

VOLUME 5 No. 2
JUNE 2019

ISSN 2546-0110

GLOBAL *Researchers* JOURNAL



GLOBAL *Researchers*
ASSOCIATION AND CONVERGENCE FOR EXCELLENCE (GRACE), INC



GLOBAL *Researchers*

Association and Convergence for Excellence (GRACE) Inc.

SEC REG. NO. CN201616169

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GLOBAL RESEARCHERS JOURNAL

Volume 5, No. 2, June 2019

*A national-refereed Journal published
quarterly by the
Global Researchers Association and
Convergence for Excellence
(GRACE) Inc.*

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TRAINING NEEDS ASSESSMENT OF CANDIJAY BARANGAY OFFICIALS ON COMPUTER LITERACY

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ABSTRACT

Being the basic political unit, the barangay serves as the primary planning and implementing unit of government policies, plans, programs, projects and activities in the community. In this modern age, such functions of barangay officials can be made more efficient with the use of modern technologies such as computers. However, not all barangay officials have the inherent capability to use computers. Thus, this study aims to assess their training needs through a self-assessment survey and documentary analysis.

Keywords: barangay; barangay records management; computer literacy

INTRODUCTION

Governance deals with the structure and dynamics of rule-making and collective action in society. However, processes of governance do not necessarily reside solely within the sphere of state action and authority. Governance could be seen in broad terms as a system for steering and coordinating collective action [1]. However, the realm of public action transcends notions of public delivery and state-led changes.

Meanwhile, governance of the smallest organized community in the country – the barangays – entails a number of functions in and out of the barangay halls. Its functions include ensuring peace and order in the community, barangay processing different types of documentations concerning its constituents [2], keeping track of records of people, businesses and activities within its jurisdiction [3], and the like. The use of information technology (IT) is deemed crucial in operations and activities of barangays.

The introduction of IT in the public sector is expected to simplify the complex and bureaucratic procedures usually associated with public sector. As the various departments attempt to implement IT, the government officials need to keep up with the rapid changes in IT, and adopt a mind shift from the conventional method to a new way of thinking and doing things.

Specifically, as contained in the Local Government Code, the barangays must be equipped with the necessary competencies which are necessary in the provision of basic technical and physical facilities. Since the enactment of Local Government Code of the Philippines, various capacity building efforts from the national government, consulting and training organizations have resulted to a number of tangible improvements in the manner the barangays manage their local affairs [4]. However, despite these efforts, there has been no clear measure of the level of capacities of the barangays and on how they apply these capacities, especially on the computer literacy aspect. Therefore, there is a need to examine the training needs of barangay officials in terms of computer literacy which would serve as a benchmark in designing computer literacy trainings for the said officials.

REVIEW OF RELATED LITERATURE

The term local government generally refers to the lower level of the political structure. It is a political subdivision constituted by law to oversee the conduct of local affairs. The local government units perform vital functions in national development. Under the partnership concept and with the devolutions of functions already in place, LGUs are no longer mere implementers of policies and administrative fiat emanating from national authorities. They are now viewed as the chief prosecutor of economic and social development at the local levels [4]. The barangay, which is the focus of this study, is the basic political unit which serves as the primary planning and implementing unit of government policies.

With this crucial function given to barangay officials, training is an important part as it helps in the enhancement of skills and efficiency of people in the organization. However, before the conduct of every training, Brown emphasized that training needs assessment plays a vital role in developing an effective training program. Training needs assessment is an ongoing process of gathering data to determine what training needs exist so that training can be developed to help the organization accomplish its objectives. It was also pointed out that conducting a training without conducting first a needs analysis runs the risk of overdoing training, doing too little training, or missing the point completely [5].

Training needs assessment has three levels. The first level of training needs assessment is the organizational assessment. In this level, skills, knowledge and abilities that a company needs to meet its strategic objectives are determined. The second level is occupational (task) assessment. Specific tasks, skills knowledge, and abilities required to do jobs within the organization are looked into. Lastly, individual assessment looks at the performance of an individual employee and determines what training should be accomplished for that individual [6].

In this study, the said three levels of training needs will be conducted in the barangays of Candijay town. However, this assessment will focus more on the aspect of computer literacy. Specifically, this study aims to answer the following questions:

1. What are the organizational objectives of barangays in the Philippines?
2. What computer operations are needed in accomplishing daily tasks of barangay officials?
3. What are the skills and knowledge required to accomplish the said tasks?
4. What is the demographic profile of barangay officials of Candijay in terms of:
 - a. sex; and
 - b. age?
5. What is the frequency of computer usage of barangay officials?
6. What is the level of computer literacy of barangay officials in terms of:
 - a. a. Basic Computer Concepts;
 - b. b. Word Processing;
 - c. c. Spreadsheets; and
 - d. d. Presentation?

METHODOLOGY

Qualitative and quantitative research were employed in this study, through a documentary analysis and training needs assessment survey respectively. The documentary analysis aimed to accomplish the first and second level of training needs assessment which are organizational and occupational assessment. On the other hand, the survey aimed to answer the individual needs of barangay officials. The survey is also supported with follow-up interviews in order to validate its results. Further, the first part of the survey contained details on the demographic profile barangay officials while the second part asked information on how they assessed their knowledge about some computer concepts necessary in office operations.

Only barangay officials who are mandated to process transactions in the barangay that need computer will become the target population of the survey. The basis will be the roles of each barangay official as stated in the Local Government Code. The proponents decided to survey fifty percent (50%) of the entire population which is greater than the rule of thumb which is thirty percent (30%). Simple random sampling was used to identify the samples for this study. For the analyses of results, descriptive statistics were used to get general knowledge on the status of computer literacy of barangay officials.

RESULTS

1. *Organizational Needs Assessment*

In order to accomplish the first level of training needs assessment, skills, knowledge and abilities needed for a barangay official were determined. Based from the duties and responsibilities of barangay officials, as written in the Local Government Code of the Philippines [7], the Punong Barangay, Secretary and Treasurer are the barangay officials who need computer in exercising their role in the barangay.

For the Punong Barangay, the following responsibility were more efficiently performed using a computer: (a) Negotiate, enter into, and sign contracts for and in behalf of the Barangay, upon authorization of the Sangguniang Barangay; and (b) Punong Barangay shall in coordination with the Barangay development council, prepare the annual executive and supplemental budgets of the Barangay. Firstly, in negotiating and signing contracts, a computer is needed in order to document the terms of the contract and to communicate with agencies/private establishments that the barangay wish to work with. Secondly, preparation of budgets of the Barangay can also be easily done in a computer, specifically, in a spreadsheet program.

On the other hand, almost all of the responsibilities and duties of a Barangay Secretary need a computer. This include the following: (a) Keep custody of all records of the Sangguniang Barangay and the Barangay assembly meetings; (b) Prepare and keep the minutes of all meetings of the Sangguniang Barangay and the Barangay assembly; (c) Prepare a list of members of the Barangay assembly, and have the same posted in conspicuous places within the Barangay; (d) Assist in the preparation of all necessary forms for the conduct of Barangay elections, initiatives, referenda or plebiscites, in coordination with the Comelec; (e) Assist the municipal civil registrar in the registration of births, deaths, and marriages; (f) Keep an updated record of all inhabitants of the Barangay containing the following items of information: name, address, place and date of birth, sex, civil status, citizenship, occupation, and such other items of information as may be prescribed by law or ordinances; and (g) Submit a report on the actual number of Barangay residents as often as may be required by the Sangguniang Barangay.

As for the Barangay Treasurer, the following duties and responsibilities can be more effectively performed using a computer: (a) Keep custody of Barangay funds and properties; (b) Collect and issue official receipts for taxes, fees, contributions, monies, materials, and all other resources accruing to the Barangay treasury and deposit the same in the account of the Barangay as provided under Title Five, Book II of this Code; (c) Disburse funds in accordance with the financial procedures provided in this Code; (d) Submit to the Punong Barangay a statement covering the actual and estimates of income and expenditures for the preceding and ensuing calendar years, respectively; and (e) Render a written accounting report of all Barangay funds and property under his custody at the end of each calendar year, and ensure that such report shall be made available to the members of the Barangay assembly and other government agencies concerned.

2. *Occupational Needs Assessment*

To accomplish the second level of training needs assessment, specific tasks, skills, knowledge and abilities required for the duties and responsibilities of barangay officials were determined.

In terms of the duties and responsibilities of Punong Barangay, skills and knowledge in word processing application were important to prepare contracts while skills and knowledge in spreadsheets are needed in preparing annual budgets. Similarly, skills and knowledge in word processing, spreadsheets and presentation applications were necessary for the duties and responsibilities of Secretary such as submission of different reports and keeping of different records of the barangay. On the other hand, majority of the duties and responsibilities of the Treasurer require skills and knowledge in spreadsheets since these are focused on accounting of funds and expenses of the barangay.

Generally, the barangay officials mentioned also need to know basic computer concepts before they could efficiently use word processing, spreadsheet and presentation applications. These concepts range from turning the computer on/off to selecting appropriate software and file type for a specific task.

3. Demographic Profile of Respondents

Table 1 shows the demographic profile of respondents. 61% of the respondents are female, while 38.2% are male. This information confirms that Punong Barangay, Secretary and Treasurer of barangays are female-dominated.

41.2% of the respondents are between the ages 48-57, while 38.2% of the respondents are between ages 28-47. Senior citizens with ages 58-67, who comprise 17.6% of the respondents, are also employed in the barangays while only 2.9% is being composed of officials aged 27 years old and below. This composition of barangay officials is also similar with other barangays in the Philippines [2].

Table 1. Demographic Profile of Respondents

Sex	Frequency	Percent
Female	21	61.8%
Male	13	38.2%
Total	34	100.0%
Age Group	Frequency	Percent
27 and below	1	2.9%
28-47	13	38.2%
48-57	14	41.2%
58 and above	6	17.6%
Total	34	100.0%

4. Frequency of Computer Usage

Table 2. Frequency of Computer Usage

Position		Frequency	Percent	General Weighted Mean	Descriptive Value
Punong Barangay	Never	7	70.0	1.6	Never
	Weekly	3	30.0		
	Total	10	100.0		
Secretary	Never	2	15.4	2.69	Weekly
	Monthly	3	23.1		
	Weekly	5	38.5		
	Daily	3	23.1		
	Total	13	100.0		
Treasurer	Never	4	36.4	2.18	Monthly
	Monthly	4	36.4		
	Daily	3	27.3		
	Total	11	100.0		

Legend:
 1.0-1.75 – Never 2.6-3.25 – Weekly
 1.76-2.50 – Monthly 3.25-4.0 – Daily

For the level of computer usage, the respondents were grouped according to their positions. Table 2 shows the frequency of computer usage of respondents. In terms of the computer usage Punong Barangays, only 30% use computer weekly while the remaining 70% do not use computer. Generally, Punong

Barangays **Never** use computer in exercising their duties and responsibilities. This is because most of the clerical works are given to their secretaries. These tasks include typing handwritten contracts and other documents. As for the Secretaries, there are 38.5% who use computer **Weekly**, while there are 23.1% who use it **Daily**. Similarly, 23.1% also are using computer **Monthly**, while 15.4 **Never** use computer. In general, secretaries use computer in performing their tasks **Weekly**. Based from the follow-up interview conducted, secretaries who never use computer either choose to keep records manually or ask other people (i.e. daughter, treasurer or wife) process documents in a computer. Some would also choose not to use computer because of some limitations like faulty monitor and limited number of computer in the barangay hall. In terms of the computer usage of Treasurers, 36.4% reported that they never use computer, the other 36.4% also reported that they use computer monthly. Lastly, the remaining 27.3% reported that they use computer **Daily**. The general weighted mean of 2.18 shows that treasurers generally use computer **Monthly**. Treasurers who reported that they **Never** use computer explained that they only give handwritten reports of accounting to their secretaries and the latter would enter the report into the computer.

5. Level of Computer Literacy in Terms of Basic Computer Operations

Table 3. Level of Computer Literacy in Terms of Basic Computer Operations

Basic Computer Operations	Mean	Std. Deviation	Descriptive Value
1. Keyboard operations.	2.2647	1.33278	NH
2. Mouse operations.	2.3235	1.24853	NH
3. Track pad operations.	2.2941	1.21927	D
4. Turn on computer and launch/run specific programs.	2.5294	1.30814	D
5. Exit/quit an application and/or file and shutdown computer properly.	2.6471	1.36809	D
6. Navigate toolbars, windows, menus, submenus, tabs and dialog boxes.	2.3235	1.22402	NH
7. Select appropriate software (word processor, presentation, browser, database, spreadsheet, etc.) for the task.	1.9412	1.07142	NH
8. Insert and eject CD-ROMs and USB drives properly.	2.0882	1.23993	NH
9. Identify components of Windows environment with correct terminology.	1.9706	1.08670	NH
10. Manipulate windows with minimize, restore, and maximize.	2.1176	1.27362	NH
11. Run more than one program simultaneously and navigate between multiple open windows.	1.8529	1.13170	NH
12. Identify file types .doc, .docx, .rtf, .pdf, .pptx.	1.8529	1.04830	NH
Composite Mean	2.18		NH

Legend:

1.0 - 1.75 – Not Confident at all (NC)

1.76 - 2.50 – Usually needs help (NH)

2.6 - 3.25 – Depends on the task (D)

3.25 - 4.0 – Confident (C)

In terms of basic computer knowledge, the respondents were asked on how confident they are in performing basic computer operations. As shown in Table 3, the respondents perceive that they usually need help in performing basic computer operations as shown in the composite mean 2.18. The item “Exit/quit an application and/or file and shutdown computer properly.” got the highest weighted mean with descriptive value **Depends on the task**. Most of the respondents reported that they usually get lost and were not able to quit applications when those applications were minimized. In contrast, the item “Run more than one program simultaneously and navigate between multiple open windows” got the lowest weighted mean 1.85 which is described as **Usually needs help**. This is because most of the respondents who use computers, usually utilize only one computer program or application which is the MS word.

6. Level of Computer Literacy in Terms of Word Processing

Since documentation was an integral part of any organization, the knowledge in using MS Word is necessary to barangay officials. Writing business letters, project proposals, contracts, Minutes of meetings are just some of the reportorial and documentary outputs that are expected from them.

Table 4. Level of Computer Literacy in Terms of Word Processing

Word Processing Operations	Mean	Std. Deviation	Descriptive Value
1. Type text and line break (Character Keys, Space Bar, Return/Enter key, and Word-Wrap)	2.1176	1.14851	NH
2. Edit text: Delete (Delete Key or Backspace Key) and Insert (Cut, Copy, and Paste)	2.1765	1.24245	NH
3. Create a new word processing document: Save, Print, and Reopen document.	2.3824	1.27955	NH
4. Format text (Bold, Italics, Underline, Alignment, Font Sizes, and Typeface)	2.1765	1.24245	NH
5. Apply Undo and Redo features.	2.2353	1.25671	NH
6. Format document (Margins, Orientation Headers, Footers, Page Numbering)	1.7353	.86371	NC
7. Format paragraph (Tab, Indent, Hanging Indent, and Line Spacing)	1.9412	1.09934	NH
Composite Mean	2.11		NH

Legend:

1.0-1.75 – Not Confident at all (NC) 2.6-3.25 – Depends on the task (D)
 1.76-2.50 – Usually needs help (NH) 3.25-4.0 – Confident (C)

Considering the knowledge of respondents on word processing, the respondents usually need help in performing specific operations in MS Word. The item “Create a new word processing document: Save, Print, and Reopen document.” got the highest weighted mean with descriptive value **Usually Needs Help**. However, the item “Format Document (Margins, Orientation Headers, Footers, Page Numbering)” got the lowest weighted mean of 1.7353 with descriptive value **Not Confident at all**. Based from the follow-up interviews, the respondents are used to the default setup of documents in MS Word. Thus, they would have a hard time when they need to change the orientation of their documents, paging and margins.

7. Level of Computer Literacy in Terms of Spreadsheets

MS Excel or spreadsheets applications were necessary for barangay officials in accounting processes and tracking records of various natures. When asked on how confident they are in using MS Excel, the respondents stated that they are not confident at all in executing spreadsheet operations. This was evident in the results of the survey which showed that every item in spreadsheet operations were rated as **Not Confident at all**. The respondents explained that they rely on templates which are given to them and only edit parts of those templates. Sometimes, they would even asked someone who are well-versed to use MS Word to help them prepare documents which they do not have template for.

Table 5. Level of Computer Literacy in Terms of Spreadsheet Operations

Spreadsheets Operations	Mean	Std. Deviation	Descriptive Value
1. Create a new spreadsheet, save, print, and reopen later.	1.7353	1.08177	NC
2. Enter, edit, and delete cell contents.	1.7353	1.08177	NC
3. Navigate within a spreadsheet.	1.6471	.94972	NC
4. Utilize AutoSum feature.	1.5000	.82572	NC
5. Use cell references in formulas.	1.4118	.70141	NC
6. Establish row and column headings for data.	1.5000	.89612	NC
7. Create graph or chart from Chart Wizard.	1.3824	.65202	NC
Composite Mean	1.56		NC

Legend:

1.0-1.75 – Not Confident at all (NC) 2.6-3.25 – Depends on the task (D)
 1.76-2.50 – Usually needs help (NH) 3.25-4.0 – Confident (C)

8. Level of Computer Literacy in Terms of Presentation

When presenting information during meetings with barangay officials, residents and stakeholders, presentation or PowerPoint applications were deemed very helpful. When asked on how confident they are in using MS PowerPoint, the respondents indicated that they are not confident at all in accomplishing

presentation operations in the computer. This was obvious in the results of the survey which showed that every item in presentation operations were weighed as **Not Confident at all**. According to the respondents, they do not usually used PowerPoint presentations because they have not been trained to use it. Mostly, during meetings with barangay officials, residents and stakeholders, they would just plainly discussed information without using visual aids.

Table 6. Level of Computer Literacy in Terms of Presentation Operations

Presentation Operations	Mean	Std. Deviation	Descriptive Value
1. Create New, Save, and Reopen presentation.	1.3235	.63821	NC
2. Add slide from Slide Layout.	1.3529	.73371	NC
3. Use Slide Design.	1.3235	.63821	NC
4. Switch between different views: Normal, Slide Show, Slide Sorter.	1.3235	.63821	NC
5. Advance through a presentation.	1.3235	.63821	NC
6. Add objects to slides (Clip Art, Picture, Movie or Sound).	1.2941	.57889	NC
7. Print presentation in various formats (Handouts, Notes, Outline or Slide).	1.3235	.63821	NC
Composite Mean	1.32		

Legend:

1.0-1.75 – Not Confident at all (NC) 2.6-3.25 – Depends on the task (D)
 1.76-2.50 – Usually needs help (NH) 3.25-4.0 – Confident (C)

CONCLUSIONS AND RECOMMENDATIONS

The first two levels of training needs assessment provided insights of the needed skills and abilities of barangay officials in the aspect of computer literacy. Thus, a training needs assessment survey was conducted specifically in terms of basic computer operations, word processing operations, spreadsheet operations and presentation operations. The frequency of use of computer in the workplace was also taken into consideration in this survey. The results showed that most of the barangays basically rely on their secretaries to transfer their handwritten documents into a computer for a softcopy and for packaging. However, the results also showed that the respondents generally need help in accomplishing basic computer tasks and word processing operations. Furthermore, it was also noted that the respondents were generally not confident in performing spreadsheets and presentation tasks.

Thus, it is recommended to conduct a computer literacy training to barangay officials in order to speed up their tasks and day to day transactions. Information Technology experts must be consulted for a training design that is appropriate for adult computers. Furthermore, the training modules must be designed in such a way that the problems to be solved and outputs to be made by the participants must be aligned with the requirements of their jobs. In this case, sample works or forms of barangays must be considered as basis for such.

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EFFECTIVENESS OF KANTUTAY (*Lantana camara* Linn.) PLANT AGAINST RICE INSECT PESTS

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ABSTRACT

*Conventional or synthetic pesticides are widely used as controlling agents by many people against the pest. However, because of its hazardous and toxic contents, some farmers used organic pesticides known to be natural pest repellents produce from living organisms. This experimental study determined the effectiveness of kantutay (*Lantana camara* Linn.) plant as an organic pesticide against a rice insect pest. This answered the following objectives of the study; 1. To determine the chemical properties of the kantutay plant in terms of medicinal, toxic value and pesticidal component. 2. To determine the most potent concentration of Kantutay plant against rice insect pests both in In-Vivo and In-Vitro techniques. 3. To determine the economic value of using Kantutay (*Lantana camara* Linn.) as an alternative pesticide for rice Insect pest. The DOST-Bicutan, Taguig determined the chemical constituents of the kantutay plant. Analysis of Variance (ANOVA) and two-tailed T-test for uncorrelated samples was used to determine the significant difference in the potency between In-Vivo and In-Vitro techniques and between the produced pesticide against commercial pesticides. Based on the gathered results, data revealed that the kantutay plants contain the following chemical compositions that are found toxic and pesticidal components; sterols, triterpenes, alkaloids, saponins, glycosides and tannins that present both in leaves and in roots. Another finding shows that 100% concentration of the extracted kantutay plant obtained the highest mortality rate of rice insect pest while 25% concentration was found to be not effective in ceasing rice pest as it obtained the lowest mortality rate among the other concentrations. Thus, an organic pesticide made up from the extracted kantutay plant was more effective in higher concentrations. There is a significant difference Comparison between 100% concentration of kantutay extract to the commercial pesticide in the In-vivo experiment was found significantly different from each other since the computed T-value of 2.826 was found higher than the tabular T-value of 2.776. However, the data in the In-vitro resulted in a computed T-value of 2.123, which is lower than the tabular T-value, meaning there is no significant difference in the performance level of 100% concentration of kantutay extract as an organic pesticide to the performance level of the commercial pesticide. These findings disclosed that the effectivity of the kantutay plant as an organic pesticide against rice insect pests is very effective in a higher level of concentration. Hence, this study recommends using a higher concentration of the extracted kantutay plant to obtain a commendable result and to test the product in other pests.*

*Keywords: Organic pesticides, *Lantana camara* Linn., Rice Insect Pest*

INTRODUCTION

Pesticides are largely applied in many agricultural, commercial, residential, and industrial applications to control/ kill pests. Pesticides are helpful for society to fight disease and increase agricultural productivity; but, they can be moved through the air, water, and soil and can cause hazards to the ecosystem and human health. The effect of pesticide residues on human health is a worldwide problem, as human exposure to pesticides can occur through swimming, showering/ raining, air, agricultural commodities, or soil. Worldwide jurisdictions have been working on regulating pesticide standard values for residential surface soil, residential air, drinking water, surface water, groundwater, and food for years (Li and Jennings, 2017).

Conventional or synthetic pesticides are widely used as controlling agents by many people against the pest. However, because of its hazardous and toxic contents, some residents use organic pesticides known to be natural pest repellents produce from living organisms. It is identified as safer to use an agent than the commercial pesticides because of its natural components making it more eco-friendly (Ahmad, et.al.).

Some common sources of organic pesticide are plants these containing pesticidal properties that are helpful to be used as pest control. Kantutay plant, scientifically known as *Lantana camara* Linn. is considered to have potential pesticide. It is commonly known as “Bahug-bahug” by the Visayans, “Kantutay” by the Tagalog (Stuart, 2015) and “Asin-asin” in some parts of Bicolandia. Kantutay plant is recognized as noxious and invasive flora. It is a perennial shrub that generally grows best in open, unshaded conditions such as wastelands, edges of rain forests, agricultural areas, grasslands, scrub/shrublands, wetlands and forests recovering from fire or logging; it does not grow at ambient temperatures below 50°C (Wei and Xing, 2010).

Almost all removal strategies of this weed have been unsuccessful so far, so management of this weed by utilization is required (Patel, 2011). With this, the researcher aimed at producing organic pesticides from kantutay plant and be tested and applied to rice insect pest particularly the stem borer. Kantutay plant was selected to be used in this study due to its abundance and accessibility in many places and no found used in the locale.

