theories, no instrument has been used to validate the theories. However, this has been easily improved and finalized through a series of meetings and deliberations with the Quality Management System (QMS) and the top management that reviewed the module template. Finally, this was also cascaded into the meeting of the Dean 's Council to ensure that the template was ready for use and dissemination to their own schools.

Data Collection

QMS review series was conducted to discuss the course module development process and brainstorm on it. A further meeting was also held in the Academic Council to disseminate the module template 's content phases as the basis for beginning the summer AY-2020-2021 module writing.

Data Analysis Framework

The researcher developed a process for developing the standardized module template with the following developmental stages: preparation, development, review, and dissemination. In the meetings, the stages were carefully discussed and agreed by the body.

Underpinning Theories

The researcher found that module creation is only a part of Outcome-based Education which is also the current curriculum promoted by the Higher Education Commission (CHED). Dr. William Spady [4], OBE 's father, proposed three fundamental assumptions: all learners can learn and succeed; success promotes success and the conditions of success are governed by "teaching institutions." The OBE focuses on what the learners will understand which is contrary to conventional planning of education [4].

Tam [5] mentioned in his study that the OBE should be applied to achieve quality assessment and improvement of the curriculum, because this nowadays fully responds to the educational problem. Teachers will switch from a teacher-centric instruction model to a student-centred model. In this paradigm shift of educational practice, the students should be the learning focus. In the institution under study, the creation of module template was recommended by the QMS as an adaptation to this concept.

Constructivism Theory

Development of Course Module Template

There have never been any empirical studies regarding course module development, but the researcher has found some literatures related to the reasons and importance of course modules.

Old literatures [7] which explain surface theories and deep learning approaches are found to be successful and beneficial in the creation of modules. In this method, the course module creator will think of the two types of students in his / her class: (1)

the surface approach of learners are those students who need encouragement before they can do something, and (2) the students who do not need to be motivated before performing a task are the deep approach of the learners. However, turning our students into "deep learners" who have a genuine ability to grasp the deep learning level, is challenging. She should reflect on what kind of teacher she is on the part of the teacher. Is she a teacher of surface approach, or a teacher of profound approach? To become deep learners, it takes time. Just as when we have healthy, great, and the best classroom students, if we improve ourselves, we can turn them to this level that is. If we strive to use our imaginative and critical thinking abilities, problem-solving and decision-making skills and communication and persuasion skills within the classroom, we will have productive learners.

Squires [8] believes an integrated curriculum should be balanced between student learning, teaching, and assessment. This is like the positive alignment principle that ILO should be vertically compatible with TLA and Evaluations, too. The Philippine education standards are based on the CHED and supplemented by other regulatory bodies such as PACUCOA and the ISO guidelines. However, there is only one reason to strengthen the instruction and the "constructive alignment" theory supports that. Apart from this transition, teachers tend to pursue their higher education degrees through conferences and paper presentations, such as postgraduate studies, creating modules and working with other professionals.

Responsibilities of Personnel in Module Development

The Management such as the President, Vice-President for Academic Affairs, Vice President for Administration are responsible for the budget approval of the module development. They are also responsible for monitoring the progress of every school. The Budget Officer is responsible for the preparation of the budget. The Dean is responsible for assigning the authors/module developers for every course. He/she shall be responsible for the review and approval of the module in his/her school. He/she shall monitor the progress of module writing in his/her school. The Program Head is responsible for the verification of the standards used in every module. The Author/Module Developer is the one responsible for writing the module based on his/her experience and expertise. He/she should make sure that the information is correct, the ILO's are met, and the references used are the latest editions of books, e-

books, journals, and other materials. The IT Personnel are responsible for uploading the modules in the Learning Management System.

5.3. Stages of Development of Standardized Module Template

Flowchart	Responsible Person	Process Description
PLANNING	Dean/HRD	The Dean identifies the courses for modularization. He/she assigns the author/module developer who is also called the SMEs to be approved by the HRD. The HRD makes prepares the appointments to the SMEs.
DEVELOPMENT	Subject Matter Expert	The SMEs work collaboratively with the dean and program head in writing the module.
REVIEW AND VERIFICATION	Program Head / SME	The Program Head verifies the content of the module as to whether the standards and other statutory requirements have been met. The Dean approves the module.
APPROVAL	Dean	The Dean monitors the progress of the project through the Program Head. Once reviewed and verified by the program head, this will be approved by the dean.
DISSEMINATION AND DISTRIBUTION	VPAA/School	The VPAA will finally check the whole module before it will be disseminated and distributed. The IT personnel assist in the dissemination of the modules via online.

5.4 The Results of the Framework and Discussion

The following are the results of the framework after a thorough study and deliberation of its content sections:

5.4.1. What I need to know: It tells about the purpose of the module, the main sections of the lesson, and the Intended Learning Outcomes of the course.

5.4.2. Instruction Flow: It is the flow of the lesson per week. It is expected that students already know what to produce or expect in every hour.

5.4.3. What I already Know: In this course, students will be given a Pre-Test to define their strengths and weaknesses. This could be easily detected when the outcomes are reviewed, and it could be the basis for enhancing student learning in the future too.