OBJECTIVES OF THE STUDY

Specifically, this study aimed to 1. Determine the chemical properties of *Lantana camara* Linn in terms of medicinal, toxic value and pesticidal component. 2. Identify the most potent concentration of Kantutay (*Lantana camara* Linn.) plant against rice pest both in In-Vivo and in In-Vitro techniques. 3. Determine the economic value of using Kantutay (*Lantana camara* Linn.) as an alternative pesticide for rice insect pests.

METHODOLOGY

Research Design

This is descriptive-experimental research. The descriptive method was used in describing and identifying the chemical properties of kantutay plant and the effectiveness of its extract as organic pesticide using the established rubrics. Moreover, the experimental method was used in identifying the potency level of the extracted kantutay plant through testing and application of the different concentrations in rice insect pest.

Research Setting

This study in-vitro test was conducted in the Central Bicol State University of Agriculture- Sipocot Campus located along Maharlika Highway and is 2 kilometers away from the town proper.

It is geographically located at a coordinate of 130 47'8" N and 122o 58'45" E with an approximate land area of 14.064 hectares. The school is a mountainous area having different kinds of vascular and nonvascular plants growing around the vicinity such as ferns, cone, and fruit-bearing plants, flowering plants, wild floras, and shrubs. While the In-vivo test was conducted at San Pedro, Cabusao, Camarines Sur the nearest place wherein there is a rice field and rice pest attack the rice grains.

Instrument

An established rubric with a rating scale of Highly Effective (81%-100% mortality rate of rice insect pest); Moderately Effective (61%-80% mortality rate of rice insect pest); Effective (41- 60% mortality

rate of rice insect pest f); Less Effective (21% – 40% mortality rate of rice insect pest); and Not Effective (0% – 20% mortality rate of rice insect pest) was used in assessing the effectiveness of kantutay plant against rice insect pest. Moreover, the laboratory test result from the Department of Science and Technology- ITDI Standards and Testing Division showing the chemical properties of the kantutay plant was used.

Experiment Treatment

Kantutay plants used in the study were gathered from Ngaran Impig, Sipocot Camarines Sur, pounding of leaves and roots, preparation of different concentrations, laboratory testing of the chemical constituents of kantutay plant at DOST-Bicutan, Taguig, application of the extracted kantutay plant to rice pest both in in-vivo and in-vitro set-up, and analysis and interpretation of the data gathered. The finished product of the experiment was the organic pesticide made up of kantutay plant.

Extraction of Kantutay Plant

Extraction is the process used to obtain the necessary component of the plant to make an organic pesticide against rice pests. In this study, 2100 grams of leaves, roots, and berries in a 1:1:1 ratio was boiled within twenty (20) minutes in 2100 ml distilled water. Then, the boiled kantutay plant was squeezed and pressed in a clean cloth to separate the extract from the solid materials. Subsequently, the extract was placed in a beaker and prepared for the process of dilution to make different concentration

Preparation of Different Solution

One of the processes to make a solution is by dilution. The extract from Kantutay plant was diluted by adding water to make four types of treatment in 100% (pure), 75%, 50%, and 25% concentration. The materials used in the dilution process are the following: 5 pieces 500 ml beaker, funnel, sprayer, basin, cloth, distilled water, mortar and pestle.

The total volume of each concentration is 100 ml. The following are the diluted concentrations: a. 100% dilution – pure extract from Kantutay plant (*Lantana camara* Linn.) without adding water. b. a 75% dilution – 75 ml of pure extract diluted with a 25 ml distilled water. c. a 50% dilution – 50 ml of pure extract diluted with a 50 ml distilled water. d. a 25% dilution – 25 ml of pure extract diluted with a 75 ml distilled water.

Application of the Different Concentrations

The experiment conducted to determine the effectiveness of the Kantutay plant as an organic pesticide against rice pest was performed in an In- vivo and In-vitro process. The In vivo set up was accomplished in a rice field at San Pedro, Cabusao, Camarines Sur. Every concentration in each trial tested 12 insects and each insect was observed within fifteen (15) minutes. On the other hand, In vitro set up was accomplished inside the laboratory. A total population of 108 stemborer was collected and tested. A sample population of 9 stemborer was treated in each concentration in every trial. Afterward, a prepared checklist was used to rate the effectiveness of Kantutay plant as an organic pesticide against rice insect pest based on the result of the In vivo and In vitro set up.

Statistical Treatment

For accuracy and truthfulness of the result, statistical treatment was used in analyzing and interpreting the data gathered. Frequency percentage identified the mortality rate of rice insect pests in 100% concentration, 75% concentration, 50% concentration and 25% concentration. Analysis of Variance (ANOVA) was used in distinguishing the significant difference in the mortality rate of rice insect pest among the different concentration levels of extracted kantutay plant.

Two-tailed T-test was utilized in determining the significant difference in the mortality rate of rice insect pests among the different concentration levels of extracted kantutay plant.

REVIEW OF LITERATURE

Sausa and Costa (2012), cited that *Lantana camara* Linn is a perennial flowering plant native to tropical regions of America and Africa. It is a somewhat hairy shrub that when bruised gives a spicy pungent odor. The aromatic flowers are borne in clusters and are a mixture of red, yellow, blue, lilac, white, and orange florets. The leaves are pointed at the tip, rounded at the base and toothed in the margins. *Lantana* is an introduced species in the Australian-Pacific region and is a low-maintenance, gregarious plant that can grow up to 1.2 m high.

Similarly, Healing Wonders of Philippines Medicinal Plants (2009) considers *Lantana camara* as a gregarious, erect or half-climbing, somewhat hairy aromatic shrub; when erect is usually 1.2 m high and twice as high when scandent. The branches are four-sided with recurved prickles while its leaves are ovate of 5 to 9 cm long, pointed at the tip, rounded at the base, and toothed on the margins. Its flowers are pink, orange, yellow, white, lilac and other shades depending on the variety. It is borne with a stalked head which is 2 to 3.5 cm in diameter. The calyx is small, Corolla tube slender, the limb spreading, 6 to 7 mm wide and divided into unequal lobes. Stamens 4, in 2 pairs, included. The ovary is 2-celled, 2-ovules and fruits are sweet-tasting drupaceous fruit. It is a purple or black, fleshy ovoid of about 5 mm long.

Furthermore, Asia - Pacific Forest Invasive Species Network (APFISN) (2016) cited that *Lantana camara* Linn occurs in diverse habitats and on a variety of soil types. It generally grows in open, unshaped conditions such as wastelands, edges of rain forests, on beachfront, an agricultural area, grasslands, riparian zones, scrub/shrublands, urban areas, wetlands, and forests recovering from fire or logging. It does not grow at ambient temperatures below 50°C. This wide range habitation of *Lantana camara* Linn threatens the natural habitats of flora and fauna. Likewise, it infests pastures, grazing lands, orchards and crops like, tea, coffee, oil palm, coconut and cotton, and reduces the economic viability of the crops. The allelopathic qualities of *Lantana camara* Linn reduce the vigor of native plant species and limit productivity. *Lantana camara* Linn infestations can sometimes be so persistent that they can completely stall the regeneration of rain forests for several years.

Lantana camara Linn. whole plant and plant parts have been thoroughly studied for chemical constituents. All studies revealed the presence of terpenoids, steroids, and alkaloids as major constituents (Seth and Mohan, et al., 2012). But then, Triterpenoids, which are most rapidly absorbed from the small intestine but absorbed slowly on stasis in the rumen, causing slow and continuous exposure of the liver that lasts for days said Stuart Jr. (2015). Barceloux (2008) cited that pentacyclic triterpenoids is an active substance of *Lantana camara* Linn. that causes toxicity to grazing animals resulting in liver damage and photosensitivity. *Lantana camara* Linn. also excretes chemicals (allelopathy) which reduces the growth of surrounding plants by inhibiting germination and root elongation said Ahmed (2007). Additionally, Shama's (2007) "A review of the Hepatotoxic Plant *Lantana camara*" stated that "the green unripe fruits of the plant are toxic to humans due to its hepatotoxins content which is pentacyclic triterpenoids called lantadenes".

On the other hand, according to Moses, et al. (2014) saponins are generally considered to have important roles in defense of plants against pathogens, pests and herbivores due to their antimicrobial, antifungal, antiparasitic, insecticidal and antifeedant properties (Augustin et al., 2011; Morrissey & Osbourn, 1999; Osbourn et al., 2011; Sparg et al., 2004). Whereas, Richard, et. al. (2013) mentioned in their study that alkaloids are secondary metabolites originally defined as pharmacologically active compounds, primarily composed of nitrogen (Croteau et al., 2000; Ziegler & Facchini, 2008). The biological properties of various alkaloids have also led to their use as pharmaceuticals, narcotics, stimulants, and poisons. Since the morphine (a well-known alkaloid from *Papaver somniferum* poppy) discovery, alkaloids are widely used as drugs in modern medicine such as morphine, quinine, and codeine. Thus, alka-

loids at lower doses are pharmacologically useful but are poisoning agents at high doses, Richard, et al. (2013) said.

FINDINGS

Medicinal, Poison and Pesticidal Component of Kantutay

The chemical components of leaves, roots and berries of the kantutay plant were determined by the phytochemical test conducted by the chemists of the Department of Science and Technology-Taguig. The chemical constituents of the plant was described by having (+) traces, (++) moderate, (+++) abundant and (-) absence of chemical constituents.

Table 1. Chemical Constituents of the Kantutay Plant

Chemical Constituents	Leaves of Kantutay	Roots of Kantutay	Berries of Kantutay
Sterols	+	+	+
Triterpenes	++	-	++
Flavonoids	-	-	-
Alkaloids	++	+	+
Saponins	+++	++	+++
Glycosides	++	+	+
Tannins	++	+	+

Note: (+) Traces, (++) Moderate, (+++) Abundant, (-) Absence of Constituents
Source: DOST – ITDI Standards and Testing Division (October, 2016)

Presented in Table 1 that there is only traces (+) of Sterols in the leaves, roots and berries of the plant, meaning there is only small amount of chemical sterol in the leaves, roots, and berries of kantutay, while Triterpenes have moderate amount (++) presents in the leaves and berries but is absent (-) in the roots of kantutay. However, Flavonoids was determined absent (-) in all three parts of the kantutay plant, whereas Alkaloids, Glycosides, and Tannins were similarly had a moderate amount (++) in the leaves and only have traces (+) in the roots and berries. On the other hand, out of all the chemical constituents, only Saponins are found to be abundant (+++) in the leaves and berries while only moderately (++) found in the roots of the kantutay.

Based on the result of the phytochemical analysis, it can be seen that there are six (6) types of chemical constituents that can be found in the leaves, berries, and roots of the kantutay. Thus, these chemicals are the components that help to enhance the effectiveness of kantutay extract as an organic pesticide. Saponins, Triterpenes, Alkaloids, Glycosides, and Tannins are the chemical components that have greater amount found in the plant sample, hence these chemical constituents contribute more accountability to the medicinal and pesticidal property of kantutay plant. Sanjeeb, et. al. (2013) cited in “A Review on Medicinal Properties of *Lantana camara* Linn” that in the last few decades, scientists and researchers around the globe have elaborately studied the chemical composition of whole plant of *L. camara*, as well as, its biological pharmacological activities. Further, their studies established the therapeutic potential of *Lantana camara* in modern medicines and as possible candidate for drug discovery.

Table 2. Mortality Rate of Stem borer in the In-Vivo Experiment

Treatment	Trial	Population	Mortality	Mortality Rate	Qualitative Description
1 (Commercial Pesticide)	1	12	11	91.67	Highly Effective
	2	12	12	100	Highly Effective
	3	12	12	100	Highly Effective
2 (100% concentration)	1	12	10	83.33	Highly Effective
	2	12	11	91.67	Highly Effective
	3	12	10	83.33	Highly Effective
3 (75% concentration)	1	12	7	58.33	Effective
	2	12	8	66.67	Moderately Effective
	3	12	6	50	Effective

Treatment	Trial	Population	Mortality	Mortality Rate	Qualitative Description
4 (50% concentration)	1	12	4	33.33	Less Effective
	2	12	5	41.67	Effective
	3	12	3	25	Less Effective
5 (25% concentration)	1	12	1	8.33	Not Effective
	2	12	0	0	Not Effective
	3	12	1	8.33	Not Effective

Legend:
81%-100% (Highly Effective) 61%-80% (Moderately Effective)
41%-60% (Effective) 21%-40% (Less Effective) 0%-20% (Not Effective)

The table disclosed that the control variable which is the commercial pesticide is highly effective against rice insect pest given that the mortality rate of the test insects in each trial reached the scale of highly effective that ranged from 81%-100% mortality rate. Also, in the different concentration of kantutay plant 100% concentration is the highly effective concentration that can be used as organic pesticide than the other concentrations, since all the results of the trials conducted for the 100% concentration show that it is highly effective organic pesticides against rice pest. The average mortality rate of test insects in 100% concentration is 86.11 which also reached the Highly Effective scale of the established rubric used in the study.

Table 3. Mortality Rate of Stem borer in the In-Vitro Experiment

Treatment	Trial	Population	Mortality	Mortality Rate	Qualitative Description
1 (Commercial Pesticide)	1	9	9	100	Highly Effective
	2	9	8	88.89	Highly Effective
	3	9	9	100	Highly Effective
2 (100% concentration)	1	9	8	88.89	Highly Effective
	2	9	8	88.89	Highly Effective
	3	9	7	77.78	Moderately Effective
3 (75% concentration)	1	9	6	66.67	Moderately Effective
	2	9	4	44.44	Effective
	3	9	5	55.56	Effective
4 (50% concentration)	1	9	3	33.33	Less Effective
	2	9	3	33.33	Less Effective
	3	9	2	22.22	Less Effective
5 (25% concentration)	1	9	0	0	Not Effective
	2	9	1	11.11	Not Effective
	3	9	0	0	Not Effective

Legend:
81%-100% (Highly Effective) 61%-80% (Moderately Effective)
41%-60% (Effective) 21%-40% (Less Effective) 0%-20% (Not Effective)

Similar to the result of the In-vivo experiment, the commercial pesticide was classified as Highly Effective against rice pests since the mortality rate of test insects in each trial lies in the highly effective scale of the rubric. It is comparable with the result in the 100% concentration, in which trial one (1) and two (2) were classified as Highly Effective concentration seeing that it similarly obtains 88.89 mortality rates. However, trial three (3) lies as Moderately Effective because of the mortality rate of 77.78% but the average mortality rate of the 100% concentration still confirmed that 100% concentration is Highly Effective concentration for having 85.86 averaged mortality rate. On the other hand, 75% concentration was in general categorized as Effective concentration for acquiring an average mortality rate of 55.56 provided that in trial one (1) it only has 66.67%, trial two (2) have 44.44% and trial got 55.56% mortality rate. In addition, 50% concentration was considered as Less Effective because of low mortality rate obtained in each trial which result to an average mortality rate of 29.63 while 25% concentration was classified as Not Effective concentration similar to the In vivo experiment for obtaining very low mortality in each trial which only had an average of 3.70% mortality rate.

Table 4. ANOVA- Difference in the Mortality Rate of Stem borer among Different Concentrations in the In-Vivo Experiment

Source of Variation	Df	Sum of Square	Mean Square	F _c	F _t	Interpretation
B/ w Group	3	10,671.56	3,557.19	76.80	4.07	Significantly different
W/in Group	8	370.56	46.32			
Total	11					

Data in Table 4 disclosed that the sum of square between groups was 10,671.56 and 370.56 for the sum of square within group. Whereas, mean square between groups obtained 3,557.19 while mean square within group acquired 46.32. Thus, the computed F value resulted to 76.80 with the tabular F value of 4.07.

Given that the computed F-value was found higher than the tabular F value, the null hypothesis was rejected. Thus, the findings presented that there is a significant difference in the mortality rate of stem-borers among different concentration of extracted kantutay plant.

Table 5. ANOVA - Difference in the Mortality Rate of Stem borer among Different Concentrations in the In -Vitro Experiment

Source of Variation	Df	Sum of Square	Mean Square	F _c	F _t	Interpretation
B/ w Group	3	10,978.15	3,659.38	59.3	4.07	Significantly different
W/in Group	8	493.9521	61.74			
Total	11					

Table 5 shows the computed F-value resulted to 59.3 with a tabular F-value of 4.07. The computed F-value was found higher than the tabular F-value meaning; there is a significant difference among the concentrations used in the In vitro experiment.

Table 6. T-Test Result for Difference between Commercial Pesticide and 100% Concentration of Kantutay Extract as Organic Pesticide in the In-vivo Experiment

Treatment		T - value			Decision	Interpretation
		D _f	T _f	T _t		
Commercial Pesticide	100% Concentration	4	2.826	2.776	Rejected	Significantly Different

The result of the table 6 shows the T-Test formulated to determine the difference between commercial pesticide and 100% concentration of kantutay extract in the In vivo set up. Data disclosed that in the degree of freedom of four (4), the computed T-value resulted to 2.8259 that is found greater than the tabular T-value of 2.776, implying that there is a significant difference between the commercial pesticide and 100% concentration of kantutay extract.

Table 7. T-Test Result for Difference between Commercial Pesticide and 100% Concentration of Kantutay Extract as Organic Pesticide in the In vitro Experiment

Treatment		T - value			Decision	Interpretation
		D _f	T _f	T _t		
Commercial Pesticide	100% Concentration	4	2.123	2.776	Accepted	Not Significantly Different

Table 7 displays the result of T-test used for the In vitro set up of the commercial pesticide and 100% concentration of extracted kantutay. In the degree of freedom of four (4), data revealed that the 2.123 computed T-value was found higher than the 2.776 tabular T-value. Thus, the commercial pesticide and 100% concentration of extracted kantutay is not significantly different from each other. Hence, it implies that the performance of pure extract of kantutay plant as an organic pesticide against rice insect is commendable to the performance of commercial pesticide.

CONCLUSION

This study focused on the effectiveness of kantutay plant (*Lantana camara* Linn.) as an organic pesticide against an agricultural rice insect pest. A descriptive-experimental method of research was used in this study. Descriptive method was employed to describe the chemical properties of kantutay plant. It also developed to describe the level of potency of kantutay plant against agricultural rice insect through the established rubrics with a scale of Highly Effective that ranged from 81%-100% mortality rate of test insect; Moderately Effective that was 61%-80%; Effective from 41- 60%; Less Effective ranged from

21% – 40% and Not Effective from 0% – 20% mortality rate. On the other hand, an experimental method was employed to identify the effectiveness of the kantutay plant as an organic pesticide against agricultural rice insect pests among 100% concentration, 75% concentration, 50% concentration, and 25% concentration. The commercial pesticide was also used to compare the performance of the 100% concentration of kantutay extract as an organic pesticide against rice insects. Additionally, data was further analyzed and interpreted through the Analysis of Variance (ANOVA) and a two-tailed T-test for uncorrelated samples.

RECOMMENDATIONS

In light of the mentioned summary and conclusion, the following recommendations are given. Further study about the chemical properties and uses of the chemical constituents of kantutay for medicinal and pesticidal purposes was strongly encouraged for more chance to produce an innovative product. A lower concentration of kantutay extract is not effective as an organic pesticide, thus the community is advised to use higher concentration or the pure extract of kantutay as an organic pesticide to ensure the commendable result. Future researchers are encouraged to use other test insects to be treated by the extract of the kantutay plant for further comparison of findings and research about the potency of kantutay. For a better result of the application of the kantutay extract, it is advisable to use higher concentration since the potency level of the extract decreases as it diluted to lower concentration. Also, intervening factors such as weather and length of application of the concentration must also be considered to ensure the maximum effect of the solution.

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FACTORS AFFECTING THE ACADEMIC PERFORMANCE OF THE SENIOR HIGH SCHOOL STUDENTS OF NARRA NATIONAL HIGH SCHOOL

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ABSTRACT

This paper presents the factors Affecting the Academic Performance of the Senior High School Students of Narra National High School and then the internal and external factors that affect the academic performance of the Senior High School students of Narra National High School. This study was classified as descriptive-correlational which tried to capture the strength of both quantitative and qualitative researches. The researchers utilized the checklist as the instrument for this study. The participants of this research were composed of randomly selected 331 senior high school students for the SY 2017-2018 with a sample size of 181. The following statistical tools were used: Frequency Distribution in presenting the profile of student-respondents in terms of age, gender, proximity of the house to the school, and general average; Percentage and Mean in analyzing the various factors affecting the academic performance of the senior high school students; and Pearson R in testing the relationship between the profile of the students (Gender, Age, and Distance of the House from School) and their academic performance (General Average). Based on the gathered data, the researchers found out , There were internal and external factors that affect the academic performance of the senior high school students of Narra National High School. These include the student-related factors, teacher-related factors, school-related factors, and family-related factors. The main factor that affects their academic performance is the lack of internet connectivity (school-related factor) with the total mean score of 72.38%. There was no significant relationship between the following: gender and academic performance of the students; age and academic performance of the students; and proximity of the house of the students to the school and their academic performance. Using Pearson R, the results revealed that there was no correlation among them and it was statistically insignificant. The students and learners should be aware of the different factors that affect their academic performance and coordinate their concern to the school administrators for a better solution.

Keywords: Factors Affecting The Academic Performance of the Senior High School Students

INTRODUCTION

Every individual needs education. Education serves as the key to getting rid of ignorance and a tool that can be used in life's battle. Bustos and Espiritu(2016) believed that through education, students would achieve their goals in life that are imbued with proper and upright ideals, values, attitudes, and aspirations to get excellent opportunities for the future.

In Philippine education, the primary target is to serve society by providing relevant and quality education for the students to become more productive and to yield globally competitive learners. It is believed that education is a way to develop socio-economic and political progress, that is why the K to 12 Program is being implemented. Every school is being enlightened and is trying to become competent with a mission of helping the society and the young educators to prepare for the world of work and become fully honed individuals as the World Bank Organization (2012) noted that the curriculum should be adopted to reflect the real needs, conditions, and aspirations of the society.

To fully achieve and attain the target of the Department of Education, educational institution tried to work in close coordination just to train and develop the skills and potentials of the 21st-century learners.

However, in the implementation of the said curriculum, there are instances that may affect implementation and initiation of the curriculum. There are factors that hinder the full success of the implementation, specifically on the processing and actual things needed including the fund, modules, school learning facilities, equipment, and classrooms, as well as the teachers that contribute to the teaching-learning process. It might affect the learning performance of the students. The result could either be progressive learning or not, and it could yield productive individuals or not.

Narra National High School (NNHS) is one of the educational institutions which also aim to promote good quality education and provide functionally literate graduates. It offers Senior High School with almost complete tracks and strands. Inspired by the mission of the school, the researchers conceived of scientifically evaluating the factors that affect the academic performance of Senior High School (SHS) students of Narra National High School to support the pursuit of excellence in the instruction of the said educational institution. This study focused on the factors affecting the academic performance of the Senior High School students of Narra National High School during SY 2017-2018. The study started in January 2018 and ended in March 2018. It was limited only to the selected 181 Senior High students of Narra National High School. The researchers utilized the checklist as an instrument for gathering data in this study. Moreover, frequency distribution, percentage, ranking, mean, and Pearson R were the research tools employed in the collection, organization, presentation, analysis, and interpretation of numerical data.

Everyone needs education for it is the only tool to wipe out ignorance. With this principle that we Filipinos hold on, our government led by the Department of Education (DepEd) pursue to uplift the standard of our education system through the implementation of the K to 12 Program or the Basic Enhancement Curriculum Act of 2013. Our government expects that the graduates under this curriculum modernization may help in improving the lives of Filipinos. However, despite of revising the whole Philippine educational system, scrutinizing the curriculum, and allocating the biggest budget for the construction of the additional building and other facilities, imprinting learners' and teachers' materials, and additional budget for a salary of new teachers, there are still difficulties regarding the performance of every Filipino learner. As these problems were being addressed by the government, it seems that the performance of the students thru grades does not improve so well. In this chapter, the researchers collected other related studies to serve as a basis in conducting the investigation entitled "Factors Affecting the Academic Performance of the Senior High School Students of Narra National High School". Internal and external factors were identified which believed to be the prevalent factors on the academic performance of the senior high school students of NNHS. These factors include family-related factors, school-related factors, teacher-related factors, and student-related factors. According to some researchers who conducted similar studies, these four factors were believed to be the contributory factors in the academic performance of the students. Student-related factors include the attitude and behavior of the students towards the learning process and to the subject. Teacher-related factors are all about the teacher expertise in handling students and how he/she treats his/her students. On the other hand, family-related factors speak about the capability of the parents to support the education of their children in terms of financial and moral aspect. Moreover, school-related factors explain how school facilities and equipment may affect the learning of the students.

METHODOLOGY

A descriptive method of research was used in this study. The researchers utilized the descriptive method in order to gather the data to obtain information concerning the status of an issue, to clearly describe, and to gather data on the factors affecting the academic performance of the Senior High School students of Narra National High School. Determining a sample size is an act to choose some target respondents that would replicate the population. Thus, for this research, the sample size was 181. The sample size was chosen based on the total population of about 331 and used the Slovin's Formula with 5% (0.05) margin of error. The study used Stratified Sampling Technique using Slovin's Formula as shown on the next page: A survey questionnaire (checklist) was devised in order to gather data on the factors

affecting the academic performance of Senior High School students of Narra National High School. The survey questionnaire was composed of two (2) parts. Part 1 was about the demographic profile of the students. Part 2 was composed of 59 statements in which the respondents had to put a check mark in every statement if it suggested something affecting their academic performance. The researcher presented a letter of request to the School Principal of Narra National High School for the approval of conducting and gathering information to the selected Senior High School students for School Year 2017-2018. The approved letter was also presented to the 181 students. The responses of the respondents were interpreted and evaluated by finding the percentages and ranking of the various factors that affect the academic performance of the Senior High School students of Narra National High School. Mean, and percentage were used to compare the factors affecting the academic performance of the students. It was also used to compare the demographic profile of the students. Moreover, the ranking was used to identify the most prevailing factor that affected the academic performance of the Senior High School students of Narra National High School.

RESULTS AND DISCUSSION

The result of the data gathered regarding the factors affecting the academic performance of the Senior High School students of Narra National High School.

Table 1.a . Student-Respondents as to Gender
n = 181

Gender	Frequency	Percentage	Rank
Male	78	43.09%	2
Female	103	56.91%	1
Total	181		

Table 1.a shows that 103 or 56.91% of the respondents were female and 78 or 43.09% were male. Balili (2013) further affirmed that students learn in different ways. One of these differences is the gender of the learners. Every individual is unique from each other. Heineseen (2010) highlighted that boys learn entirely different from girls.

Table 1.b Student-Respondents as to Age
n = 181

Age	Frequency	Percentage	Rank
17 years old	70	36.67%	2
18 years old	98	54.14%	1
19 years old	12	6.63%	3
20 years old	1	0.55%	4
Total	181		

Table 1.b reveals that majority of the respondents were 18 years old with 98 respondents or 54.14% and the least was 20 years old with one (1) or 0.55%. Abbasi and Mir (2012) accentuated that student's characteristics such as their age, entry qualification, self-motivation, and work ethics could give an impact on their performance

Table 1.c. Students-Respondents as to Distance of the House from School
n = 181

The distance of the House from School (km)	Frequency	Percentage	Rank
0.5	21	11.60%	4
1	34	18.78%	2
2	47	25.97%	1
3	31	17.13%	3
4	20	11.05%	5
5	15	8.29%	6
6	7	3.87%	7
7	4	2.21%	8
8	2	1.10%	9
Total	181		

Table 1.c reveals that most of the respondents were living two (2) kilometers away from school with 25.97%. It was followed by the respondents whose proximity of their house to the school was one (1) kilometer or 18.78%. Student-respondents who were living three (3) kilometers away from a school ranked third with 17.13%. Moreover, only 1.10% of the respondents were living eight (8) kilometers away from school. As Agbuga (2008) pointed out in his study, students' environment, including the distance of their houses to the school, could significantly affect the academic achievement and performance of the students. Dafiagor (2011) asserted that tardiness due to long walk or travel could affect the performance and learning proficiency of the students. Tardiness destroys the students and disorganizes his/her learning.

**Table 1.d. Students-Respondents in Terms of General Average
n = 181**

General Average	Frequency	Percentage	Rank
95-99	0	0	6
90-94	44	24.31%	2
85-89	72	39.79%	1
80-84	41	22.65%	2
75-79	17	9.40%	4
70-74	7	3.87%	5

Table 1.d shows that most of the student-respondents' general average ranged from 85 to 89 with 39.79%. Respondents who had an average of 90 to 94 (24.31%) ranked second. It also revealed that no respondent had a general average from 95 to 99.

Furthermore, Lumsdem (1994) emphasized that the grades of the students in the different learning areas may serve as their external motivation to strive more and get higher grades than before.

Table 2.a. Family-Related Factors

Factors	Respondent's Response		
	Frequency	Percentage	Rank
1. Parents are separated	35	19.34 %	5
2. Parent's incapacity to provide educational materials.	32	17.68 %	6
3. Disapproval of my family to go with someone.	44	23.20 %	4
4. Home life is unhappy	31	17.13 %	8
5. Financial help from parents/benefactor is not enough	61	33.70 %	1
6. Parents are unreasonably strict	47	25.97 %	2
7. My parents do not try to get involved in school parent-teachers association	29	16.02 %	7
8. My parents cannot help me make/answer my Projects and homework.	46	25.41 %	3

Table 2.a highlights the family related factors which affect the academic performance and achievement of the students. It shows that 61 or 33.70% of the students responded that financial help from parents/guardians/benefactors was not enough to support the students' educational needs. As stated by the Higher Life Foundation (2017), the family plays a critical role in a student's academic performance. Living in poverty can distract a child from academics because survival becomes a more immediate and pressing priority.

Parents are unreasonably strict with 25.97% ranked second among the family-related factors. The respondents believed that this specific factor could affect their achievements in school. The data also revealed that 25.41% of the student-respondents felt that their parents/guardians could not help them make/answer their projects and homework. A total of 35 (19.34%) respondents mentioned that their parents were separated and their home life was unhappy. This number of respondents believed that these factors significantly affect their academic performance.

There were also students who claimed that their parents' incapacity to provide educational materials and their parent do not try to get involved in school parent-teachers' association significantly affect their academic performance in school, as well.

Parents play a significant role in a student's achievement. This claimed was strengthened by Lemessa (2015) when he explains that student's parents or guardian's educational background had a positive influence on the student's academic performance and achievement. In Bandura's (2002) social cognitive theory, the family is an environmental agent that give impacts on human development and therefore in the student achievement. Furthermore, Diaz (2003) emphasized that a good function family could create a favorable climate in the family institution which the dynamic communication and effective relationship could determine the educational climate in the family, and in turn influence the academic results. Every student requires a degree of attention from their parents on their academic aspirations and to influence their children's academic achievement.

Table 2.b School-Related Factors

Factors	Respondent's Response		
	Frequency	Percentage	Rank
9. Space within the classroom is not conducive for teaching-learning process.	81	44.75 %	6
10. Problem with ventilation/temperature inside the classroom.	113	63.42 %	2
11. Laboratories are appropriate for the conduct of The science activities and experiments.	37	20.44 %	9
12. Lack of books and reference materials in the school library.	98	54.14 %	5
13. Crowded classroom.	80	44.20 %	7
14. Lack of internet connectivity in the school	131	72.38 %	1
15. Lack of adequate learning facilities.	103	56.91 %	3
16. No research room for senior high school students.	101	55.80 %	4
17. Chairs, tables, and classrooms do not meet the standard.	67	37.02 %	8

Table 2.b shows that majority of the respondents 131 or 72.38 % agreed that the school lacks internet connectivity that they could use in their studies, eventually affecting the academic performance of the students.

One hundred thirteen (113) or 63.42% of the respondents mentioned that there was a problem with ventilation and temperature inside the classroom.

More than half of the respondents, specifically 103 (56.91 %), responded that the school lacked adequate learning facilities (computers, projectors, etc.), and there was no research room for senior high school students. The student-respondents also complained about the school library which did not have a sufficient number of books and references and was not always open when students wanted to read and study. Furthermore, the table revealed that 81 or 44.75 % of the students said that the space within their classroom was not conducive for the teaching-learning process.

Chimombe (2011) stated that various studies are done on the effect of the school environment on the academic performance of the students. When the school environment is conducive for the students to learn it may bring comfort to them and motivate them to study well. Conversely, if the school environment is not conducive for learning it may lead to students underperformance. Additionally, if the classroom becomes more crowded, it also affects the student's performance because they cannot have focused well and the teacher have to give more time to classroom management than on teaching which can result to underperformance of the students.

In the same manner that Lemessa (2015) in his study found out that majority of the schools lack enough classroom which is considered as one of the basic requirements for learning. This might affect the academic performance of the students. The result of her study also indicates that moderate space within the classroom affected the teaching-learning process. Constant noise exposure can destruct the cognitive performance and functioning of the student in their studies (Higgins et al., 2004).

Table 2.c. Teacher-Related Factors

Factors	Respondent's Response		
	Frequency	Percentage	Rank
18. Teachers do not check our attendance.	27	14.92 %	16
19. Teachers give us homework regularly.	60	33.15 %	6
20. Lack of suitable instructional materials.	78	43.09 %	2
21. Teachers do not use different methods/strategies in teaching lessons.	46	25.41 %	10
22. Teachers do not provide hands-on activities and collaborative learning	29	16.02 %	15
23. Teachers are too hard to understand.	64	35.36 %	5
24. Not getting individual help from teachers.	42	23.20 %	11
25. Teachers do not consider my excuse.	38	20.99 %	12
26. Teachers do not manage the instruction time properly.	49	27.07 %	9
27. Teachers cannot make one to one conversation with us.	36	19.89 %	14
28. Teachers are not competent enough to teach.	37	20.44 %	13
29. Teachers are not competent enough to teach (mastery of lesson).	56	30.94 %	7
30. The teacher is boring.	77	42.54 %	3
31. Lessons are not delivered to the class because of the teacher's voice.	74	40.88 %	4
32. My teacher does not like my participation in class.	19	10.50 %	17
33. Teachers do not assess the performance in a fair way.	51	28.18 %	8
34. Teachers love to discuss and discuss.	79	43.65 %	1

Table 2.c shows the responses of the students on teacher-related factors which affected their academic performance. Seventy-nine (79) or 43.65 % of the students responded that their teachers love to discuss and discuss.

Teachers play a pertinent role in the development and academic achievement of the students. Teachers are seen as the primary source of learning in schools especially in ensuring the students' success. According to Higherlife Foundation (2017), teacher resource is being a vital input into the education process because they are responsible for the delivery of the curriculum. As stressed by Asikha (2010) on his research, the teacher's method of teaching is the one that could influence the student's performance, the teaching style could help in enhancing the understanding of every student conceptual thought and the teacher's ability and competence to teach proved that it has a significant role in improving the students' performance (Heinesen, 2010).

On the other hand, some of the students cited that some teachers did not utilize good instructional materials with 43.09%; boring (42.54%); did not delivered the lesson due to his/her voice (40.88%), and hard to understand (35.36%). Few of the respondents found their teachers not competent enough to teach (20.44%).

Engin and Demir (2009) claimed that teaching style and strategies during their lectures on school play a very crucial role in promoting educational growth and performance of the students. They affirmed that teacher's qualification, enthusiasm, interaction with the students, methods of lecture delivery and encouraging participation in the discussion have a positive and significant impact on student's performance and achievement. It is also recommended that the need for the use of appropriate teaching methods, facilities and fundamental electronic component by teachers should be provided to facilitate learning well. Additionally, the research study by Andaya (2014) proves that teachers have a significant influence and impact on every student's academic performance and achievement. It is the teacher's experience, and educational qualifications were the prime predictors of factors that affect a student's academic achievement (Yana & Wanjohi, 2011; Adejemi, 2010).

Table 2.d. Student-Related Factors

Factors	Respondent's Response		
	Frequency	Percentage	Rank
35. The allowance is not enough.	76	41.99 %	6.5
36. Feeling tired most of the time.	128	70.72 %	1
37. Not getting enough sleep.	98	54.14 %	2
38. Frequent headache.	66	36.46 %	8
39. Unsure of financial support.	58	32.04 %	12
40. The purpose in choosing the track/strand is not clear.	51	28.18 %	13.5

Factors	Respondent's Response		
	Frequency	Percentage	Rank
41. Having a poor background for the home subject.	34	18.78 %	19
42. Unfair test.	33	18.23 %	20
43. Afraid to speak up in class discussion/recitation.	76	41.99 %	6.5
44. Awkward in meeting people.	51	28.18 %	13.5
45. Being timid or shy.	77	42.54 %	5
46. Lack leadership ability.	62	34.25 %	11
47. Nervousness.	87	48.07 %	4
48. Being in love.	64	35.36 %	9
49. Not knowing how to study effectively.	34	18.78 %	19
50. Unable to concentrate well.	74	40.88 %	7
51. I need to know my vocational abilities.	44	24.31 %	16
52. Frequent cold/cough.	36	19.89 %	18
53. Feeling inferior.	33	18.23 %	20
54. Lack of self-confidence	95	52.44 %	3
55. Too easily discouraged	64	35.36 %	9
56. Lacking skills in sports and games.	63	34.81 %	10
57. I usually face discrimination and being bullied.	41	22.62 %	17
58. Lessons are difficult.	48	26.52 %	15
59. Not using my leisure time well.	49	32.60 %	14

Majority of the respondents 128 (70.72 %) stressed that they felt tired most of the time because of not getting enough sleep. Seventy-six (41.99 %) of the students responded that their allowance was not enough. More than half of the students 95 (52.49 %) revealed that they lacked self-confidence, felt nervous, afraid to speak up, felt timid/shy inside the classroom, lacked concentration, encouragement, and skills in sports and games.

Abbasi and Mir (2012), on the other hand, pointed out that student's characteristics such their age, entry qualification, self-motivation, and work ethics could give impact on their performance. As explained by Dube and Orpinas (2009) that students have a variety of reasons why they are not attending the school such as find school boring, classes unengaging and staff members unapproachable.

On the latest study by Franco (2016) reported that the habitual tardiness of the students is caused by personal related factors, family-related factors, and students related factors like uninterested in the subject matter, classrooms that are not conducive to learning, no interest in attending the class, health problem and late sleep. It can create a grave, systematic problem that may lead the students to decline on their learning performance (Eduflow, 2013). Dafiagor (2011) asserted that tardiness could affect the performance and learning proficiency of the students. Tardiness destroys students and disorganizes its learning. It also leads to absenteeism and the general failure of one's student's life. These also affect individuals' academic performance.

Table 3. Ranking of specific factors that affect the academic performance of the SHS students of NNHS

Factors	Rank	Factor	Frequency of response	Percentage
14. Lack of internet connectivity in the school	1	School-related Factor	131	72.38 %
36. Feeling tired most of the time.	2	Student-related Factor	128	70.72 %
10. Problem with ventilation/ the temperature inside the classroom.	3	School-related Factor	113	63.42 %
15. Lack of adequate learning facilities.	4	School-related Factor	103	56.91 %
16. No research room for senior high school students.	5	School-related Factor	101	55.80 %
12. Lack of books and reference materials in the school library.	6.5	School-related Factor	98	54.14 %
37. Not getting enough sleep.	6.5	Student-related Factor	98	54.14 %
54. Lack of self-confidence	8	Student-related Factor	95	52.44 %

This table shows the ranking of specific factors that significantly affect the academic performance of the senior high school students of Narra National High School. The data revealed that more than half of the respondents 131 (72.38 %) said that lack of internet connectivity in school (school-related factor) affected their academic performance. It was followed by another student-related factor which was feeling tired most of the time with 128 (70.72 %). Problem with ventilation and temperature inside the classroom with 113 (44.75 %) ranked third, then lack of adequate learning facilities 103 (56.91 %), no re-

search room for the senior high students 101 (55.80 %), lack of books and reference materials in the school library and not getting enough sleep 98 (54.14 %), and lack of self-confidence 95 (52.49 %). Majority of the respondents revealed that their academic performance was affected by factors under school-related factors.

Chimombe (2011) stated that various studies are done on the effect of school environment or academic performance. When the school environment is conducive for the students to learn it may bring comfort to them and motivate them to study well. Conversely, if the school environment is not conducive for learning it may lead to students under performance.

According to Taylor & Vlastos (2009) classroom, environmental design can facilitate and improve the learning process of the students as well as the teachers. This study was asserted by Hussain et al. (2012) that academic achievement has a close link with the availability of educational facilities on their schools. Lumuli (2009) noted that the provision of adequate learning facilities at all levels including equipment and human resource enhance the quality and relevance of imparted skills of the learner. It is also necessarily to provide facilities and equipment needed during a lecture to enhance more the skills and potentials to provide competitive and progressive learners; classroom environment has revealed that physical arrangement plays a vital role in the teaching-learning process.

Table 4.a. Relationship Between the Gender of the Respondents and their Academic Performance

variable	coefficient	std. error	t value	one-sided p value
intercept	0.1364	0.5883	0.2319	0.4085
Acad. P.	0.0148	0.0067	2.2048	0.0144

Additional statistics:
 Average value of the dependent variable Gender: 1.4309
 Average value of the explanatory variable Acad. P.: 87.2044
 Number of observations: 181
 standard error of estimate (SEE): 0.4913
 coefficient of determination (R-squared): 0.0264

P value 0.2319 > 0.05

The data above indicates that there was no significant relationship between the gender of the student-respondents and their academic performance. Meaning, the gender of every learner did not affect their academic performance and achievement in school.

The result contradicts Balili 's findings (2013) that affirmed that students learn in different ways. One of these differences is the gender of the learners. Every individual is unique from each other. Heine- seen (2010) highlighted that boys learn entirely different from girls.

Table 4.b The Relationship Between the Age and the Academic Performance of the Student-Respondents

variable	coefficient	std. error	t value	one-sided p value
intercept	98.9389	11.6178	8.5161	0.0000
Age	-0.6633	0.6563	1.0106	0.1568

Additional statistics:
 Average value of the dependent variable Acad. P.: 87.2044
 Average value of the explanatory variable Age: 17.6906
 Number of observations: 181
 standard error of estimate (SEE): 5.4390
 coefficient of determination (R-squared): 0.0057

P value 8.5161 > 0.05

The data reveals that there was no correlation between the age and the academic performance of the student-respondents. It only indicated that the age of the respondents did not influence his/her academic performance.

Conversely, Abbasi and Mir (2012) accentuated that student’s characteristics such as their age, entry qualification, self-motivation, and work ethics could give an impact on their performance.

Table 4.c. The relationship between the Distance of the House from School also, the Academic Performance of the Students

variable	coefficient	std. error	t value	one-sided p value
intercept	8.0709	1.9333	4.1748	0.0000
Acad. P.	-0.0643	0.0221	2.9072	0.0021

standard error of estimate (SEE): 1.6147
coefficient of determination (R-squared): 0.0451

P value 4.1748 > 0.05

The data above reveals that there was no significant relationship between the distance of the house from school and the academic performance of the students. It affirmed that the distance of the house from school did not greatly affect the academic achievement of the students.

In contrary, as Agbuga (2008) pointed out in his study, students’ environment, including the distance of their houses to the school, could significantly affect the academic achievement and performance of the students. Also, Dafiagor (2011) asserted that tardiness due to long walk or travel could affect the performance and learning proficiency of the students. Tardiness destroys the students and disorganizes his/her learning.

CONCLUSIONS

Based on the results and findings of the study, the researchers arrived at the following conclusions. There were different factors that affect the academic performance and achievement of the senior high school students of Narra National High School. These include family-related factors, school-related factors, teacher-related factors, and student-related factors. The said factor significantly influence the performance of the learners in school; Among the four major factors, school-related factors, specifically internet connectivity, was the most prevailing factor that significantly affects the academic performance of the SHS students of NNHS; There was no significant relationship between the gender and the academic performance of the senior high school students of Narra National High School; There was no correlation between the age and the academic performance of the SHS students of NNHS; and The distance of the house of the students from school did not affect their academic performance in school.

RECOMMENDATIONS

In consideration of the findings of the study, the following were the recommendations: the parents, be aware of your responsibilities and monitor and coordinate the academic performance of your children to the teachers, the teachers, conduct self-investigation on the performance of the students in school especially in teaching-learning process, the school heads and administrators, always monitor and evaluate how the curriculum was implemented and the things needed to improve it, The school managers should always make sure that the learning environment is conducive for teaching and learning process, The school administrators should make a separate organization for senior high school students and do more educational projects for better growth and development and The students and learners should be aware of the different factors that affect their academic performance and coordinate their concern about it to the school administrators to solve it easier.

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THE SCHOOL UNIFORM POLICY FROM THE STUDENTS' PERSPECTIVE: BASIS FOR POLICY IMPROVEMENT

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ABSTRACT

This quantitative research delved on knowing the students' perspective on the school's uniform policy in order to provide basis for policy improvement. A total of 355 students of Narra National High School were selected as respondents using a stratified random sampling technique. The data were collected through a survey questionnaire and were analyzed and interpreted using frequency, percentages, rank, mean and standard deviation. It found out that students have knowledge on the benefits and advantages of wearing uniform, yet, still justifies their failure to comply with the school uniform policy with their choice and preference, self-regard and self-expression, and economic status. A thorough review of the existing policy on school uniform to come up with a more appropriate policy is hereby urged.

Keywords: Policy, Students' Perspective, School Uniform

INTRODUCTION

Every government has its obligation to nurture, hone and develop its citizen by providing them quality education. A student, especially in the public school system, enjoys privileges and opportunities to become who they want to be. Being a student is a right, but, it comes with responsibility.

Abiding with the school policies and rules is one among students' responsibilities. A proper school attire a student should wear when coming to school is still an issue nowadays as it has an impact to student's life. For this reason, private school and even public school have determined and implemented their respective school uniform policies. But, DepEd Order 65 s.2010 entitled as "School uniform are not mandatory while identification card (IDs) are free of charge to all public school students nationwide" says otherwise.

Despite of the issuance of department order, the Narra National High School (NNHS), along with other public schools in the province that prescribed and required a school uniform to their students for the reasons: (1) it is economical, (2) for easier identification of students; and (3) for security purposes. The school's prescribed uniform for male and female students differs according to the program they are enrolled in. For students who are enrolled in General Secondary Curriculum (GSC), the prescribed uniform is green pleated skirt, white blouse and green tie with school logo, and white polo or polo shirt and any dark colored-pants for female and male students respectively. While, Science, Technology, & Engineering (STE) male and female students are required to wear white polo and brown pants, and brown checkered skirt, long sleeved blouse with a tie respectively. The students under Special Program for Sports (SPS) on the other hand are required to wear gray pants and white polo for the males and gray-colored checkered skirt and white blouse with tie for females. Green pleated skirt paired with white long sleeved blouse with a tie, and black pants partnered with polo are required for female and male students under the Special Program in the Arts (SPA). Lastly, the male students of Senior High School (SHS) are required to wear a cream polo and black pants while pencil-cut emerald green skirt and cream blouse

with a scarf are required for the female SHS students. It is noted that parents and school authorities both agreed on the implementation of the prescribed uniform.

With the increasing number of school problems or issues involving students such as bullying, violence, decreasing academic performance and the like, researchers believe that wearing school uniform might offer solution to the said problems. Also, wearing proper school uniform was perceived to help the students develop sense of identity and responsibility to the school community. With this, the researchers conducted this study entitled “The School Uniform Policy from the Students’ Perspective: Basis for Policy Improvement”.