5.4.4. Lesson Proper: The details of the lesson, ILO's, and the phases of the study are found in this section. Such phases include the following:

The Introduction includes the lesson starter, review, and motivation of the lesson as necessary. As much as possible, the teacher and student interaction should be obviously seen in this part. There should be a review of the past lesson and a brief motivation related to the new topic. The module developer can freely introduce the topic covering the basic tenet of the lessons, including a summary of the past lesson to link to the present one while simultaneously motivating the students. The Presentation asks the question, "What is the lesson all about?" The teacher presents the content/discussion/concept in this box. The presentation can be in the form of a PPT, links, summarized handouts, or a content of a lesson to be pasted in this box. This should be an original composition of the developer to easily understand the content of the lesson. The presentation provides an important theoretical framework required to achieve the ILOs, while the questions/analysis are guide learning questions so that the learners can examine how these chunks of knowledge are connected and essential for understanding the lesson. T

he development is the part wherein the teacher could possibly add or simplify the lesson to in a form of another question or additional salient points for easy understanding. The Assessment: Assessment is an integral part of teaching, and is characterized operationally as evaluating understanding after giving a particular lesson to the student to learn. There may be questions in this lesson, sequence of exercises,

Multiple Choice quiz, etc. Students will be given self-check activities. They could also collaborate with their classmates. (They try to coordinate/collaborate with their friend, for instance). Activities may vary from one course to another. It could be more than one activity for a particular lesson. S-S interaction is encouraged. Instruction" refers to the direction or guide for the students to do the activity. After giving them the lecture, they may be given some tasks to do and analyse results immediately. The author may also provide additional readings based on other acknowledged sources. It might be another link in a textbook or reference material, or an article. The Reflection is more of a student task wherein he/she needs to reflect on his/her learning in this particular topic. A teacher may also provide one question for the students to reflect on. The student may write his/her answer in the box provided in this section.

The Generalization is the task of students who should attempt to make their thematic generalizations/abstractions. A problem will drive this by giving them a guide question. The Reinforcement is the task of students that will provide them another opportunity to practice through another exercise or drills that will enhance the teaching and learning process. The Summary is the task of students to summarize the main points the lesson. Moving Forward is the author/module developer's additional 5-10 questions related to the board exam. An answer key should be provided at the back of their module. This is only applicable for those programs which have board examinations. The Pre-Test and Post-Test are the assessments that will be given to all learners before and after learning the course module. The Appendices may include the following: glossary, suggested readings, answer key, grading rubric, components of class standing, etc. This depends on the requirement of the course. The References shall meet the guidelines of the APA 6th edition, which should be of the latest editions.

In order for the module developers to create their collaborative module for outcomes-based teaching and flexible learning, as effective teachers, there are some reminders which need to focus on which include the following:

- ✓ The use of advance organizers: An advance organizer is a device used to present the content of the lesson and to explain the relationship between what the students are learning and the knowledge they have learned. It could be a reminder of what they have known previously.
- ✓ The use of conceptual models: Aquino [9] defines conceptual models are any of the mental systems we invented to make our lessons understandable. Students should first develop their mental models before any instruction takes place.

- ✓ Chunking: Explains chunking as the method of splitting a whole concept into components that are small and workable [9].
- ✓ Questioning: Effective Questioning helps the students to engage with each other and with their work. Helps students think loudly. Facilitate learning through open discussion. Enables students to feel comfortable in their ideas. Improves the ability to speak and to listen. Builds expertise in critical thinking. Giving the students guide questions will enable them to organize their thoughts of information.
- ✓ Use of mnemonic devices: A structure like a sequence of letters, thoughts, or connections that helps to remember something.
- ✓ Use of constant reminders, reviews, and activities will help enhance student learning.
- ✓ Provide reflections: Teachers are required to indicate a change of tone when they tell students to reflect on their learning. Reflective teachers help students understand that the students are now looking back instead of moving forward. Some even ask for silent thought process before students write about a lesson, a task, or whatever other task in the module.
- ✓ The use of rubrics: The rubric, also known as the Standard for Scoring or Marking, is a text describing in depth how students work areas assessed [10], or put it another way, this explains how the instructor measured the student's success level to show the achievement of acceptable expected learning outcomes.

Impact on Student Learning

Examining certain views of the TL process, teaching is considered an activity of profession. Biggs and Tang[7] mentioned that good teaching supports activities in the classroom that lead to the achievement of the ILO as in constructive alignment. We need to dwell on these questions as an educator: (1) What did I do? (2) What does all the things that I did affect? (3) How can I make improvements to what I did? We have to focus on improving our teaching practices. Therefore, the creation of course manual is one way of showing our dedication and commitment by the department or administration to teach the assigned course. So the main goal of a teacher is always to improve the TL operation. Documenting what we do in the classroom and reflecting on how things are done in the classroom will encourage us to improve our strategies and methodologies which may impact the development of student learning. The course manual serves not only as a guide for teachers and administrators but also for students

to browse on. It also represents a substantial expression of what students should know and do, and also supports teachers in knowing how to accomplish these objectives.

CONCLUSION

Higher education should be aligned with higher learning efficiency, expectations, learning at all levels of all forms, and assessment of research approach to reflective inquiry. There is a need to approve, embrace and endorse the development of the course module within the practice of the college under study for effective learning outcomes. The study implies learning is facilitated by having a course guide at an institution. An improved teaching practice may result in proper documentation on student learning outcomes, teaching and learning activities, and assessment. However, this study was limited only to CHED's advocated development of the standardized module framework based on OBE. The researcher recommends that the all courses should be modularized which other institutions of higher learning could possibly also use. Finally, the researcher also recommends that a future study on the use and impact of modular courses which could be carried out to find out whether the modules have a positive impact in the academic world.

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