Findings of this study which gathered information about the students’ reasons for not wearing the school uniform and their perceptions toward the benefits and/or advantages of wearing, generally provides a basis for the improvement of the existing school uniform policy. It is also significant to the teachers as it will help them adjust their strategies and measures to enforce the prescribed uniform of the school. Meanwhile, the students will also benefit from it as it might help them understand the relevance of adhering to the school’s uniform policy, thus, complying to the said policy. Lastly, the parents will be able to understand the importance of the school uniform and realize their part in encouraging their children to abide with the school’s uniform policy.

LITERATURE REVIEW

Over the years, there are lots of studies conducted probing the effects of wearing school uniform to students’ behavior, academic performance, and school environment. Some of the findings were presented to substantiate and establish the very purpose of the conduct of this present study.

Kouzmine (2019), in her commentary, enumerated several reasons as to why school uniform is a bad thing. According to her, school uniform limits student’s personal expression, feeling of discomfort, it forces conformity and discourages diversity, an additional burden to parents since it can be costly to buy such. Similarly, Cook (n.d.) listed reasons why school uniform is not advisable since it generally mean additional costs, refutes individual expressions, promotes bullying and violence and others.

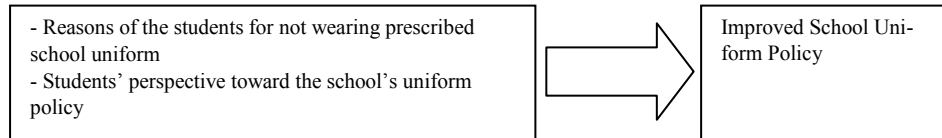
The study of Jones (2018) concluded that school uniform may positively affect the school’s climate that provides equal opportunity for the students from different walks of life. His study further claims that bullying among students, and conflict between parents and their children will be lessened through school uniform. This assertion indeed offers delightful information as for school situations, however, conflicts and bullying incidences are still becoming prevalent in this research’s locale which made the researchers to dig more of the said issue.

Sempele, Wamalwa, and Kisilu (2014) revealed that learners’ feeling of being equal to their fellow students which resulted to higher self-esteem is attributed to school uniform. They added that having school uniform positively affects learners since they became less concerned on their differences in appearances and what others might think of them. If the school, where students spend more of their time, promotes a climate where self-esteem is nurtured and appearance differences is not an issue will surely be able to make students learn more and perform better. Perhaps, having a school uniform means that a student will not have to worry about peer pressure when it comes to their clothes. When everyone dressed the same, worrying about what you look like isn’t important. For others this is not important, it’s up on you if you follow the school uniform policy as long as you are comfortable in what you wear.

Factors like students’ behavior, test performance, and attendance were positively affected by wearing school uniform in a public school. Specifically, wearing of school uniform promotes equality or denounces differences among students from various societal class. Students were also become more disciplined when they are in their prescribed uniform which further resulted to being academically-focused, thus, improves their academic performance (Agarwal, 2015).

Grounded on the previously presented facts and concepts, the researchers come up with a notion that by knowing the students' reasons for not wearing prescribed school uniform and their perceptions on its benefits and advantages might result to an improved school uniform policy as shown in Figure below.

Figure1. Research Paradigm



STATEMENT OF THE PROBLEM

This study aimed at identifying the factors affecting the school uniform policy implementation which might provide basis or assistance in examining and improving the existing school's uniform policy.

Specifically, it sought answers to the following questions:

1. What are the students' reasons for not wearing prescribed school uniform? and
2. What are the students' perspective toward the school's uniform policy?

Research Assumption

It is assumed that knowing the students' reasons for not wearing school uniform and their perception toward the benefits of school uniform will improve the existing school's uniform policy.

METHODOLOGY

This study used the descriptive method of research which describes the nature of situation as it exists at the time of the study and explore the factors particular phenomena such as the respondents' demographic profile, their reasons for not wearing school uniform and their perceptions toward the benefits/advantages of wearing such. This method is a fact finding study with adequate and accurate interpretation of the findings. It describes what is, with emphasis to what actually exist such as current conditions, practices, or any phenomena.

Stratified random sampling technique was utilized in identifying the respondents of this research because the population of every grade level is unequal. A Slovin's Formula with 0.05 margin of error was employed in determining the sample size. Table 1 shows the computed samples taken from each grade level totaling to 355 out of 3,344 students.

Table 1. Respondents' Computed Sample

Grade Level	Sample (n)
Grade 7	70
Grade 8	66
Grade 9	62
Grade 10	57
Grade 11	51
Grade 12	49
Total	355

In gathering the data, the researchers developed a survey questionnaire with three parts. Part 1 of the questionnaire covered the demographic profile of the respondents particularly their age, gender, ethnicity and religion. Part 2 comprised the possible reasons of the students for not wearing the prescribed school

uniform. While the last part was focused on the students' perceptions on the benefits and/or advantages of wearing the proper school uniform.

The approval from the office of the school's administrator was secured prior to the conduct of this study. After the permission was granted, the researchers personally conducted the survey. The survey questionnaires were handed to the respondents after discussing how it will be answered. Upon completion, the questionnaires were collected and the responses were tabulated, analyzed and subjected to interpretation.

Frequency, percentages, rank, mean, and standard deviation were computed to analyze the respondents' demographic profile, and their answers on items covering the reasons of not wearing uniform and perceptions to the benefits of wearing it.

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

The findings, analysis, and interpretation of collected data with regards to the respondents' reasons for not wearing proper school uniform, and their perceptions toward the school uniform policy are presented below in accordance with the specific research questions.

Reasons of the Students for Not Wearing Proper School Uniform

Table 2. Students' Reasons for Not Wearing Proper School Uniform

Reasons	<i>f</i>	Rank
My Parents can't afford me to buy proper school uniform.	158	2
I don't feel comfortable wearing proper school uniform.	171	1
I don't think that wearing proper school uniform is a basis in studying.	126	4
I don't look cool while wearing proper school uniform.	103	5
School uniform is not suitable for my body shape.	82	8
I am living alone so that I can't afford to purchase proper school uniform.	85	7
I prefer to wear trendy outfits than school uniform.	102	6
Teachers allow me to wear civilian clothes.	72	10
I can't express myself when wearing proper school uniform.	149	3
I don't think that dress codes or uniform policies have to be the means to achieve life success.	78	9
I'm not allowed to wear proper school uniform because of my religion.	40	12
I can't express myself when wearing proper school uniform.	55	11

Table 2 shows the frequency and rank of the respondents' responses with regard to their reasons for not wearing proper school uniform. The result shows that most of the respondents are not comfortable wearing the proper school uniform. The table also reveals that parents' ability to buy the school's prescribed uniform is the second-most reason why students do not wear uniform. Reasons such as *I can't express myself when wearing proper school uniform*, *I don't think that wearing proper school uniform is a basis in studying*, and *I don't look cool while wearing proper school uniform* ranked as the 3rd, 4th, and 5th reasons respectively, the respondents have for not wearing uniform. Noticeably, most of the reasons the students have for not wearing uniform are connected to or pertaining to self-expression, fashion and individualism, except for the reason *My Parents can't afford me to buy proper school uniform*. This conforms with Kouzmine (2019) when she mentioned wearing uniform might be an additional expense, and negatively affects student's self-image and self-expressions.

Students' Perception towards the Benefits of Wearing Proper School Uniform

Table 3. Perception on the Benefits of Wearing Proper School Uniform

Indicators	M	σ	Interpretation
School uniform can decrease violence and theft.	2.1099	0.7263	Agree
School uniform can prevent gang members from wearing gang color and insignia at school.	2.1549	0.8034	Agree
School uniform can help parents and students resist peer pressure	1.8901	0.7715	Agree

Indicators	M	σ	Interpretation
School uniform can help school officials to recognize non-students who may be in the school.	1.9633	0.7796	Agree
School uniforms boost school spirit and increase the sense of a school community.	2.1831	0.9374	Agree
School uniforms are an effective way of improving student academic achievement	2.0028	0.7972	Agree
School uniforms improve student focus by reducing in-class distractions.	1.9155	0.8327	Agree
School uniforms are an effective way of improving student behavior.	2.0282	0.8889	Agree
School uniforms are an effective way of reducing clothing related bullying.	1.9690	0.8548	Agree
School uniforms reduce the prevalence of clothing related cliques.	2.0366	0.8997	Agree
School uniforms are an effective way of reducing gang related behavior in school.	2.0648	0.9290	Agree
School uniforms are cost effective alternative to non-student school wardrobes.	2.0901	0.9192	Agree
School uniform is an effective way to improve education.	2.0056	0.8798	Agree
School uniform can instill students with discipline.	2.1577	0.9038	Agree
School uniforms do not reduce student creativity	1.9915	0.8813	Agree
School uniform can avoid student from cutting classes.	2.0620	0.8904	Agree
School uniform can make a student to dress smartly.	1.9577	0.8674	Agree
Valid N (listwise)	355		

Survey Scale:
1.00-1.75 - Strongly Agree
1.76-2.5 – Agree

2.51-3.25 - Disagree
3.26-4.00 - Strongly Disagree

Table 3 reveals that students have agreed on all the benefits or advantages of wearing prescribed uniform presented. The top most benefit or advantage the students have agreed is *Boosting school spirit and increasing sense of school community*. It has a mean of 2.1831 and standard deviation of 0.9374. It is followed by the perception *It can instill students with discipline* ($\mu= 2.1577$, $\sigma= 0.9038$), *Can prevent gang members from wearing gang color and insignia at school* ($\mu= 2.1549$, $\sigma= 0.8034$), *Can decrease violence and theft* ($\mu= 2.1099$, $\sigma= 0.7263$), and are *Cost effective alternative to non-student school wardrobes* ($\mu= 2.0901$, $\sigma= 0.9192$). Clearly, students are aware of the good impact of wearing school uniform since they agreed on all of the benefits or advantages presented, thus, enforcing the school's policy on students' uniform might not be a problem.

SUMMARY, CONCLUSION AND RECOMMENDATION

Summary of Findings

This section presents the excerpts of the results of careful analysis of the gathered data on students' perspective of the school's uniform policy.

Students' Reasons for Not Wearing Proper School Uniform

The findings present that students' fashion sense, self-regard and self-expression marked as the top reasons why they are not abiding with the school's uniform policy. While, financial or economic-related reason was only secondary.

Students' Perception on Benefits and Advantages of Wearing School Uniform

Students' perception on the impact of wearing school uniform plays vital role in examining the effectiveness of the implementation of school uniform policy. The present study finds that students are aware of the positive impact and/or advantages of wearing school uniform. School uniforms boost school spirit and increase the sense of a school community, instill students with discipline, prevent gang members from wearing gang color and insignia at school, decrease violence and theft, and are cost effective alternative to non-student school attires were the top benefits and/or advantages the students are most aware of. The results signify the students' agreement to the identified positive effects of the school uniform policy.

Conclusions

Based on the findings presented above, the researchers concluded that (1) choice and preference, self-regard and self-expression, and economic status have significant influence on students' adherence to school's policy on uniform; and (2) the students were aware of the positive impact and/or advantages of wearing school uniform. It would mean that wearing school uniform has positive effect to students and the school community as a whole.

Recommendations

With the results in mind, it is recommended that the school must review its existing school uniform policy in order to come up with a mechanism that would benefit the students and the school. DepEd Order No.65 s.2010 might be considered in formulating its school uniform policy. Also, the school must conduct symposium or dialogue with the parents and the students to discuss the benefits and the advantages of wearing school uniform in order to make them aware of its positive effects. With this, the smooth implementation of the school's existing policy on school uniform will be achieved.

ACKNOWLEDGMENT

This research will not be possible without the support, encouragement and assistance of the researchers' family, friends and colleagues. Grateful acknowledgement is likewise extended to the group of students who shared their time and efforts in assisting the researchers. The researchers' expresses thanks to the students who served as respondents of this study. Above all, this research is dedicated to our Heavenly Father who provided the researchers enough wisdom.

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THE CAREER DEVELOPMENT PROGRAM AND THE CAREER READINESS OF GRADE 10 STUDENTS: BASIS FOR CAREER ENHANCEMENT PROGRAM

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ABSTRACT

The Department of Labor and Employment identified that the wrong career choices of students in higher education has resulted to greater problems of job and skills mismatch which is one of the primary causes of high youth unemployment rate in the Philippines. Using the Department of Education Career Development Program in developing competencies and the level of career readiness of selected Grade 10 students in La Union enrolled in AY 2018 – 2019 an enhancement program was conducted. Descriptive-correlational research design was utilized to measure the developed competencies and their career readiness. Otis Lennon Scholastic Ability Test was used to measure the mental ability, t- test and analysis of variance were used to treat the data collected. Results revealed that respondents perceived their career competencies as develop particularly in developing career awareness; employment readiness; acquiring career information; identifying career goals; and acquiring knowledge to achieve career goals. Moreover, respondents perceived their career readiness in terms of self-information, career information, career decision making and career planning as below average. Comparison of respondents' sex, mental ability, family monthly income, and parents' involvement in choosing their career were very significant in developing career competencies and career readiness. It was concluded that there is a strong relationship between the career development program and career readiness.

Keywords: Career Development Program, Career Readiness, Sex, Mental Ability, Family Monthly Income

INTRODUCTION

Career development incorporates evolutionary dynamics which prescribes an individual's choices with respect to his/her future employment toward the desired or targeted profession. Counseling and Vocational Guidance emphasize that the professional life of an individual is not confined only to the period of employment, but incorporates prior phases of decision-making and preparation that lead to employment. The term also incorporates changes in and movement from one professional environment to another (Siddiqui, 2008).

The National Career Development Association (NCDA) in 1993 and Career Guidance Advocacy Program in 2013 aimed to help individuals increase self – understanding of their abilities, interests, values and goals as vital foundation of the career development process. Hence, developing career development program tailor-fit to the new curriculum is vital for career readiness and success.

The Department of Education developed the National Career Assessment Examination (NCAE) to determine the strengths of students in different career fields. They can plan a course of study that will give them the skills and education which they will need for their ideal careers. Once they are determined which is suited for them. However, with the Education for All (EFA) programs which aim to improve the quality of education and eliminate drop outs (Tan, 2015). It affects what the NCAE wanted to achieve regarding the alignment of students' interests and abilities in their chosen careers.

Related to career development is career readiness of the students towards school achievement and success by which the Career Readiness Partner Council (CRPC) of 2013 acknowledge its vital role played in the life of student. "Career readiness" consists of the development of academic, employability and technical skills that are not only minimally qualifying for a specific occupation but also needed to pursue learning and work throughout the life course (ACTE, 2018). Career readiness is the attainment and demonstration of necessary competencies that generally prepare graduates for an effective evolution into the workplace. Competencies that each individual must possess are critical thinking/ problem solving, communicating through oral/written, teamwork/collaboration, flexibility, leadership skill, professionalism/work ethic, career management, fluent globally and intercultural.

But with the dramatic change in the labor market in the 21st century, particularly the increase progress of information and communication technologies,, individuals are facing rising educational demands and experiencing job transitions and working in different occupations across their lifespan because they lack three key qualities, critical thinking, initiative and effective communication skills (Alcasid, 2013).

It is in this premise that the researcher desires to investigate the current status of the career development program rendered to the Grade 10 students and at the same time, assess their career readiness.

THEORETICAL/CONCEPTUAL FRAMEWORK

To capture a holistic perspective of career development and career readiness of students, theories of Becker's "Human Capital Theory" (Becker, 1993), Bronfenbrenner's bio-ecological systems theory (1994), College choice theory and School Effectiveness theory (Lee and Kim, 2010), Super's Life Space Life Span Theory (1990) of career development and the model for National Standards for School Career Development Program in the Philippines (Clemeña, 2010) serves as the foundation of the study.

Becker's human capital theory (Becker, 1993) considers career readiness as a component of student graduates' human capital, which contribute to students' competencies. Therefore, as a component of human capital, career readiness is affected by interactions between these variables (including career information, and self.

College choice theory stresses students' family features such as SES and parental involvement (Lee & Kim, 2010). College life is viewed as a developmental phase that is influenced by these students' background characteristics (mental ability, gender). The theory of school effectiveness states that greater school abandonment rates and lesser perseverance in post-secondary schooling unavoidably go together with an absence of college readiness regardless of the student's personal characteristics and background (Lee & Kim, 2010).

Super's Life Space Life Span Theory (1990) of career development and the model for National Standards for School Career Development Program in the Philippines (Clemeña, 2010) are the foundations of the study.

Donald Super's (1990) theory postulates the implication of an individual's different life stages for making choices in relation to career. Hence, he distinguished that career choice is a dynamic process where career development was observed as an evolving process of life (Patoon and McMahon, 2006, Arnado and Posadas, 2017).

The figure shows below the flow of the methodological process of this research. The first box with the heading INPUT contains the information data of the (a) respondents namely: sex, mental ability, family monthly income and parents' involvement in choosing career.. In the second box with the heading PROCESS includes the analysis of career development program adapted from the Model for National Standards for School Career Development Program in the Philippines (Clemeña, 2010), measured

through the standards that contains different competencies. The third box with the heading OUPUT contain the result of the research which is the Career Development Enhancement Program.

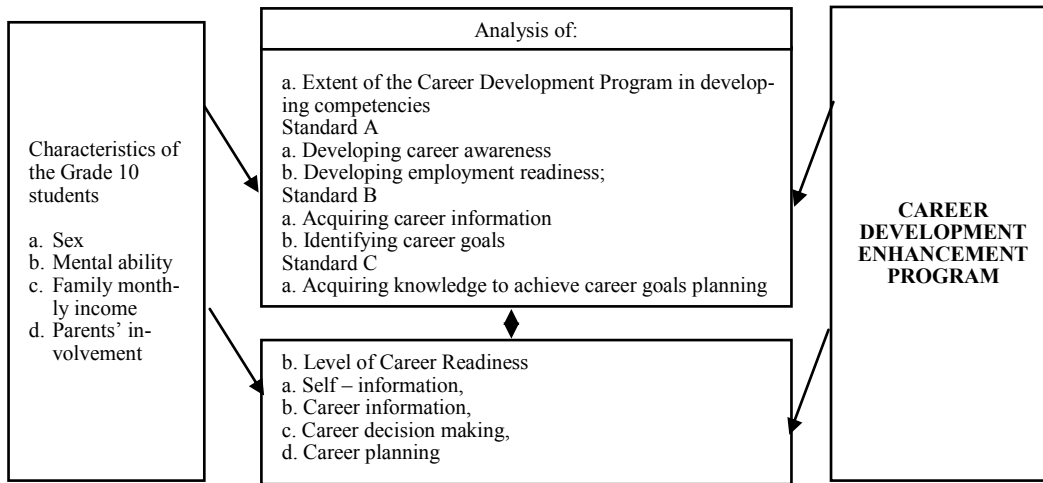


Figure 1. A Schematic Presentation showing the Relationship of the Variables in the Study

STATEMENT OF THE PROBLEM

The purpose of this study is to determine the relationship between the extent to which the career development program have developed competencies of students and their career readiness. Specifically, it sought to answer the following questions:

1. What are the characteristics of the respondents in terms of:
 - a. Sex
 - b. Mental ability
 - c. Family income
 - d. Parents' involvement in choosing career?
2. What is the extent of the career development program in developing competencies as perceived by the respondents in terms of
 - a. Developing career awareness
 - b. Developing employment readiness
 - c. Acquiring career information
 - d. Identifying career goals
 - e. Acquiring knowledge to achieve career goals?
3. What is the level of respondents' career readiness in terms of:
 - a. Self – information
 - b. Career information
 - c. Career decision making
 - d. Career planning?
4. What is the significant difference of the extent in which the career development program has developed competencies of the respondents when grouped according to their characteristics?
5. What is the significant difference in the level of career readiness of the respondents when grouped according to their characteristics?
6. What is the significant relationship between the extent to which the career development program has developed competencies and the level of career readiness of the respondents?
7. What areas of career development enhancement program may be proposed to the public secondary schools?

METHODOLOGY

This study used a descriptive and correlational research design. The research was conducted to the different National High Schools in La Union where the respondents of this study were the Grade 10 students enrolled during the School Year 2018 – 2019. Three sets of survey instruments were used for data collection: Three sets of survey instruments were used for data collection: **1. The Otis-Lennon School Ability Test (OLSAT)**, published by Pearson NNC, is a multiple choice test. It is the newest version of a distinguished series of ability tests. OLSAT 8 is designed to measure those verbal, quantitative, and figural reasoning skills that are most closely related to scholastic achievement. The OLSAT series is based on the idea that to learn new things, students must be able to perceive accurately; to recognize and recall what has been perceived to think logically; to understand relationships; to abstract from a set of particulars, and to apply generalizations to new and different contexts. Pilot testing was done to the twenty Grade 10 students. it has a reliability of .92 which is very reliable; **2. Career Development Program Student Inventory (CDPSI)**, a 25-item inventory adapted from Arnado and Posada (2017) which is from Clemeña’s (2010) model of National Standards for School Counseling Programs in the Philippines. Using Cronbach alpha, the Career Development Program Student Inventory has a coefficient alpha of .854 which mean that it has an excellent internal consistency; **3. Career Readiness Questionnaire** a standardized instrument assessing the career maturity level of an individual which is adapted from Arnando and Posadas (2017). Using Cronbach alpha, the Career Readiness questionnaire has a coefficient alpha of .937 which means that it has an excellent internal consistency. This research protocol was observed in conducting the study Ethics Approved by IERC. Data for the study were subjected to the following statistical tools: frequency and percentage; mean and standard deviation; T-test and Analysis of Variance (ANOVA); and Pearson r.

RESULTS AND DISCUSSION

The characteristics of the Grade 10 students in terms of sex, mental ability, parents’ involvement in choosing career and family monthly income revealed that majority of the respondents were 1478 or 51.1 percent female respondents, mental ability of below average 1705 or 59 percent, family monthly income less than Php 7,890 family monthly income with 1820 or 62.9 percent and parents’ involvement in choosing a career revealed the parents were moderately involved This implies that there were more females enrolled during the study. Parents and their children who have a closed relationship to each other. Roe’s theory supports this finding wherein it focuses in early relations within the family and their influence on career choice. The parent- child interaction affects the child’s career decision. (Peters, J.S., 2015).

Table 1 Perception of the Respondents Regarding the Extent of the Career Development Program in Developing Competencies

Indicators	Mean	SD	Interpretation
Standard A: Students acquire the skills to investigate the world of work in relation to knowledge of self and to make informed career decision			
Developing Career Awareness	3.932	.7388	DEVELOPED
Developing Employment Readiness	3.868	.7401	DEVELOPED
Standard B: Students employ strategies to achieve future career goals with success and satisfaction			
Acquiring Career Information	3.720	.7530	DEVELOPED
Identifying Career Goals	3.908	.7200	DEVELOPED
Standard C: Students understand the relationship between personal qualities, education and training and the world of work			
Acquiring Knowledge to Achieve Goals	3.912	.7776	DEVELOPED
Overall rating for Career Development Program	3.868	.6397	DEVELOPED

Table 1 shows that the extent of the career development program has developed the competencies of the respondents. Counselors and counseling programs in schools should assist the students in the continuous expansion of knowledge and awareness of the world of work. This must include a developing

recognition of the relationships between values, lifestyle, and careers. Many excellent films and printed materials are available for this purpose (Gibson & Mitchell, 2003).

Table 2. Perception of the Respondents Regarding their Level of Career Readiness

Indicators	Mean	SD	Interpretation
Self-Information	3.268	.4701	Below average
Career Information	3.066	.4975	Below average
Career Decision Making	3.118	.4964	Below average
Career Planning	3.137	.5169	Below average
Overall rating for Career Development Program	3.147	.4430	Below average

Table 2 revealed that all the indicators of career readiness are perceived to below average. This implies that students were not yet ready in choosing a career because information, trainings, exercises and other are still insufficient. According to Villar (2014), Career Orientation seminars must take place and be held for high school students wherein students are guided to select a college course and the schools where they are offered, and it is often thought that Career Placement takes place as early as high school.

Table 3 Perception of the Respondents Regarding the Extent to which Career Development Program has Developed Competencies when Group According Sex

Sex	Mean	SD	t	p-value	Significance
Male	3.785	.6558	-6.834	.000<.01	Very significant
Female	3.947	.6139	-6.834	.000<.01	Very significant

The table 3 shows that there is a very significant differences in the perception of the respondents regarding the extent to which career development program has developed their competencies when they are grouped according to sex. This implies that male and female are not comparable in their perception. This supports what McKinsey (2018) stated that women had a better understanding of what they are looking for in a new job, and thus in a new job description. Also, in Stockdale and Nadler's (2012) economic model, women tend to select careers or college majors based more on job satisfaction, people-orientation, or schedule flexibility, while men tend to make decisions based on their financial success.

Table 4 Comparison of the Perception of the Respondents Regarding the Extent to which Career Development Program has Developed Competencies when Grouped According to Mental Ability

Mental Ability	Mean	SD	F-value	p-value	Significance	Remarks (Post hoc)
Above average (3)	4.073	.6518	50.658	0.000 < 0.01	Very Significant	1 VS 2, 3
Average (2)	4.004	.5957				
Below average (1)	3.770	.5792				
Total	3.868	.6397				

Table 4 shows that there is a very significant differences in the perception of the respondents regarding the extent to which career development program has developed their competencies when they are grouped according to mental ability. As Quadri (2018) study affirms that intellectual development was the major factor which influenced career choice of students because this is the determining factors and motivations that led the individuals' involvement in an action and been seen to influence the performance level of such individuals in developing competencies. In line with this, the Department of Education developed the National Career Assessment Examination (NCAE) to determine the strengths of students in different career fields. They can plan a course of study that will give them the skills and education that they will need for their ideal careers once the students determined which careers they are ideally suited for.

Table 5 Comparison of the Perception of the Respondents Regarding the Extent of Career Development Program when Grouped according to Family Monthly Income

Family Monthly Income	Mean	SD	f-value	p-value	Significance	Remarks (Post hoc)
Above Php 157, 8000 (7)	3.306	.6348	5.367	0.000 < 0.01	Very Significant	1 VS 2, 3, 7
Between Php 118, 350 - Php 157, 800 (6)	3.514	.6350				
Between Php 78, 900 - Php 118, 350 (5)	3.932	.6035				

Family Monthly Income	Mean	SD	f-value	p-value	Significance	Remarks (Post hoc)
Between Php 31, 560 - Php 78, 900 (4)	3.946	.6297	5.367	0.000 < 0.01	Very Significant	1 VS 2, 3, 7
Between 15,780 - Php 31,560 (3)	3.953	.6487				7 VS 2, 3, 4, 5
Between Php 7,890 - Php 15, 780 (2)	3.926	.6350				
Less than Php 7,890 (1)	3.833	.6348				
Total	3.868	.6397				

Table 5 shows that there is a very significant differences in the perception of the respondents regarding the extent to which career development program has developed their competencies when they are grouped according to family monthly income. As Blustein et al (2002) and Posadas et al (2017) emphasize that students with low family income or low socio-economic status engaged in less deliberate career development activities, receive less guidance in school and from home regarding career. Also, Brazal and Guillo (2015) said that students do not want to have a feeling of financial pressure regarding the payments for their college expenses.

Table 6 Perception of the Respondents Regarding the Extent to which Career Development Program has developed Competencies when Grouped according to Parents' Involvement in Choosing Career

Parents' Involvement in Choosing Career	Mean	SD	f-value	p-value	Significance	Remarks
(3)High	4.019	.5946	9.486	0.000 < 0.01	Very Significant	1 VS 2
(2)Moderate	3.820	.6539				3 VS 1, 2
(1)Low	3.769	.6810				
Total	3.868	.6397				

Table 6 shows that there is a very significant differences in the perception of the respondents regarding the extent to which career development program has developed their competencies when they are grouped according to parents' involvement in choosing career. According to Gniewosz and Dietrick (2010), career development is being shaped through the guidance of parents who are in continuous contact with the child. Family involvement on career development among adolescents have a great effect on them because it is essential that families should understand how to provide guidance to their child or children's need. Parents who are actively involved in their children's education can expect positive results.

Table 7 Comparison of the Perception of the Respondents Regarding the Level of Career Readiness of Grade 10 Students when Grouped According Sex

Sex	Mean	SD	t	p-value	Significance
Male	3.113	.4484	-4.048	.000 < .01	Very Significant
Female	3.180	.4355			Very Significant

Table 7 shows that there is a very significant differences in the perception of the respondents regarding the level of career readiness when they are grouped according to sex. This implies that male and female are not comparable in their perception. According to Posadas et al (2017), sex is one of the internal determinants that correlates with career readiness, which is the same with the findings of Peters (2015) and Wu (2017). Male's most influential factors in choosing a career was the anticipated earnings while females choose availability of advancement opportunity and opportunity to apply skills. As Freedman (2012) indicates that women tend to be slightly more self-aware because they can identify and understand feelings and acknowledge frequent recurring reactions.

Table 8 Comparison of the Perception of the Respondents Regarding the Level of Career Readiness when Grouped According Mental Ability

Mental Ability	Mean	SD	f-value	p-value	Significance	Remarks
Above average (3)	3.293	.4642	49.113	.000 < 0.01	Very Significant	1 VS 2, 3
Average (2)	3.240	.3907				
Below average (1)	3.081	.4037				
Total	3.147	.4431				

Table 8 values show that there is a very significant differences in the perception of the respondents regarding the level of career readiness when they are grouped according to mental ability. This implies that the higher their mental ability, the higher the level of their career readiness since it was observed that students with high mental ability easily cope up with their surroundings and demands of their environment. Piaget's theory on Intelligence states that an intelligence act is one that causes an approximation to the conditions optimal for an organism's survival. It allows an organism to deal effectively with its environment. It always tends to create optimal conditions for the organism's survival under the existing circumstances. For students, it is necessary to develop their mental abilities in order to survive with the challenging task in school. If it is innate within him and has been nurtured by wholesome environment, he will be capable with more complex intellectual actions, (Schhustack, 2004, Martinez, 2010)

Table 9 Comparison of the Perception of the Respondents Regarding the Level of Career Readiness when Grouped According to Family Monthly Income in Choosing Career

Family Monthly Income	Mean	SD	t-value	p-value	Significance	Remarks
Above Php 157, 800	2.746	.3281	9.993	0.000 < 0.01	Very Significant	1 VS 2, 3, 7
Between Php 118, 350 - Php 157, 800	2.896	.3607				2 VS 7
Between Php 78, 900 - Php 118, 350	3.187	.4286				3 VS 6, 7
Between Php 31, 560 - Php 78, 900	3.250	.4712				4 VS 6, 7
Between 15,780 - Php 31,560	3.241	.4225				5 VS 6, 7
Between Php 7,890 - Php 15, 780	3.200	.4077				
Less than Php 7,890	3.109	.4511				
Total	3.147	.4431				

Table 9 shows that there is a very significant differences in the perception of the respondents regarding the level of career readiness when they are grouped according to family monthly income. According to Posadas et al (2017), parents who have high income can better provide resources to acquire educational materials for their children and discuss job opportunities and indicates a high level of career readiness of students. Therefore, socioeconomic status affects performance which is linked with college outcomes (White House, 2014).

Table 10 Comparison of the Perception of the Respondents Regarding the Level of Career Readiness when Grouped According to Parents' Involvement in Choosing Career

Parents' Involvement in Choosing Career	Mean	SD	f-value	p-value	Significance	Remarks
(1)Low	3.089	.4666	6.408	0.000 < 0.01	Very Significant	2 VS 1, 3
(2)Moderate	3.153	.4532				3 VS 1, 2
(3)High	3.239	.4183				
Total	3.147	.4430				

Table 10 shows that there is a very significant differences in the perception of the respondents regarding the level of career readiness when they are grouped according to parents' involvement in choosing career. This implies that students have a strong interaction with their parents in which it influences their career readiness upon choosing what career to take. This finding is supported by the statement by Robinson and Haris (2014) that parental support and educational engagement have a net positive impact on college readiness. Also, as Tillman (2015:23) states that parents are the major initiators in helping the students develop their post-secondary plans. Therefore. children who had healthy independence from family during adolescence and young adulthood were more confident in career choices than those who had dependent relationships (Saleem, 2014; Leonard, 2013).

Table 11 Significant Relationship Between the Extent to which the Career Development Program has Developed Competencies and Level of Career Readiness of Students

Variables		r - value	V. I.	Sign.
Career Development Program	Career Readiness			
Standard A: Students acquire the skills to investigate the world of work in relation to knowledge of self and to make informed career decision				
A. 1 Developing Career Awareness	Self-Information	.551**	Marked	VS
	Career Information	.470**	Marked	VS
	Career Decision Making	.503**	Marked	VS

Variables		r - value	V. I.	Sign.
Career Development Program	Career Readiness			
Standard A: Students acquire the skills to investigate the world of work in relation to knowledge of self and to make informed career decision				
A. 1 Developing Career Awareness	Career Planning	.480**	Marked	VS
	Overall Career Readiness	.559**	Marked	VS
A. 2 Developing Employment Readiness	Self-Information	.550**	Marked	VS
	Career Information	.477**	Marked	VS
	Career Decision Making	.515**	Marked	VS
	Career Planning	.497**	Marked	VS
	Overall Career Readiness	.569**		VS
Standard B: Students employ strategies to achieve future career goals with success and satisfaction				
B.1 Acquiring Career Information	Self-Information	.536**	Marked	VS
	Career Information	.504**	Marked	VS
	Career Decision Making	.518**	Marked	VS
	Career Planning	.506**	Marked	VS
	Overall Career Readiness	.576**	Marked	VS
B.2 Identifying Career Goals	Self-Information	.542**	Marked	VS
	Career Information	.498**	Marked	VS
	Career Decision Making	.521**	Marked	VS
	Career Planning	.534**	Marked	VS
	Overall Career Readiness	.586**	Marked	VS
Standard C: Students understand the relationship between personal, qualities, education, training and the world of work				
C.1 Acquiring Knowledge to to Achieve Goals	Self-Information	.562**	Marked	VS
	Career Information	.505**	Marked	VS
	Career Decision Making	.529**	Marked	VS
	Career Planning	.528**	Marked	VS
	Overall Career Readiness	.593**	Marked	VS
Overall Career Development Program	Self-Information	.639**	Marked	VS
	Career Information	.573**	Marked	VS
	Career Decision Making	.603**	Marked	VS
	Career Planning	.593**	Marked	VS
	Overall Career Readiness	.672**	Substantial	VS

The table shows that the correlative coefficient obtained between career development program and perceived career readiness ranges from marked relationship to substantial relationship. All the relationships obtained are found to be very significant as shown by the p-values which are all less than 0.01 level of significance. This implies that there is enough basis for the marked substantial relationships obtained. This affirms the report of Toepfer (as cited in Bholanath, 2004; Posadas et al, 2017) that through career programs, children in their early grades in high school were helped to understand the changing circumstances that they face in trying to achieve regarding their work ethics.

These findings supported what Gibson and Mitchell (2003) stated that students must be assisted in developing adequate understanding of themselves and must be prepared to relate this understanding to both social-personal development and career-educational planning. These understandings are significant in the fulfillment of the individual's need for self-actualization. Both career guidance and student's appraisal seek to further enrich their meaning and value to students by preparing them to look at themselves realistically in terms of continuing educational opportunities; career requirements, and the demands and relationships of society.

As Hooker and Brand (2010) suggest that career readiness requires a level of developmental maturity which includes self-motivation and goal setting. A developing sense of identity provides the framework for exploration and ultimate decision-making regarding career choices (Kosine & Lewis, 2008). Further Gibson and Mitchell (2003) stated that students must be assisted in developing adequate under-

standing of themselves and must be prepared to relate this understanding to both social-personal development and career-educational planning. These understandings are significant in the fulfillment of the individual's need for self-actualization. Both career guidance and student's appraisal seek to further enrich their meaning and value to students by preparing them to look at themselves realistically in terms of continuing educational opportunities; career requirements, and the demands and relationships of society.

CONCLUSIONS AND RECOMMENDATIONS

This study concluded that Career development competencies is important in developing career readiness of students; characteristics of the students place a significant part in designing an effective career development program; and, career competencies and readiness cannot be developed in one year, it has to early years in high school education.

Based on the findings of the study, the following recommendations were suggested: Adopt the proposed Career Development Enhancement Program to make it relevant in the schools to show individuals how the knowledge, understanding, skills they are obtaining and the courses they are taking will help them as they progress through their life careers. Replication of the study with larger and more diverse samples may be conducted. Lastly, further research may focus on the occupation of the parents, source of income of the parents, achievement interest and educational attainment too.

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GAME-BASED INSTRUCTIONAL MODEL: HELPING STUDENTS LEARN PHYSICS

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INTRODUCTION

The global community trusts that everyone merits access to quality education. Quality education is the highlight of the Sustainable Development Goals of 2030, that is, to ensure inclusive and equitable education and promote lifelong learning opportunities for all.

One of the Philippine Department of Education Millenium Development Goals is a vision of A Filipino Learner who possesses sufficient mastery of basic competencies in literacy and numeracy, skills in problem solving, creative and critical thinking (Ruiz, 2013). Mathematics and science proficiency is one of the 10-point educational Agenda of the country's president, thus, mastery of the four basic mathematical operations in the primary grades is a must to cope up with much higher logical and mathematical operations. If Filipino students have strong foundation and mastery in mathematics and sciences, they can deal well much higher learning competencies as they continue to progress in their study (Libradilla et al, 2013).

In order to enhance the Basic Education of the Philippines, a reform was made by the Department of Education. It was made into flesh by virtue of Republic Act 10533 also known as the Enhanced Basic Education Act of 2013. Thus, the K to 12 Program was implemented. This program extends the basic education from 10 years to 12 years, starting from Kinder to Grade 12. This is for the purpose of giving students the opportunity to develop as productive and responsible citizens equipped with the essential competencies, skills, and values for life-long learning and employment. The enhanced Basic Education Act of 2013 stipulates that curriculum shall be contextualized and global as well as flexible enough to enable and allow schools to localize, indigenize based on their respective and social context. In short, make the curriculum culture-based. Localization maximizes materials that are locally available and contextualization is using authentic materials, activities, interest, issues and needs of learners.

BACKGROUND OF THE STUDY

The importance of teaching Physics effectively is not new to education institutions, thus curricula are adjusted to deliver the subject in the best manner. Given several reasons, focus on Physics teachers' education is a notion to industrialized countries (Sassi & Michilini, 2014).

Many students are fearful to study science particularly Physics because it has a reputation as a difficult subject. Students are bombarded with theories and terminologies. Others do not understand the importance of studying Physics in their everyday lives. Students find discouraging include the need to understand different mathematical equations and graphs and then be able to translate those concepts into real life. One of the values of studying Physics is that it is intrinsically challenging and extremely rewarding when a student understands it (Nava, 2017).

However, empirical survey conducted revealed some problems today in Physics teaching. These are inadequate textbooks, lack of laboratory rooms and apparatus for actual experiments. Likewise, careful scrutiny of the existing activities in Physics shows that there is a need to make activities that could

bridge the gap between the topics taken in the previous grade levels and the present topics (Batuyong and Antonio, 2018).

Many studies have found out and proven that indeed, attitude of students and dedication of teachers in their jobs are really big factors in determining the performance of students. Today, many students are not so much interested anymore to study because they no longer find lectures interesting. They want to learn and discover things on their own. They want to explore and work on something according to their own pace. If this is the way of learning that will motivate the students, then, this is the type of teaching that is supposed to be given to them (Ebora, 2016).

At the Don Mariano Marcos Memorial State University-North La Union Campus, Secondary Laboratory School particularly in the Grade 9 students, majority of them are weak on physics part as reflected in their grades during the third quarter of S.Y. 2017-2018.

Based on the researcher's observation as a physics teacher, many of the students easily forget the concepts taught to them. They are somewhat pressured. This is reflected as well on the low results of their quizzes and exams. This condition was brought about by different factors and one of these is due to students' poor retention of the basic Grade 9 Science mainly physics concepts and skills due to lack of practice and exercises which contain the same items and where every part of the solution is shown and explained. Because of this scenario, slow learners are having hard time coping with the lessons and cannot easily go with the flow of the fast learners.

Also, the students lack activities that were carefully planned, selected, and crafted that could be properly used to greatly enhance the performance of the students.

From the outset, the researcher interviewed the science faculty in the DMMMSU-NLUC, SLS about the performance of their student particularly Physics topics as well on the availability of instructional materials. It was found out that the students are not performing well due to the inadequacy of learning materials and students' lack of interest and probably students just imagine blackboard full of equations and symbols. The researcher also inquired about their approaches in teaching and mostly they are using lectures. Some teachers applies games but no one of them practices the traditional game or "Kannawidan nga Ay-ayam" or "Laro ng Lahi" in teaching physics concepts.

It is the researchers' minds that for teaching to be effective, learners must be involved actively in scientific inquiry and knowledge construction. Hence, teachers must think of appropriate teaching and learning pedagogies to make learning meaningful. Teachers must devise instructional materials that ignite students' interest to learn and improve academic performance.

Consequently, game-based learning can be considered as an active learning method. Active learning is a method of instruction in which learners actively participate in the learning process. Active learning requires students to do meaningful learning activities and think about what they are doing (Bonwell & Eison). The games enable students to witness the outcome of their actions. Moreover, since one of the requirements for effective learning is motivation in the learners, and since studies have shown that lack of motivation is one of the main reasons for poor performance of students in physics, incorporating games and recreational activities into physics course can be a way of upsetting the interest of students. Games bring students satisfaction, excitement, and escape from tension and anxiety. It can be concluded that learning increases when the process is accompanied by joy and amusement.

This research is motivated by the desire to discover and try out a well-developed method of teaching knowledge and skills and develop the positive attitudes of students toward the subject. The game-based learning instruction using traditional games or "Kannawidan nga Ay-ayam" or "Laro ng Lahi" activities will be authentic, readable, interesting, accessible to students and yet comprehensive with careful and detailed explanation of Physics principles with emphasis on problem solving. One way to ignite the students' interest and emotive thinking is to provide a stimulating activity. It is for this reason wherein the

researcher believed that the provisions of a game-based learning instruction could help the teachers bring up opportunities for slow learners to cope up and reinforcement for brighter students and make Physics teaching and learning realistic, engaging, more exciting, fun and productive. Hence, the undertaking of the study entitled “Game-Based Instructional Model : Helping Students Learn Physics”.

THEORETICAL FRAMEWORK

The K to 12 Basic Education Program envisioned to have an equipped with an adequate continuum of knowledge and proficiency in preparing a curriculum consisting of an integrated and a vertically deepening knowledge-search and understanding gives an assurance of a strengthened science curriculum. A number of theorists have proposed ideas about how learners learn, and these ideas can be related to the learning of science.

For science teaching, the constructivist approach is one of the most desirable ways to involve students in their own knowledge building.

Constructivism in education is based on the research of Jean Piaget that confirmed in 1970 that the epistemology constructivism as the most important scientific paradigm. The construction is a result of student’s own activity, under teacher’s unremarkable help, based on his assimilation and accommodation effort. In school, constructivist teaching approach is based on new teaching skills different by traditional ones. Constructivist teachers encourage their students to evaluate all the time how these activities help them to improve concept understanding. The students asked themselves questions about the way they learned and about the activities deployed in school in order to become “a learning expert”. Using a well-planned learning environment students find out “how to learn” (Feng Liu et al., 2013).

Constructivist teaching is based on the belief that learning occurs when learners are actively involved in a process of meaning and knowledge construction as opposed to passively receiving information. Learners are the makers of meaning and knowledge.

Another theory is the Vygotsky’s theory or called the sociocultural because it focuses on how values, beliefs, skills, and traditions are transmitted to the next generation. He considered the child as a whole, and believed in a connection between culture and development. He believed that children’s skills and interactions varied by culture and that a child learns through family not through stages. Vygotsky thought that a large amount of learning was through play because language and development are built upon each other. When a mentor thinks that a student is ready for a new challenge and can conquer the challenge almost independently, a zone of proximal development is drawn. It is a range of learning that would be what a child can learn on its own but better with the help of someone else.

Instructional design models may be defined as the visualized representations of an instructional design process, showing the main elements or phases, and their relationships. One of the most commonly used models is the ADDIE Model. These processes represent a dynamic, flexible guideline for building effective training and performance tools. The following are the phases of ADDIE model. (a) Analysis – the instructional problem is clarified, the instructional goals and objective are set and the learning environment and learner’s existing knowledge and skills are identified; (b) Design – it deals with learning objectives, assessment instruments, exercises, content, subject matter analysis, lesson planning and media selection; (c) Development – the instructional designers and developers create and assemble the content assets that were blueprinted in the design phase; (d) Implementation – a procedure for training the facilitators and the learners is developed. The facilitators’ training should cover the course curriculum, learning outcomes, method of delivery and testing procedures and finally, (e) Evaluation – is the process of determining the adequacy of the instruction (Tabbada and Buendia, 2015).

One of the design models that show stages of the basic design to be simple and easy to learn is ADDIE. The five phases or stages of the ADDIE model need to be conducted systematically (Pribadi, 2011).

As defined by Trybus, (2015), game-based learning is borrowing of certain gaming principles and applying them to real-life settings to engage users. The motivational psychology involved in game based learning allows students to engage with educational materials in a playful and dynamic way.

Game-based learning is not just creating games for students to play, it is designing learning activities that can incrementally introduce concepts, and guide users towards an end goal. Traditional games can incorporate competition, points, incentives, and feedback loops. These concepts have become increasingly popular in higher education and in libraries as a way to engage students in learning (Pho & Dinscore, 2015).

Learning vis a vis to cultural background could promote sustainability and preservation of indigenous knowledge. Students’ cultural perspective influences cognitive style and motivation (Morales, 2014). Based on the aforementioned, a possible context where learning takes place and applied and with a touch of social and physical environment is through traditional games.

In the Philippines, traditional games are Filipino indigenous games or “Laro ng Lahi”. It is a symbol of a national identity and pride. It promotes healthy outdoor activities through play which also leads to physical (energy), social (camaraderie) and emotional (fun) development. “Laro ng Lahi” could be also used in education that will fall to the current trend in education which highlights two-way flow of learning and culture. As UNESCO stressed, education should be global in perspective but localized in approach to bring significant effects on sustainability. Learning according to cultural background could promote sustainability and preservation of indigenous knowledge (Morales, 2014).

Applying these laws to physics instruction can improve the competence of the students. Physics is a subject in which most of the lessons are interconnected. Some lessons require mastery of a prerequisite concept before it can be understood by the students. A simple algebraic, geometric, or statistical concept that is not learned very well will greatly affect the competence in other lessons that require such skill or knowledge. If a student has not learned the prerequisites concepts, there is a great tendency that he will not learn the lesson that requires the application of such.

In light of these theories and concepts, the conceptual framework, as illustrated in Fig. 1, is constructed to show the flow of the process entailed in this study.

As gleaned from the framework, the analysis and development of the study includes administration of test instrument and identifying the least mastered, design the game-based learning instruction model present in existing game characteristics. Along the development, it includes development and validation of the game-based learning instruction. The implementation part will be the evaluation of the game-based learning instruction and the evaluation measures the effectiveness of the game-based learning instruction in Physics.

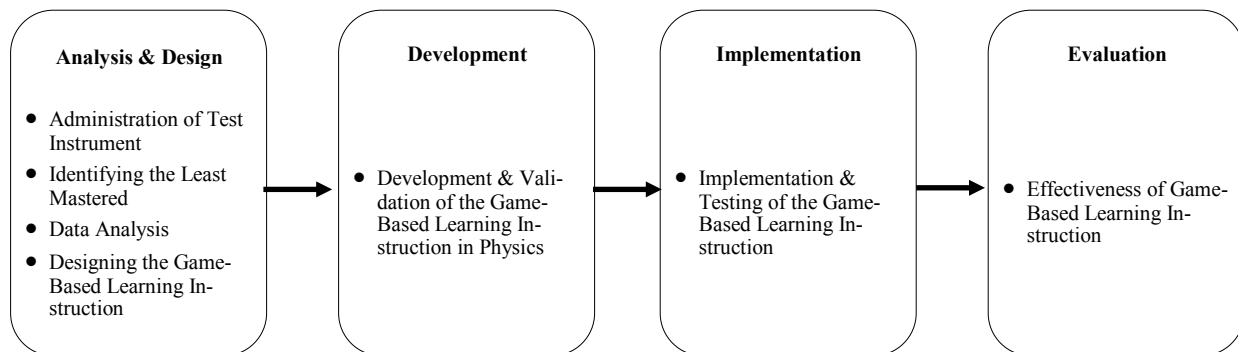


Figure 1. Phases of Game-Based Learning Instruction

STATEMENT OF THE PROBLEM

The main objective of this study is to develop a game-based learning instruction in Physics for Grade 9 learners.

Specifically, it sought to answer to the following questions:

1. What are the least learned competencies in Physics?
2. What are the game characteristics present in existing game-based artifacts?
3. What game-based learning instruction model may be designed in teaching Physics?
4. What game-based learning instruction maybe designed utilizing the proposed designed model?
5. Is there a significant difference in the conceptual understanding in selected physics concepts of Grade 9 students prior to and after the used of game-based learning instruction?
6. How will the students perceive the use of the developed game-based learning instruction in physics to the Grade 9 students?

METHOD AND PROCEDURE

Research Design

The mixed method, quantitative and qualitative research approaches were used in this study. Hohmann (2006) defines quantitative research approach as a type of descriptive design making use of numerical data. Its main purpose was to analyse input variables using quantitative techniques such as means, percentages, ranking etc. This research approach is appropriate for the study because it aims to describe the level of physics competence of students. It made use of quantitative techniques to determine the quality and effectiveness of the game based learning instruction on Physics. The qualitative part of this study includes analysis of the interview data to support and substantiate the results of the survey and class journal.

However, qualitative data were also collected along the performance and perceptions of students of the game based learning instructions in Physics. The researcher opted for a phenomenological approach to explore and investigate students' experiences and their perceptions on the game based learning instruction in Physics. A researcher can derive what an experience means to a person through a phenomenological approach (Schram, 2005).

The descriptive method of investigation was used. This research design aims at gathering data about existing conditions. This design is defined as one that includes all studies that purpose to present facts concerning the nature and status of anything (Leary, 2010; Shuttleworth, 2015). This is appropriate for the study, since it gathers pertinent data to describe the level of competence in Science particularly Physics of the Grade 9 learners of DMMMSU-NLUC SLS and identifying their strengths and weaknesses in order to come up with a solution to the identified problems. This design was suitable for the study since it intended to gather pertinent data to describe the quality and effectiveness of the game-based learning instruction in Physics including the experience and perceptions of the students.

Setting of the Study

The study was conducted at Don Mariano Marcos Memorial State University-North La Union Campus Secondary Laboratory School in Bacnotan, La Union.

Respondents of the Study

A total of forty (40) Grade 9 students of DMMMSU-NLUC SLS, School Year 2018-2019 were the respondents of the study.

Five competent teachers in the field of science education validated the game-based learning instruction. The evaluators were chose based on experience and educational qualification. Revisions and improvements were based from their comments and suggestions.

Sampling Techniques

The non-probability sampling technique was utilized in this study since one intact class of Grade 9 students taking science subjects was considered.

Instrumentation

A. Concept Test in Physics

1. Preparation of the test questions

The researcher prepared an eighty (80) item test instrument for pre-test and post-test on the learning competencies particularly in physics found in the DepEd K-12 Curriculum Guide for Science 9. The test instrument covers the topics on Mechanics of Motion, Work, Power and Energy, Heat, Work and Efficiency and Electricity and Magnetism.

The researcher administered the validated test instrument for the pre-test before the conduct of the game-based learning instruction. This ensured that directions were clearly explained and questions or clarifications regarding the test was directly answered or addressed by the researcher. The test was good for one hour and the students were allowed to use calculators.

The competence test was immediately collected and corrected. The result was tallied to determine the level of competence of the students. Moreover, strengths and weaknesses were identified based from the results of the competence test.

The researcher administered the post-test instrument after covering all the learning competencies included in the study.

2. Content Validation

The competence test have undergone different processes such as constructions of table of specifications, construction of test items, face and content validation by the science teachers and pilot testing/trial run to eighty five (85) Grade 10 students of San Juan National High School, San Juan, La Union. The result of the test was highly valid and reliable using Cronbach alpha with equivalent rating of 0.866. After which, item analysis was employed resulted to 50-item test.

To determine the level of competence of the students as reflected in their test scores, frequency count, mean and percentages were used. The strengths and weaknesses were determined based on the findings on the level of competence in Science 9 particularly physics topics. A content area is considered strength when it received a descriptive rating of high and very high competence; otherwise, the content area is considered a weakness.

To compare the pre-test and post-test competency of the students, t-test for correlated means was used.

3. Item Analysis

The eighty (80) item-test instrument that was used in the pilot testing will be subjected to item analysis.

Item analysis was employed as a basis for the computation of difficulty and discrimination indices of each item in the test material.

The test items with discrimination indices above 0.40 were considered very good, from 0.30 to 0.39 as good; from 0.20 to 0.29 as marginal items, and below 0.20 were considered poor items. The test items with poor discrimination indices were rejected.

Items with difficulty indices within 0.20 to 0.80 and discrimination indices within 0.30 and above were retained. Items with very difficult indices were modified.

4. Reliability Testing

The concept test was subjected to reliability testing where at least 30 subjects will be considered for field testing. These subjects are not the actual respondents of the study and will be just be used to compute the reliability index of the tool using Kuder-Richardson 20/21 or Cronbach alpha. As gleaned in the literature, in order for the instrument to be a valid and reliable tool, it should have at least 0.6 reliability index for a researcher-developed instrument and at least 0.8 for adopted instrument – meaning it has established reliability or a certain degree of reproducibility.

B. Game-Based Learning Instruction Plan

The game-based learning instruction plan designed by the researcher was based on the spiral progression in science which is a unique feature in the K-12 Curriculum. Based on this curriculum, the physics concepts in Grade 9 science will cover the following topics: projectile motion, impulse-momentum, work, power and energy.

To discuss the projectile motion the following “kannawidn nga ay-ayam or laro ng lahi” were conceptualized: shatong, sipa and paksiit. The students were able to visualize the components of a projectile motion in an authentic way.

For identifying the relationship of impulse and momentum with collision the researcher tinnumba lata, bulintik, ginnuyud and dinnurun were employed. These activities examine effects and predict and causes of collision.

Finally, for the topics work, power and energy, linnayaw, innuli kawayan and sinibon were performed for the students to demonstrate conservation of energy.

C. Flowchart of Research Methodology

To establish and safeguard ethics in conducting this research, the following were strictly followed and taken into consideration by the researcher:

A letter of permission to the Principal of San Juan National High School, San Juan, La Union was secured for the conduct of the pilot testing of the test instrument. The Chancellor, the Dean of the College of Education and the Principal of Secondary Laboratory School were communicated informing the said conduct of the research. Likewise, the validators of the test instrument and the game-based learning instruction.

Prior to the actual conduct of the study, the data gathering instruments were prepared and validated.

Two instruments that were used in the study. First is the pre-test/post-test instrument to identify the physics concepts that are least mastered to be emphasized in developing the game-based learning instruction based in the DepEd Curriculum Guide. The test instrument was administered before and after the experiment.

To ensure the validity of the instrument, a table of specifications is being prepared. It includes the topics from each learning contents; the number of contact hours; the percentage of items, and the placement of the number of items. The cognitive level is categorized into three, the low (for remembering and understanding), moderate (for application) and high level (for analysis, synthesis and evaluation).

Second is the questionnaire for science teachers which was used to evaluate the developed game-based learning instruction. The researcher adapted the questionnaire from the study of Espero (2018) which is modified to suit the needs of the present study. The questionnaire includes the following criteria for the face validity, content validity and utilization.

The data which were gathered, collated and tabulated were subjected for analysis and interpretation using the appropriate statistical tools. The raw data were tallied and presented in tables for easier understanding.

The learning instruction in physics is based on the available instructional materials and sources that were used in the activity using traditional games or “Laro ng Lahi”. The researcher has consulted to the science teachers regarding if they are employing game activities in their lesson. The researcher came up with an idea on the developing a game-based learning instruction.

The retained test items were utilized for the pre-test and post-test instrument. The number of activities that was implemented will be based on the findings on the level of competence of the Grade 9 students in the respective topics that suffice to achieve understanding and mastery as reflected in the result of the pre-test.

Preliminary validation was done by submitting the initial drafts of the game-based learning to the adviser for suggestions. Likewise, the game-based learning instruction was validated by five (5) competent Science teachers. The validation criterion included the validity (face and content), and utilization. Corrections, suggestions and comments were incorporated for the enhancement of the learning package.

The game-based learning instruction where the traditional games or “Laro ng Lahi” activities developed by the researcher was implemented to the Grade 9 students. The different “Laro ng Lahi” games that were played are shatong, sipa, palsiit, tinnumba lata, bulintik, ginnuyud, dinnuron, linnayaw, innuli kawayan and sinibon connected to the different topics in physics. After every activity, the students were instructed to record their experiences in the form of a journal.

Post-test was conducted after the implementation of the game-based learning instruction to determine the effect of the learning material to the performance of the students.

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

1. Least Mastered Competencies in Science 9 – Physics

Table 1 shows the least mastered topics Grade 9 students of Don Mariano Marcos Memorial State University North La Union Campus Secondary Laboratory School in Science 9 particularly physics. The data suggests that physics is really one of the subjects by which majority of the students have learning difficulties reflective of the high frequency counts culled from the majority of the topics listed in the competencies in physics. It also means that they were not able to acquire enough knowledge and failed to retain and comprehend important concepts and skills necessary in this subject. It implies therefore, the there is a need to improve and enhance these competencies of the students in the different content areas such as Projectile Motion, Impulse, Momentum and Conservation of Linear Momentum; and Work, Power and Energy.

Moreover, it can be gleaned from the table that the students have poor competence along Projectile Motion, Impulse and Momentum and Conservation of Linear Momentum. This means that they have not really acquired the necessary competencies for them to acquire on the aforementioned area. This implies that these topics were not thoroughly discussed in Grades 7 and 8.

Further, the table also reflects that the lowest performance is along Work, Power and Energy. This signifies that the students have gained only a little understanding of the different lessons covered. This,

in turn, led them to incorrectly solve problems involving the aforementioned topics. This result could possibly be brought about by the failure of teachers to cover many topics on physics exhaustively because they are on the last part of the syllabus.

Many topics are covered but only briefly in a spiral curriculum. The spiral design does not promote sufficient review once units are completed. There may be some review of previously introduced topics within the chapter, but once students move on to the next chapter previous concepts may not be seen again until they are covered the following year.

The students exhibit moderate competence along Heat, Work and Efficiency and Electricity and Magnetism because it is merely theories and they have already discussed these topics in their electricity specialization in Technology and Livelihood Education. Moreover, these topics were already discussed in their previous years.

While some showed moderate competence, there is a need to intensify physics instruction during class period.

This claim is attested by the researcher's survey among teachers in the university which according to them that the last topics in the syllabus were not being covered or were not thoroughly discussed because of too many activities that disrupts the regular class session. These activities were not only under the laboratory schools, but also under the College and Campus where the junior high school students are required to attend. This scenario most likely, has caused the unsatisfactory performance of the students in Physics because of the insufficiency of time allotted to teach the remaining topics in the syllabus.

Table 1 Least Mastered Competencies in Science 9 – Physics

Content Area	Mean	Standard Deviation	Descriptive Equivalent Rating
Projectile Motion Impulse and Momentum and Conservation of Linear Momentum	34.31	13.007	Poor Competence
Work, Power and Energy	29.01	9.862	Poor Competence
Heat, Work and Efficiency	57.50	34.991	Moderate Competence
Electricity and Magnetism	59.38	18.723	Moderate Competence

The findings run parallel with what was found out by Auditor & Naval (2014) in their study on "Development and Validation of Tenth Grade Physics Modules Based on Selected Least Mastered Competencies" for tenth graders, when they found out that topics from motion, force, energy, impulse and momentum were found to be their weak points.

Munoz (2015) also claimed in his study that both the problem solving skills and physics performance of BS math students belonged to the category beginning. The results suggest that they have not adequately developed the fundamental knowledge and skills as well as core understanding of doing authentic performance task.

The Spiral Progression approach had greatly influenced science curriculum particularly the content and transitions of four areas of science, the secondary schools, the learners, and especially the science teachers. Science teachers were still adapting to the new curriculum, they needed more time and trainings to master all the fields and to learn new teaching strategies because it is difficult to teach something, in which one does not have the necessary mastery. They can teach other branches of science without the in-depth discussion because it is not their specialization.

2. Characteristics of Existing Game-Based Artifacts

Games are usually used as part of motivation in teaching to arouse learners' interest in learning. Preparation, execution and evaluation are found to be the characteristics of existing game-based artifact based from the informal interview with science teachers.

In the preparation, it covers the game goals, mechanics, physical setting, and materials.

The goal is an essential element of in preparation because it establishes what player has to do to win in the game. Fullerton (2008) stated that goal in games set the atmosphere in a game and can also be modified to generate behaviors, actions, and feelings. Once the goal of the game is achieved, the player has won.

The mechanics or rule of the games provide an agreement of executing the game and is developed to guide the players on how to overcome the challenges in order to reach the goal. It defines what is allowed or not allowed when any circumstances occur during the execution of the game. When designing the mechanics, alignment to the game goal and learning outcome should be considered.

The physical setting or the environment is a component of game characteristics that is taken into account. Some games require a spacious setting, and some could be done inside the classroom. This provides the learners to move freely while performing the game. The game-based learning materials used drive the entirety of the game. Materials that are used in traditional games are usually available in the environment. Some of the game materials require no effort in producing it.

In the execution of games, the elements that are embedded include skills requirement, safety, number of players, competition, and interactivity.

One may distinguish games either team or individualized but apparently, such teams may consist of two or more persons. Although one of its characteristics is competition, games are seen to be effective in developing the three domains of educational activities or learning: cognitive, affective and psychomotor. It requires skills such as communication using verbal and non-verbal cues, problem solving, critical thinking and decision making in applying a certain strategy or technique, agility, speed, and cooperation.

The interactivity as one of the characteristics of game infuses a social facet into it by providing learners an avenue to communicate and cooperate with each other. It engages them to actively participate in the game requiring a good teamwork to overcome the challenges and achieve the goal. Challenges employ a positive effect on the cognitive and affective domains of the learners and require skill-level modification (Wilson et al., 2009). Moreover, the safety of the learners during the execution of the game should not be compromised.

Evaluation or assessment as characteristic of game-based learning can be used either formative or summative purposes. The formative assessment is the appropriately used in game-based learning. It can either be administered by a teacher or embedded within a game (Belland, 2012). That is why aligning learning and evaluation is the fundamental for generating a favorable and effective learning environment.

With these characteristics of the existing game-based artifacts mentioned, one of the characteristics that are over-looked is the relevance and scientific connections of games to the learning content and learning outcome. Game-based learning instruction is not a common practice among teachers. Scientific relevance should be immensely given an emphasis to enhance the higher order thinking skills of the learners.

3. The Game-Based Learning Instruction Model

The teacher aims to develop a game-based learning instruction that helps the students achieved the learning outcome. The teacher has the expertise to choose and plan which content and learning activities will support the different learning processes that traditionally lead to the students achieve the learning outcomes. The teacher must give emphasis also on how to make the game-based learning an interesting and coherent experience.

In the development and use of the game-based learning instruction in the classroom, it is important to ensure possibilities for implementation of the learning outcomes in a measurable and controlled in a

game-based way. It means that when one develops and implements learning outcomes he should at the sometime consider how this learning outcome can be measured and aligned with assessment to be able to evaluate when the learners has accomplished the learning outcomes.

A teacher needs to set the learning outcomes, select content appropriate for reaching the learning outcomes, design appropriate learning activities and after having conducted the activities, observe and assess the obtained learning of the students. The same type of process needs to be integrated into the PILLAR GBLI Model.

The steps used in designing the PILLAR GBLI Model were analysis of the science teaching approach used through informal interviews with science teachers, determining the least mastered competencies, inclusion of learning theories embedding the 21st century skills and innovative teaching practices, and searching for literatures to clarify various perspectives on game-based learning instructional model. A diagram was illustrated into cyclic phases to categorize and simplify numerous features that would help in designing and developing a game-based learning instruction model.

PILLAR GBLI Model

The PILLAR GBLI Model was used by the researcher as basis for developing the game-based learning instruction in physics for Grade 9 students. PILLAR GBLI Model comprises of five cyclical phases-Planning, Implementing, Linking Learning, Assessing and Reflecting. These processes represent a dynamic and flexible guideline to suit diverse learners and instructional materials. The model is easy to apply and help teachers discussed and implement the learning content comprehensively and realize the learning outcomes of the design game-based learning instruction.

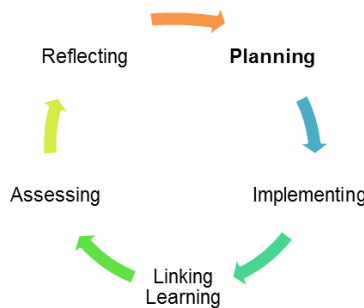


Figure 2 PILLAR GBLI Model

Planning

Planning phase is the underpinning for all other phases of the PILLAR GBLI Model. It includes analysis of the learner’s knowledge, learning styles and needs.

In the planning phase, the instructional outcomes are established and learner’s existing knowledge and skills are identified. The construction of the learning content and learning materials are determined. The researcher designs teaching and learning activities and develops instructional materials and teaching-learning methods.

A pre-test should be given to the learners to identify the least mastered competencies which will serve as a guide in designing and developing a game-based learning instruction. In doing so, appropriateness and scientific relevance of games on the learning content, alignment to the learning outcomes and the availability of learning materials should be considered.

Implementing

In the K-12 educational system, performance based learning is the way of learning that is being encouraged and incorporated in the curriculum. As to John Dewey, the proponent of learning by doing, he believed that each child was active, inquisitive and wanted to explore. Children are encouraged to learn through experience. It also clarifies key points and apply the lessons to get practical results.

The implementing phase refers to the delivery of the game-based learning instruction. This involves engaging the students by exploring, experiencing and learning through the game as a group. In this phase, the role of the teacher is to facilitate the game.

During the implementing phase, the game-based learning instruction is put into action. The teacher implements teaching and learning activities. Students actively involved in the learning content and the game-based learning instruction prepared for them.

Before the start of the game, the mechanics should be properly explained and demonstrated to avoid student misconceptions and guide questions should be provided for them to answer. Make sure that academically good learners should be equally distributed to scaffold the challenged learners in groupings.

While competition cannot be avoided in games, one of its advantages is that it fosters critical thinking, cooperation and collaboration while learning through the game. The learners are engaged in planning the best strategy they could employ in order to accomplish the task and win.

Linking Learning

Linking learning is the phase where the students link the learning. They have acquired in the game in the context of the learning content. Learning does not only appear purely on academic aspects, but then, it links to other disciplines and able to transfer learning into different real life context. Game-based learning instruction encourages students to participate actively in the teaching-learning process. Integrating real world connections in teaching helps learners gain a deeper understanding why and what they are learning, its usefulness beyond the school providing a meaningful context for both academic and personal development.

This involves a post-activity discussion to further elaborate and discuss the scientific explanations of the game. During the discussion, the teacher should pose questions that target the higher-order thinking skills.

Assessing

Assessment is the engine that drives student learning and it is the job of the teacher to make it run smoothly and efficiently (Ashmore & Robinson, 2015).

Assessment is an integrated process for determining the nature and extent of student learning and development. It informs the learner the current level of performance, specifically his strong and weak points.

The assessing phase is where students ask questions related to the content wherein the researcher are developing with the goal of ensuring that is meeting the instructional objectives. Assessment should occur throughout the entire instructional design. The teacher should be able to perceive how well the students met the instructional objectives after receiving the instruction contained in the game-based learning instruction. The teacher checks the learning outputs of the students to realize whether the instructional outcomes are achieved. The point is that the teacher needs to design for assessment whether our student has reached the learning goal and the growth and mastery that the teacher has aimed in the game-based learning instruction.

A reflection journal is one of the assessment methods used to assess students' learning. It is where the students write their own thoughts. Students are encouraged for the development of their metacognitive skills by helping students sort what they know from what they don't know from the activity. In this way, students value their own learning and progress. This is a chance for the teachers to evaluate how well the game-based learning instruction works for the learning outcomes that are realized.

In learning, games assessment has an important role, since we want to be able to investigate if the student has achieved the learning objectives while playing the game. Feedback in a learning game is essential, since the possibility to give individual informative feedback to the student is one of the advantages of learning games. Games should be able to gather data from the learner and give direct, useful and relevant feedback, telling the student where he is in the learning process and where he should consider going next. We need to decide how the learning objectives will be measured in the game and how student performance will be evaluated to provide actionable and relevant feedback and support student self-reflection (Wilson et. al., 2012).

Developing the links between learning outcomes, teaching and assessment, and making these links clear to learners is challenging for a teacher. Biggs (2003) calls this "constructive alignment" where all elements are coordinated to support learning.

Assessment results can be used as a source of data and useful information to find out the effectiveness of the game-based learning instruction.

Reflecting

Reflecting in a game-based learning instruction is essential for teachers in identifying their strengths and weaknesses and improving their teaching practice (Ahmed & Al-Khalili, 2013).

It involves recognizing, examining, and pondering over the way the teacher teaches the lesson. This will lead teachers to revisit the alignment of the learning content, learning outcomes, activities and assessment used in teaching. The result of the assessment will serve as a guide in reflecting what should be improved and enhanced in the teaching-learning process.

Reflection is the key to successful learning for teachers and for learners. The ability to reflect on what, why and how they do things and to adapt and develop their practice within lifelong learning. Another reason for reflective practice is because it encourages them to understand learners and in their needs and abilities. If they practice reflection, they can more effectively encourage learners to reflect on, analyse, evaluate, and improve their own learning.

Through the game-based learning instruction, the teacher will be able to gather data useful and relevant feedback from the learners and give direct, telling the student where he/she is in the learning process and where he/she should consider going next. The teacher needs to decide how long the learning outcomes will be measured in the game and how student performance will be evaluated to provide actionable and relevant feedback and support student self-reflection.

The PILLAR GBLI Model plays a vital role in the development of the game-based learning instruction in physics because it guides teacher to complete the process in a step by step manner and helps the researcher verify the validity (content and face) and utilization of the game-based learning instruction in physics. The model is always a continuous process and provides an environment for interactive engagement.

4. Game-Based Learning Instruction in Physics

Since the year the K-12 Curriculum was implemented in the Philippines, the unavailability of learning materials that are aligned in the learning competencies is evident. This material is therefore designed

to help students in the Junior High School especially in Science 9 to learn physics easily in an engaging and relatable manner through the traditional games called as laro ng lahi or kannawidan nga ay-ayam.

The prepared game-based learning instruction covers two topics and competencies in Physics for Grade 9 – Science as set by the Department of Education.

The following are the two topics that were included in the game – based learning instruction 1) Projectile, Impulse and Momentum, and Conservation of Linear Momentum and 2) Work, Power and Energy. There are ten (10) game-based learning instructions that were developed. The games were selected based on their scientific relevance on their scientific relevance on the topics in Physics. On the topic Projectile Motion, shatong, sipa and paksiit were included while tinnumba lata, bulintik, ginnuyud and dinuron comprised the Impulse and Momentum and Conservation of Linear Momentum. Additionally, on Work, Power and Energy, liinayaw, innuli kawayan and sinibon were covered. With the game-based learning instruction, the students enjoyed playing kannawidan nga ay-ayam or laro ng lahi while learning the concepts and applications of physics. This is manifested to their enthusiasm in the activity and as reflected in their daily learning log (Appendix N).

Each activity in the game-based learning instruction has the following features such as, a) Learning Outcome, b) Materials, c) Game Mechanics d) Going Further and e) Reflection Journal.

The findings lend support to the study of Diano et. al (2015) that the culture and game-based physics activities are anticipated to promote active and fun learning of physics concepts. The study features non-conventional design and development of physics activities using traditional Filipino games also known as “Laro ng Lahi”. These non-conventional processes in the development comprise literature reviews, document analyses, and interviews. The eight developed “Laro ng Lahi”-based physics activities are presented as activity pack intended for high school physics and introductory physics students.

Similarly, it also supports the study of Del Carmen et al. (2015), that the developed “Laro ng Lahi”-based activities may further help teachers in providing a new perspective of pedagogical approach with Filipino cultural-context. Likewise, it may serve as a collaborative activity; an assessment tool in diagnosing students’ prevalent misconceptions, and additional supplementary learning exercises for students.

Validity and Utilization of the Game–Based Learning Instruction in Physics

Five experts in the field of Physics/Science evaluated the level of validity of the game – based learning instruction in terms of content and face and utilization. (Appendix L)

The first part of the questionnaire was answered using the 4-point scale value and the second part requires them to write their comments, suggestions and remarks about the game-based learning instruction in Physics for Grade – 9 Science.

Content Validity

The validators generally find the content of the game-based learning instruction as highly valid. This means that the activities in the game-based learning instruction are representative of the concepts of the topics in Science 9 particularly Physics and it covered the learning competencies of the K to 12 Basic Education Curriculum. Furthermore, the language used is appropriate to the vocabulary level of the Junior High School Grade 9 students. Similarly, the arrangements of items in the game-based learning instruction are logically arranged and clearly constructed.

Face Validity

The level of face validity of the game-based learning instruction as evaluated by the validators is highly valid.

These are the general appearance, grammar and lay-out. This implies that the game-based learning instruction observes neatness, alignment, typing and attractiveness. The content is correctly constructed and followed the correct lay-out. This is indicative that the game-based learning instruction produced utilizes correct grammatical structures, is aesthetically appealing, and can be used with ease by teachers and learners in Science 9 particularly in Physics. Furthermore, it heightens students' burning desire to learn (Appendix K).

Utilization

The level of utilization of the game-based learning instruction is very much usable. This elucidates that the game-based learning instruction is perceived functional and can highly contribute to effective learning. This also denoted that the developed game-based learning instruction contains complete and precise instruction to be easily understood and are very suitable to Grade 9 students. Therefore, the game-based learning instruction can be used as additional instructional material to make teaching and learning Science 9 predominantly Physics effective.

This implies that the game-based learning instruction is of highly acceptable quality along physical appearance, alignment of the content to DepEd K to 12 learning competencies, that is perceived to learning Science 9 particular in Physics, that the intended task and activities are suitable to the Grade 9 students and that the activities jibes with the existing textbook in Science 9 Physics part. This elucidates that the proposed game-based learning instruction can help address the needs of the students and teachers especially on the inadequacy of instructional materials.

This also corroborate with the findings of Morales et al. (2015) that the “Laro ng Lahi” based activities are content valid and an excellent over-all reliability index suggesting a good and supplementary and support material for classroom use and for a wider goal of promoting active physics learning.

This finding harmonizes with the result of the study of Espinar & Ballado (2016) that the Worktext in Basic Mathematics 2 that they developed has a content validity and acceptability is very much valid and very much acceptable which means this could be used as a tool in enhancing the teaching-learning processes in Basic Mathematics 2.

This conforms to the study of Batuyong & Antonio (2018), that the developed Physics Education Technology (PheT) Interactive Simulation-Based Activities were valid in terms of their features namely: learning outcomes, instructional characteristics and assessment of techniques, making it as good learning material in teaching physics, particularly Electromagnetism.

Teachers must think an appropriate teaching and learning pedagogies to make learning meaningful. They must devise instructional materials that ignite students' interest to learn and improve academic performance. The use of instructional materials is intended to recreate interesting, engaging and realistic content that encourage active learning among students.

5. Performance of Students in the Game-Based Learning Instruction

The level of performance of the students was based on the scores gathered from the pre-test and post-test. The pre-test was the test conducted before the teaching-learning process took place. Post-test, however, was the test conducted after the teaching-learning process took place. Table 2 shows the level of competence in the pre-test.

Table 2 Level of Competence in the Pre-test

Score Interval	Descriptive Equivalent Rating	Number of Students with Correct Answers
41-50	Very High Competence	0
31-40	High Competence	0
21-30	Moderate Competence	15
11-20	Poor Competence	25
0-10	Very Poor Competence	0

This implies that majority of the students have poor competence level of performance in the pre-test. It means that majority of the students do not have enough knowledge on physics topics.

Table 3 displays the result of the post- test. It can be gleaned from the table that thirteen students were considered with high competence on their competency level after the teaching – learning process took place with the used of the game-based learning instruction. Also, twenty four students got a moderate competence rating, while three students got a poor competence level. These three students who got a poor competence were noticeably not present for almost a week during the discussions and implementation of the game-based learning due to illness which cannot be avoided in a normal setting of a class.

Table 3 Level of Competence in the Post-test

Score Interval	Descriptive Equivalent Rating	Number of Students with Correct Answers
41-50	Very High Competence	0
31-40	High Competence	13
21-30	Moderate Competence	24
11-20	Poor Competence	3
0-10	Very Poor Competence	0

As a whole, there is an immense improvement in the level of performance of the students. This suggests that there is a learning that took place and learners were able to achieve the learning outcomes.

The scores of the pre-test and post-test were utilized employing a t-test for paired samples (correlated means) the results of computation were summarized and presented in the table 4.

Table 4 displays the comparison of the pre-test and post-test. From this, it could be seen that there is a significant difference on the pre-test and post-test conducted with the value $0.000 < 0.01$ which is very significant. The significant difference; however, favoured that there was a positive effect of the instructional method that was with the use of the game-based learning instruction using laro ng lahi or kannawidan nga ay-ayam. It can be gleaned from the table that the post-test scores of the students are higher than the pre-test scores.

Table 4 Comparison of the Pre-test and Post-test

	Mean	Standard Deviation	p-value	Interpretation
Pre-test	18.475	4.5177	P=0.000<0.01	Very Significant
Post-test	28.375	4.9442		

It could be therefore, be considered that the game-based leaning instruction in teaching physics using laro ng lahi or kannawidan nga ay-ayam could be a major step in the improvement of instruction in the Junior High School.

The study agrees with Gutierrez (2014) that using educational card games as supplementary material found out that the performance of the students significantly increased. It therefore can be said that it is an effective adjunct to traditional method of teaching.

Similarly, it also supports to the findings of Jorda & De los Santos (2015) that there is a significant difference in the students’ performance in Trigonometry using Computer Game-Based Learning (CGBL) and has a positive effect in the cognitive and affective domains of learning. The CGBL could be a better learning tool in improving the students’ performance.

Results revealed that game - based learning instruction improved students understanding of physics concepts and could hold promise as an effective pedagogy for teaching and learning highly mathematical and conceptual subjects.

The outcomes of the study have significant contributions in enhancing the teaching-learning process. Students have greater enthusiasm for learning when there are concrete representations of physics concepts through the use of game-based learning instruction. Students also provided more opportunities to

explore things beyond the four walls of the classroom and improve their problem solving skills and supports for self-directed learning.

6. Students Feedback in the Use of Game-Based Learning Instruction

One of the greatest challenges for a teacher is the success of teaching with diverse students having totally different personalities, competencies and learning styles. Students desire varieties of activities to arouse their interest to be actively engaged in learning. Nowadays, finding new ways to seize the attention of students and engaging them in the teaching learning process is one of the main issues. Learning is not just rote memorization.

Students will not be able to gain information and skills out of dull teaching learning process to solve real life problems with help of effective learning pedagogies. In order to make teaching learning effective, game-based learning instruction can be successfully implemented to improve both teaching and learning. The game-based learning instruction requires that is well designed and have well implemented learning task.

It found out that the feedback of the students on game-based learning instruction has positively affects their perspective in learning physics. The following are their feedback culled out in their daily log and unstructured interviews after every end of activity.

- S1 B: *"I appreciate physics when laro ng lahi was used. Decision making is one of the critical skills we learned as a group because we need to consolidate the decisions of our members specially on what strategy we could use to achieve the goal."*
- S5 G: *"Ang aming guro ay malikhain dahil naging madali ang aking pag-intindi sa mga konsepto ng mga aralin sa physics" (Our teacher is very creative because it made me understand the lessons in physics easier.)*
- S8 B: *"Narerelate namin ang physics sa aming mga daily life activities at application nito sa iba't-ibang disciplines. Mas natutunan ko ang pag-iisip ng malalim dahil sa mga HOTS questions during our discussions na siyang nagmotivate saakin na hindi nakakatakot pag-aralan ang physics" (We were able to relate physics in our daily life activities and its application in numerous disciplines. My critical thinking skills also enhanced because of the higher order thinking skills question (HOTS) posed by our teacher.)*
- S12 G: *"Nahihirapan ako sa physics part ng aming science subject noong kami ay nasa grades 7 and 8, pero ngayon mas naintindihan ko ng malinaw dahil isinasagawa namin mismo ang mga games na may kaugnayan sa pag-aaral ng physics." (I find difficulty learning the physics part of Science when I was in grades 7 and 8 but now, I was able to understand it easier because we were directly involved in the execution of the games related to physics.)*

Their statements are supported by their performance in the post-test where majority of them have improved. Moreover, it was also evident that the game-based learning instruction improved their social skills. The following are some of their statements:

- S4 G: *"Dahil sa game-based activities, mas natutunan ko kung paano maging lider sa aming grupo. Kailangan talaga na may pagkakaisa at pagtutulungan para maachieve ang isang goal." (Because of the game-based activities, I was able to learn to become a leader in our group. Teamwork and unity are really important in achieving a certain goal.)*
- S8 B: *"Sobrang nag-enjoy ako sa paglalaro. Nag-enjoy na ako, may natutunan pa ako." (I enjoyed playing so much. I enjoyed at the same time I learned.)*
- S11 B: *"Mas natutunan kong makisalamuha sa aking mga kaklase dahil sa mga activity na ipinapagawa ng aming guro dahil loner ako." (I was able to learn how to socialize with my classmates because I am a loner type of person.)*
- S15 G: *"Mas natutunan ko ang pakikipagcommunicate ng maayos at sportsmanship dahil sa mga laro na aming isinagawa." (I was able to enhance my communication skills and learn more about sportsmanship because of the games that we were doing.)*

Their statements are parallel with the observations of the teacher-researcher and their teacher handling the subject. This implies that the game-based learning instruction does not only improve their achievement positive outlook in learning physics, but also developed their social skills. The 4Cs: critical thinking, collaboration, communication and creativity are manifested in the learners. The 4Cs are the 21st century core skills that are needed to hone in our learners.

The game-based learning instruction plays a vital role in teaching by making students to collaborate, communicate, interact and work in teams. The game kannawidan nga ay-ayam or laro ng lahi creates a dynamic that can inspire students to develop skills and build connection to learning content. The game helps the students to become more confident and independent thinkers.

The game-based learning allows the students to discover new methods of working towards achieving learning outcomes in an interactive manner. The game-based learning instruction contributes for the betterment of students' learning and quality of education.

CONCLUSIONS AND RECOMMENDATIONS

Findings

The salient findings of the study are the following:

1. The least mastered competencies based from the teacher-made test are: Projectile, and Impulse and Momentum and Conservation of Linear Momentum and Work, Power and Energy.
2. The game characteristics present in existing game based artifacts are preparation, execution and evaluation.
3. A PILLAR GBLI (Planning, Implementing, Linking Learning, Assessing and Reflecting) Model was designed by the researcher as a basis for teaching physics in interactive way utilizing traditional games (Kannawidan Nga Ay-ayam or Laro ng Lahi).
4. A game-based learning instruction in Physics for Grade 9 as prescribed by the Department of Education was developed. The game-based learning instruction conceptualized and developed revealed highly valid results with utilization and usability as described by the experts.
5. The performances of the Grade 9 students have improved when the game-based learning instruction was implemented based on the post-test score as revealed by the post-test scores.
6. The game-based learning instruction plays a vital role in teaching and learning by making students to collaborate, communicate, interact and work in teams. For this to be guided in constructing and correcting their content learning in physics.

Conclusions

1. The least mastered topics were the basis in developing the game-based learning instruction in physics for Grade 9.
2. Preparation, Implementation and Evaluation are the common characteristics of the existing game-based artifacts.
3. It is feasible to develop an instructional model as basis for developing game-based learning instruction in physics for Grade 9.
4. The developed game-based learning instruction in physics for Grade 9 is highly valid and can be utilized as an additional instructional materials to improve students' performance
5. The used of the game-based learning instruction improved students' understanding of physics concepts.
6. The use of the local game in the context of science teaching has a meaningful impact on learning because students had enjoyed the games while learning physics.

Recommendations

Based on the results and conclusions of the study, the researcher recommended the following:

1. The use of games as pedagogies can be the best techniques to eradicate concepts about the difficulty of the subject matter which is Physics.
2. There should be a control group in the implementation of the study.
3. Game-based learning instruction can be proposed to enhance the performance of the learners in science.
4. The game-based learning instruction should be tried out in other school to further improve its effectiveness and practicability.
5. Teachers should be motivated, encouraged and be given incentives to make their own instructional materials.
6. The school administration should provide support in the production of this game-based learning instruction and other instructional materials by faculty members.
7. The developed game-based learning instruction in physics could be used by other science teacher with the permission of from the writer.
8. More studies must be undertaken related to science and traditional games.

COMMON FIGURATIVE LANGUAGES USED IN THE CREATIVE WORKS OF SELECTED STUDENTS

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ABSTRACT

This study focused on analyzing the different figures of speech and which of these figures of speech were prevalently used. The researchers chose the composed poems of the selected students in the Philippine Literature Classes during Summer. It is done through quantitative and qualitative methods. Composed poems were translated and these were shown to the respondents for approval. Interviews were conducted to students for their experiences and reflections while writing the poems. The following figurative languages present in the poems composed by the respondents were anaphora, assonance, hyperbole, metaphor, personification, rhyme, and symbol. Rhyme is the most prevailing figurative language that has 23 occurrences in the poems; followed by metaphor that has 6 occurrences; assonance and hyperbole with 4 occurrences, and least were anaphora and personification. Rhyme is the most prevalent figurative language. It is then recommended that teachers integrate poetry writing especially in English classes to sustain their awareness, on students' reading and writing comprehension abilities and their skills in the field of literature.

Keywords: Experiences, figurative language, literature, poetry, reflections

INTRODUCTION

Poem is an outlet of what is in the heart and mind. When a poem is composed, a part of the life of the poet is being manifested that makes it as his style of writing. Keraf (1984) stated the style of a language is a particular way to express an idea or concept through language use. This particular way is usually different from one person to another; therefore, language style can represent someone's character or personality. One of these styles that were being used by poets is the figures of speech.

McArthur (1992) explained that figurative language is the language in which figures of speech such as metaphors and similes freely occur. He also states that figures of speech are a rhetorical device using words in distinctive ways to achieve a special effect.

Meanwhile Perrine (1982) defined figures of speech as a way of saying something one thing and meaning another. She argued that figures of speech should not be taken literally only and that they serve function of giving extended meanings to words, phrases or sentences from their literal expressions. She also claimed that figures of speech can be more effective means of saying what we mean rather than direct statements.

Figurative language is used in any form of communication, such as in daily conversation, articles in newspaper, advertisements, novels, poems. etc. The effectiveness of figurative language affords readers

imaginative pleasure of literary works. Second, it is a way of bringing additional imagery into verse, making the abstract concrete, making literary works more sensuous. The third, figurative is a way of adding emotional intensity to otherwise merely informative statements and conveying attitudes along with information. And the last, it is a way of saying much in brief compass. She divides figurative language into seven types, namely metaphor, simile, personification, metonymy, paradox, overstatement, understatement, irony and illusion.

Keraf (1998) divided *majas* (figures of speech) into two classifications, namely *majas retorik* (rhetoric) and *majas kiasan* (analogy). The first classification covers alliteration, assonances, anastrophe, apophasis, apostrophe, asyndeton, polychynton, chiasmus, ellipsis, euphemism, litotes, paradox, hyperbole and oxymoron. Meanwhile the later covers simile, metaphor, allegory, personification, allusion, metonymy, irony and synecdoche.

The figure of speech is in need because it attracts attention and more forceful, easier to be remember and encourages reflection, it is better for illustration, and it also can simplify the complex word.

Numbers of figure of speech that used by most people, they are:

Assonance- This takes place when two or more words, close to one another repeat the same vowel sound, but start with different consonant sounds. For instance, in the following sentence: Men sell the wedding bells. The same vowel sound of the short vowel ‘-e-’ repeats itself in almost all the words, excluding definite article. The words do share the same vowel sounds, but start with different consonant sounds. (Literary Devices, 2019)

Anaphora- The deliberate repetition of the first part of the sentence in order to achieve an artistic effect is known as Anaphora. For example: Every day, every night, in every way, I am getting better and better. (Literary Devices, 2019)

Metaphor-Comparison is implied, without using the words of comparison such as like, as, similar to, and resembles. For example: Your diamond eyes amaze me. The sentence is comparing the ‘eyes’ with ‘diamond’. In that sentence, the eyes being compared are the ordinary human eyes, but the word ‘diamond’ means the characteristics of the eyes (Perrine,1992).

Simile-Unlike metaphor, in simile the comparison is explicit, indicated by adding comparative word or phrase such as like, as, similar to, and resembles. For example: The child resembles his father. In that sentence, it uses the comparative word that is ‘resembles’ (Perrine,1992).

Personification- This is giving the attributes of a human being to an animal, an object, or an idea. This figure of speech personifies inanimate being as if they can act like human beings. For example: The powder touches the baby gently. That sentence considers the powder as a human being which can touch the baby gently (Perrine,1992)

Metonymy is a figure of speech in which some significant aspect or detail of an experience is used to represent the whole experience, the single term metonymy issued for what are sometimes and metonymy (the use of something closely related for the thing actually meant) (Perinne,1992)

Paradox- This is an apparent contradiction that is nevertheless somehow true. As a figure of speech, paradox is a statement that seems contradictory, unbelievable, or absurd but that may be true in fact. For example: There is a life after death. This sentence is a contradiction because some people do not believe that there is life after death. Thus, this sentence is paradox. (Perinne,1992)

Symbol- It portrays something that has meaning beyond what it is. It means that a symbol uses a word or phrase which is familiar in society and has one meaning. For example: He writes the letter with red ink. Red ink symbolizes anger.(Perinne,1992)

Hyperbole- It is simply exaggeration, but exaggeration in the service of truth. It is used to express something or state of condition in a bigger way than its ordinary on. For example: I have told you that a million times. That sentence contains exaggeration, because the speaker did not really mean to what he/she said and it is impossible for a human being to speak a million times (Perrine,1992)

Irony- This is saying the opposite of what one means. For example: Your hand writing is very good that I could not read it. This sentence is an irony because the speaker says the opposite of what he/she means when he/she reads the hand writing to the hearer. Actually, the speaker means that your hand writing is very bad, but the speaker says the opposite of what he/she means (Perrine, 1992)

Synecdoche-The use of the part for the whole by stating significant detail only to simplify what is being talked about. For example: I did not see your nose last year. That sentence is synecdoche because the speaker uses ‘nose’ as a part of a person. It means that the speaker did not see ‘you’ last year (Perrine, 1992)

Rhyme- a repetition of similar sounding words occurring at the end of lines in poems or songs. A rhyme is a tool utilizing repeating patterns that brings rhythm or musicality in poems which differentiate them from prose which is plain. A rhyme is employed for the specific purpose of rendering a pleasing effect to a poem which makes its recital an enjoyable experience. Moreover, it offers itself as a mnemonic device smoothing the progress of memorization. For instance, all nursery rhymes contain rhyming words in order to facilitate learning for children as they enjoy reading them and the presence of repetitive patterns enables them to memorize that particular poem effortlessly. We do not seem to forget the nursery rhymes we learnt as a kid. (Literary Devices, 2019)

By using figures of speech, poets can evoke emotion and imagery from their writing that literal language just cannot provide. By doing so, figures of speech make expressing meaning through writing easier and more relatable to the reader.

In this study, the researchers chose the composed poems of the selected students to analyze the different figures of speech used in the different poems, which of the figures of speech prevalently used.

OBJECTIVE

The objective of this study is to look into the common figurative languages in the composed poems of the respondents.

METHODOLOGY

In conducting this study, the researchers used the quantitative and qualitative method of investigation to identify the figurative languages in the poems of the selected students. Lines from the poems were classified accordingly and counted the identified figures of speech.

Forty (40) students in the Philippine Literature Classes were requested to compose their poems of their choice. They were given an hour to do so with music as their back ground. The selection of the respondents was done purposively. For those who were not disposed to write their poems during that day were not forced to write.

After a number of poems were written, these were retrieved, analyzed, and interpreted. The translations done were shown to the respondents for approval.

FINDINGS

There were 41 lines from the poems that contain figures of speech. The classification of figurative languages used in the poems of the respondents is shown in the following table.

Table 1. Figurative Languages in the Composed Poems of the Respondents

Figurative Languages	Number of Occurrences
<i>Anaphora</i>	1
<i>Assonance</i>	4
<i>Hyperbole</i>	4
<i>Metaphor</i>	6
<i>Personification</i>	1
<i>Rhyme</i>	23
<i>Symbol</i>	2
Total	41

Based on the table above, it can be seen that there are 7 figurative languages found in the poems of the respondents. They were: rhyme, that is the most prevalent figurative language with 23 occurrences, metaphor that has 6 occurrences, assonance and hyperbole have both 4 occurrences and anaphora and personification have the least occurrence in the said poems.

It is clear that in the poems, the respondents mostly used figurative language to create aesthetically and creatively as to the sounds and express extended meanings from it. Thus, this affirms with Perrine (1982) that the effectiveness of figurative language affords readers imaginative pleasure of literary works. Second, it is a way of bringing additional imagery into verse, making the abstract concrete, making literary works more sensuous. The third, figurative is a way of adding emotional intensity to otherwise merely informative statements and conveying attitudes along with information. And the last, it is a way of saying much in brief compass. She divides figurative language into seven types, namely metaphor, simile, personification, metonymy, paradox, overstatement, understatement, irony and illusion.

From the figures of speech, rhyme is the most prevalent figurative language because the students easily identified and thought of other words that rhymed with the first word. Further, rhyme made their poem very interesting to read because of the similar ending sounds.

In contrast, in the study of Iswanto Wibowo, Ary & Akbar, Ali. (2017) the aim of it is to find out the usage of figurative language appear in The Room of My Life's poem by Anne Sexton and Still I Rise's poem by Maya Angelou. The study focused on kinds of figurative language that appeared in the poems. A descriptive qualitative method was used in this study. Data were gathered from each line of the poetry then figurative language were grounded. The results showed that the poems mostly used three kinds of figurative language: personification, simile, and metaphor. Personifications were more dominant than similes and metaphors in The Room of My Life and similes were more dominant than personifications and metaphors in Still I Rise.

The result of the study of Minhatul Maula (2013) showed that from three poems as the sample of collection of William Blake's poems, there are 11 kinds of figurative language are used in the collection of William Blake's poem; they are Alliteration, Hyperbole, Irony, Litotes, Metaphor, Metonymy, Paradox, Personification, Pun, Simile, and Synecdoche. And the most commonly used is Hyperbole. There are many difference message are expressed by the William Blake in every stanza of those poems.

DISCUSSION OF THE FINDING

This section discusses on the analysis of types of figurative language. There are 41 figures of speech identified in the poems of the respondents. The researchers only took three examples for rhyme, two examples each for metaphor, hyperbole and assonance and only one example each for symbol, personification and anaphora.

In conducting this study, the researchers would discuss only the 7 types of figurative language found in the poems of the respondents. They are: Rhyme, Metaphor, Hyperbole, Assonance, Symbol, Personification and Anaphora.

1. Rhyme

It is a repetition of similar sounding words occurring at the end of lines in poems or songs. (<https://literarydevices.net/rhyme/>)

Table 2. Rhyme Found in the Poems with Corresponding Translation

Estrikto ni ma'am mi Ngem ti klase han nga napili Naragsak ti estudyante na Ngem kaasi't pagtripan na	<i>The teacher is strict But in the class, she's not picky The students are happy But poor him if he be bully by the teacher</i>	No anya ti desisyon ti adu kanyada Addan to latta kumontra Adunto man ti mapatang dan Agingga awan metlang ti pagbanagan na	<i>Whatever the general decision is There is someone who opposes They will have more to say Until it becomes useless</i>
No panpanunotek ti langa Madik ammo nu anya man ti adda	<i>If I think of your image I don't know what there is</i>	Dagitoy nga aggagayem ket nasingipet da Adda panagayat ti tunggal maysa kanyada No marigatan ti kadwa da Sipupuso nga tulongan da dayta	<i>These friends are kind They have love for one another When someone is hard up with They help him whole heartedly</i>
Nagmayat rikna Nu agayat ka	<i>It is a good feeling When you love</i>	Isuda ti kakadwak Uray sinudjay ti mapmapanak Diak maawatan ti riknak Nu isuda ti kakadwak	<i>They are my companion Wherever I will go I can't understand my feeling When I am with them</i>
Malagip ko manen idi kaubing ko Agin-innayay ni nanang ken tatang ko Anyan a ragsk di dimteng ni ading ko Nagasatak ti nayted a panagbiag ko	<i>As I remember my childhood days My parents love each other How happy we are when my younger sibling was born I am lucky to have this life</i>	Nu kumpleto kami Naragragak kami Nu adda makita mi Ay anyan nga uyaw mi	<i>If we are complete We are happy When we see something Oh, we criticize it</i>
Uray pay narigat ti kasasaad mi Agyamyaman kami ti adda a biag mi Uray kanayon nga nateng ti sidami Nasustansya daytoy kuna ni nanang mi	<i>Even though life is tough Still we are thankful of the life we have Though we do only have vegeta- bles as our viand Those are nutritious as mother said</i>	CHLEMJ-DEN ti nagan mi Saysayaaten mi panagadal mi Ta magun-od minto ararapaap mi	<i>CHLEMJ-DEN is our name We will study hard For us to achieve our dreams</i>
Ti amin a pannubok ti biag ken panagadal ko Dawat ko ken Apo a silawan na toy dalan ko Arapaap magun-od ko	<i>Of all my obstacles in life and studies I ask God to light my way For me to achieve my dreams</i>	Nu meryenda ti pagpapatangan Duwa kam ken Ernalin ti num- ber one Nu panagisbuan ti pagpapatangan Ay ni Hazel ti number one	<i>When we talk about our snacks Ernalin and I are the number one But when we talk about peeing Ay, Hazel is number one</i>
Magmagnaak iti maysa nga dalan Ada nasabat ko nga lugan	<i>I am walking along the way I meet a vehicle</i>	Addaan ti gagayem nga mangtarabay kanyam Hannaka malipatan uray sadinno ti papanam	<i>You have friends to guide you Never be forgotten wherever you go</i>
“Coke man Inyang, manu ti gated na?” “Dose pesos Iyang, nu para kenka”	<i>Coke, Inyang. How much is it? 12 pesos, Iyang, just for you kenka”</i>	Narigat ti agbasa Aagriing kanayon nga masapa Uray nakakosyep palang ti mata Nga agderetso jay kusina	<i>To study is tough Wake up early always Though eyes are still sleepy To go to the kitchen</i>
Isuda iti kanayon nga agkakadwa Ruar man wenno uneg ti skwela Agsasabali ti ugali da Adda nalaing nga agkatawa Adda met jay para an-anawa	<i>They are always together Outside or inside of the school They have different attitudes There is someone who laughs There is someone who is naughty</i>	Ti oras ti klase Ket alas syete Agganat ti bagi Ta makamakam lang ni ma'am mi	<i>The time of class Is 7 o' clock The body moves quick To be on time before the teacher arrives</i>
Pasyar ditoy, pasyar dita Ngem maymaysan to metlang ti turong da Iso diay plaza	<i>Wander here, wander there Yet they have one common desti- nation The plaza</i>	Uray nu napuyatan Nalaka maagasan Nu nagistorya ni ma'am Amin solved ti katawan	<i>Though I stay too late at night Easily healed When the teacher storytells Everything is solved</i>
Nu mangrugi ti kadwa da nga agpakatawa Ay apo agpaot dayta Uray lang makakaisbo da Gapo ti gagayem da nga nalaing nga agpakatawa	<i>When someone starts to become hilarious Oh, it will last As if they want to pee 'Cause of their friend who is funny</i>	Ngem nu ti estudyante Ket irresponsible Ay agalwad ka ti klase Sumungad punishment ni ma'am mi	<i>But if a student Is irresponsible Be careful in your class Ma'am's punishment arrives</i>

The following examples below take the original lines of the poem and not the translated ones.

Example 1:

*Estriкто ni Ma'am mi
Ngem ti klase han nga napili
Naragsak ti estudyante na
Ngem kaasi't pagtripan na*

Based on the figurative language above, it is rhyme because the respondent used end rhyme as to the words- mi, napili, na and na.

Example 2:

*No panpanunotek ti langa
Madik ammo nu anya man ti adda*

The lines above taken from the respondent's poem are with end rhyme-langa and adda.

Example 3:

*Nagmayat rikna
Nu agayat ka*

It is seen from the example above that it is with rhyme because of the ending words-rikna and ka.

2. Metaphor

Comparison is implied, without using the words of comparison such as like, as, similar to, and resembles (Perrine,1992).

Table 3. Metaphor Found in the Poems with Corresponding Translation

Sika't liwliwa nu adda problema	<i>You're my comfort when problems come</i>
Sika't pigsa ken namnama ti panagbasa	<i>You're my strength and hope in my studies</i>
Nagannak nga sagot iti Dios	<i>My parents are a gift from God</i>
Pamilya isu't inspirasyon	<i>My family is my inspiration</i>
Isuda't lawag ti dalan ko	<i>They are the light of my way</i>
O nanang ko, sika ti kapisi ti biag ko	<i>My mother is my better half.</i>

For the examples of this figurative language, the translated lines are utilized.

Example 1.

You're my strength and hope in my studies

In the example above, it is a metaphor because the 'you' is considered to be his parents who are described as the respondent's strength when he feels weak and his hope when he loses the will to study.

Example 2.

My mother is my better half.

This is an example of metaphor because the respondent describes his mother as his better half. He tries to compare two characters that are alike- the mother and the better half.

3. Hyperbole

It is simply exaggeration, but exaggeration in the service of truth. It is used to express something or state of condition in a bigger way than its ordinary on (Perrine,1992)

Table 4. Hyperbole Found in the Poems with Corresponding Translation

Ayat ko kenka Awan kapadpada na Aldaw rabii sika latta	<i>My love for you Incomparably Day and night</i>
Riknak uray kaano dinto maupay	<i>My feelings will never get tired</i>
Sika innak panpanunoten Nga awan patinggana	<i>You're the one I am thinking of endlessly</i>
Panagayat ko Awan makalepped	<i>My love Is unstoppable</i>

The translated lines are to be used as examples of this figurative language.

Example 1.

My feelings will never get tired

Based on the above figure of speech, it is a hyperbole because it simply expresses exaggeration. It is not ordinary that feelings will not get tired.

Example 2.

You're the one I am thinking of endlessly

In the example, it belongs to hyperbole because a person who thinks endlessly does not exist. He needs to rest. The respondent tries to emphasize for certain effect.

4. Assonance

This takes place when two or more words, close to one another repeat the same vowel sound, but start with different consonant sounds. (<https://literarydevices.net/assonance/>)

Table 5. Assonance Found in the Poems with Corresponding Translation

Narigat ngem naragsak ti agadal Adda kanyam kasanum iturong ti pagsyaatam Nu naytibkol ka balasang, babawin ton ti sumukat Ta haan pulos maysubli dati nga saad	<i>To study is tough yet happy It depends on you how you handle it When she fails, repentance comes And life changes not</i>
Anyan a ragsak ko nu adda ka ditoy denna Sika't naidumduma, maparagsak mo toy kararua	<i>How happy I am if you're by my side You're unique that makes my soul happy</i>
Ti maysa nga balasang addaan ti nadalus nga langad Haan nga mapukaw ti disiplina nga inted ti nagannak Nga agnaed ta pusom ti awan patingga na Inggana sikan to ti addaan ti pamilyan	<i>A lady should have a good disposition Discipline will not be lost that her parents give That lingers in your heart for eternity Till you have your own family</i>

The examples are the original lines taken from the poems of the respondents.

Example 1.

Anyan a ragsak ko nu addaka ditoy denna

In the example above, this is assonance because there are two or more words, close to one another repeat the same vowel sound, but start with different consonant sounds. These are anyan, a ragsak, adda-ka and denna.

Example 2.

Sika't naidumduma, maparagsak mo toy kararua

This is an example of assonance because the words-sika, naidumduma, maparagsak and kararua have the same vowel sounds though they start with different consonant sounds.

5. Anaphora

The deliberate repetition of the first part of the sentence in order to achieve an artistic effect is known as Anaphora. (Literary Devices, 2019)

Table 6. Anaphora Found in the Poems with Corresponding Translation

Pamilya a napnuan ragsak Pamilya a agtitinnulong Pamilya nga addaan panagsisinnakit Pamilya nga agiinnayat	<i>A family full of happiness A family who helps one another A family that cares for each other A family that loves</i>
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The example above is a figure of speech which is an anaphora because the word ‘family’ is deliberately repeated as the first part of each line in the poem.

6. Personification

This is giving the attributes of a human being to an animal, an object, or an idea (Perrine,1992)

Table 7. Personification Found in the Poems with Corresponding Translation

Uray no sinno Nu pusok ti mangisuro	<i>Whoever they are If my heart teaches</i>
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In the example above, it is personification because a heart is considered as an inanimate thing which can do human activity like of teaches. Thus, a person is able to do something because it is what his heart desires.

The examples above are of end rhymes that make the poem very interesting to read because of the sounds.

7. Symbol

It portrays something that has meaning beyond what it is (Perinne,1992)

Table 8. Symbol Found in the Poems with Corresponding Translation

Iti aldaw nga innak pinagkitkita dagiti lugar a nakapaspasamakan na anyan a nagsakit	<i>Places we had been Remind me Of the unbearable pains</i>
Nagparang ti letrato ti kaayan-ayat Hello, my love, sinungbatak ti awag	<i>The picture of my beloved appeared Hello, my love! I answered her call</i>

In the example, ‘Nagparang ti letrato ti kaayan-ayat, Hello, my love, sinungbatak ti tawag’ shows the figure of speech, symbol because the picture symbolizes the person he loves.

Based from the examples above, figurative languages express feelings and thoughts creatively and they make poems interesting to read. From this study, it manifests that in teaching literature specifically poetry, one must understand and use the figurative languages to communicate, not only literally but also with deeper meanings.

CONCLUSIONS

In view of the findings, the following conclusions are made:

1. The figurative languages in the poems of the respondents are anaphora, assonance, hyperbole, metaphor, personification, rhyme and symbol.

2. The figurative language in the poems that is the most prevalent is rhyme that has 23 occurrences; next is metaphor that has 6 occurrences; assonance and hyperbole have both 4 occurrences and anaphora and personification have the least occurrence in the said poems.

RECOMMENDATIONS

Based on the conclusions made by the researchers, the following recommendations are hereby advanced:

1. Identification and awareness of the students for the purpose to strengthen their writing abilities specifically in poem and later on with other literary genres like short stories, novels, essays, etc.
2. Integrate poetry writing especially in English classes to maintain their development on students' reading and writing comprehension abilities and their skills in the field of literature.

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EVALUATION OF THE MANAGEMENT AND QUALITY OF A SCHOOL PAPER

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Bangued, Abra

ABSTRACT

This study attempted to assess the effectiveness of school paper management of the Abra State Institute of Sciences and Technology Bangued Campus along: a) parts such as layout and make up, editorial page, literary page, news page, feature page, sports page, circulation, b) editorial board such as the office, adviser and the editorial staff, c) procedures such as selection of staff, request of funds, and purchase of materials. Respondents included 100 faculty members and 100 students. It used a quantitative design of research. A 5-point Likert scale for the quality of school paper was utilized with 5-very highly effective, 4- highly effective, 3-fairly effective, 2-slightly effective, and 1-not effective. The questionnaires were distributed, tallied, and interpreted. The instrument used was designed by the researcher herself and was validated by three experts from the different schools in the province. Findings included the following: "The Technocrat", the official school paper of the institution had an overall composite mean of 4.41 (VHE) on lay out and make-up for both faculty and students. It had a very highly effective (VHE) in terms of its (\bar{x} =4.39). However, the set of respondents gave varied results as to the circulation (\bar{x} =4.18, highly effective), the office (\bar{x} =3.03, fairly effective). The item on the Office is spacious and well-ventilated suited for working received the lowest mean (2.77) rated as fairly effective and the item the Staff are comfortable in working at the Office (\bar{x} =2.90,). The adviser with a mean of 4.48 rated as very highly effective for both set of respondents. As to the procedures, the items on they manage to work beyond class to beat the deadline and they support other members of the Staff received a mean of 3.63 rated as highly effective solely for the staff however, as to funds, the item on, the Staff, including the Technical Adviser handle the collection for the publication received the lowest mean of 1.00 rated as not effective by the Staff while the item on the Staff are free to manage their finances gained a mean of 2.33 rated as slightly effective by the staff. As a whole, the effectiveness of the school paper as to funds gained a composite mean of 2.57 rated as slightly effective. From the findings, the following conclusions were drawn: a) The school paper is effective on the editorial board but poorly on the procedures. b) The advisers designated were high profiled, capable, dedicated, and committed to fulfil their duties and responsibilities. c) There are provisions in the Republic which are not well practiced and properly implemented for the school paper to effectively function for the school. From the conclusions, the researcher humbly forwards the following recommendations: a) A more spacious office may be taken into consideration for the editorial staff to freely move and work productively, efficiently, and effectively. b) The republic act 7079, otherwise known as the Campus Journalism Act of 1991 may be reviewed for proper implementation. c) Parallel study may be considered to look into other variables on the effectiveness of school paper management.

Keywords: Editorial Board, Feature page, News page, Newspaper Act, Lay out, School Paper, Sports page

INTRODUCTION

A school paper is needed in any institution because it is a great educational opportunity as well as a great chance to keep up on the school news. The students, including the faculty members find entertainment to it too.

Many students are probably already interested in journalism as a career, and these are the students whom are most likely to take over the school newspaper and manage it for the school. They're going to

be the most interested in publishing interesting, up to date content and information. They're going to try to keep the school informed and entertained, depending on school requirements for the school newspaper. Some schools really lay out the content that they'd like to be in the newspaper, and others allow the creativity of the writers to take over, so long as the content is still appropriate for school.

As the Technical Adviser for almost 8 years, the researcher finds it imperative to evaluate the effectiveness of the school paper. Since there is a legal basis for its operations, the activities and operations must be monitored as to what extent the Republic Act 7079 is implemented in the school. It is only through such an evaluation that the school paper management can level up to a higher degree and be comparatively effective with other SUCs.

Every institution must have a school paper for this is a great opportunity for the students to hone their art in writing and their leadership skills, as well. This is an educational avenue for entertainment and to be updated on the activities of the school.

The school paper serves as the voice of the students. All concerns, updates, and school news are lay out into the publication. The staff designate the technical adviser to supervise the staff's duties and responsibilities. The editor-in-chief being the head of the Editorial Board supervises the operations of the publication. Working hand-in-hand with the Associate Editor and the Managing Editor, he/she gives assignments to the section editors and the writers/correspondents, supervises the preparation of the layout, writes the editorials, edits all articles, and submits everything to the Adviser for editing. Moreover, he schedules meetings, plans the activities for the publication, and recommends sanctions to staffers for any misbehavior, refusal to perform a directive, neglect of responsibility, and the like. In the performance of his duty, he always consults the Adviser. He/ She manages to cooperate with the other editors like news, sports, literary, feature, and other members of the editorial board. He sees to it that the operations of the publication is well managed and be well abreast on their rights and privileges as mandated by the RA 7079 or otherwise known as the Campus Journalism Act of 1991.

OBJECTIVES

1. To evaluate the management of the school paper along:
 - 1.1 Procedures:
 - 1.1.1 Selection of Staff
 - 1.1.2 Request of funds
 - 1.1.3 Purchase of materials
 - 1.2 Staff
 - 1.2.1 Adviser
 - 1.2.2 Editorial Staff
2. To evaluate the quality of the school paper parts:
 - 2.1 Lay out and Make up
 - 2.2 Editorial Page
 - 2.3 Literary Page
 - 2.4 News Page
 - 2.5 Feature Page
 - 2.6 Sports Page
 - 2.7 Circulation
3. To assess the differences on the effectiveness of the school paper management among the faculty and students along:
 - 3.1 Parts
 - 3.2 Editorial Board
 - 3.3 Procedures

METHODOLOGY

The researcher used the quantitative design of research and described the quality of school paper management of The Technocrat in the Abra State Institute of Sciences and Technology Bangued Campus. A 5-point Likert scale for the quality of school paper was utilized with 5- very highly effective, 4- highly effective, 3-fairly effective, 2-slightly effective, and 1-not effective. The evaluation included the 1) procedures for the selection of staff, request of funds, purchase of materials, 2) staff like the adviser and the editorial staff, 3) school paper parts namely: lay out and make up, editorial page, literary page, news page, feature page, sports page, and circulation. Also, it looked into the differences on the effectiveness of the school paper management among the respondents along the parts, editorial board, and procedures. The questionnaires were distributed, tallied, and interpreted. The instrument used was designed by the researcher herself and was validated by three experts from the different schools in the province.

FINDINGS

Table 1a. Quality of the School Paper of ASIST in terms of the Parts Along Lay Out and Make Up

Lay out and Make up	Students		Faculty		As a Whole	
	Mean	Descriptive Rating (DR)	Mean	Descriptive Rating (DR)	Mean	Descriptive Rating (DR)
The front-page is attractive and consistent in style.	4.13	HE	4.19	HE	4.16	HE
The name of the paper is readable, of suitable size, and in harmony with the general makeup.	4.68	VHE	4.61	VHE	4.64	VHE
The paper contains the date, issue, volume number, and the name of the school, address and province.	4.55	VHE	4.05	HE	4.30	VHE
The write- ups are concise and free from typographical errors.	4.42	VHE	4.58	VHE	4.50	VHE
The headlines are definite and with specific statements.	4.35	VHE	4.30	VHE	4.33	VHE
The meanings which the headlines carry are easily grasped.	4.35	HE	4.40	VHE	4.38	VHE
The headlines are free from repetition of key words, slang, improper abbreviations	4.16	HE	4.38	VHE	4.27	VHE
The paper is well edited.	4.48	VHE	4.77	VHE	4.63	VHE
The paper is free from misspelled words, mistakes in grammar, and wordiness.	4.45	VHE	4.59	VHE	4.52	VHE
Composite Mean	4.40	VHE	4.43	VHE	4.41	VHE

Norm:

<i>Point Value</i>	<i>Statistical Limits</i>	<i>Descriptive Rating (DR)</i>
5	4.20-5.00	<i>Very Highly Effective (VHE)</i>
4	3.40 – 4.19	<i>Highly Effective (HE)</i>
3	2.60 – 3.39	<i>Fairly Effective (FE)</i>
2	1.80 – 2.59	<i>Slightly Effective (SE)</i>
1	1.00 – 1.79	<i>Not Effective (NE)</i>

Table 1a shows that the school paper of ASIST, “The Technocrat” has an overall composite mean of 4.41 (VHE) on lay out and make-up for both faculty and students. It has gained a mean of 4.16(HE) for both faculty and students on its attractiveness of front page and consistency in style.

The paper is free from misspelled words, mistakes in grammar, and wordiness gained the mean of 4.52 (VHE) for both set of respondents.

Homillano, D. (2016) shares that makeup is a happy marriage of aesthetics & mechanics; that is, the arrangement of illustrations and types on a page or a spread which is to be reproduced graphically. Further, she claimed that a newspaper should be carefully and properly laid out to give prominence to the news in proportion to its importance, to make the different contents easy to find and to read, to give the pages an attractive appearance and to give the paper a personality of its own.

Table 1b. Quality of the School Paper of ASIST in terms of the Parts Along Editorial Page

Editorial Page	Students		Faculty		As a Whole	
	Mean	Descriptive Rating (DR)	Mean	Descriptive Rating (DR)	Mean	Descriptive Rating (DR)
Contains one specific idea.	4.39	VHE	4.13	HE	4.26	VHE
The topics are interesting to the ASISTIANs.	4.23	VHE	4.57	VHE	4.40	VHE
It deals on problems and issues of the ASIST, current social, economic, and military problems in the province of Abra.	4.52	VHE	4.41	VHE	4.46	VHE
The page contains criticisms of ASIST's Administrators, Faculty, and Staff	4.16	HE	4.20	VHE	4.18	HE
The editorial clearly states a STAND.	4.55	VHE	4.50	VHE	4.53	VHE
The arguments are clear.	4.39	VHE	4.58	VHE	4.48	VHE
The editorial is simple, direct, clear, and forceful.	4.61	VHE	4.69	VHE	4.65	VHE
The editorial cartoon appeals the reader's sense of humor.	4.00	HE	4.00	HE	4.00	HE
Composite Mean	4.35	VHE	4.38	VHE	4.37	VHE

As to the editorial page, *the appeal of the editorial cartoon to the readers' sense of humour* gained the lowest mean of 4.00 (HE) for both set of respondents and 4.16 (HE) for students while 4.20 (VHE) for the faculty on the area that states *the page contains criticisms of ASIST's Administrators, Faculty, and Staff*.

Editorial is predominantly about balance. But that does not prevent it from occasionally stirring things up, when such is the need. It is an opinion maker and analyses evidences rather than produces them. When necessary, the editorial expresses opinions and attempts to critically analyse and examine from the various opinions. It must present a refreshing perspective on an issue so as to retain balance when writings get opinionated; and/or stir up the crotchety and crusty when scientific/creative stupor sets in. Moreover, a good editorial is contemporary without being populist. It tackles recent events and issues, and attempts to formulate viewpoints based on an objective analysis of happenings and conflicting/contrary opinions.

Also, a good editorial is either one or more of the following: it is an opinion maker, it is reconciliatory between contrary viewpoints or standpoints, it is balanced in its analysis of evidence and events, and it is, manifest or otherwise, crusading in its thrust.

Table 1c. Quality of the School Paper of ASIST in terms of the Parts Along Literary Page

Literary Page	Students		Faculty		As a Whole	
	Mean	Descriptive Rating (DR)	Mean	Descriptive Rating (DR)	Mean	Descriptive Rating (DR)
The page contains poems, essays, and short stories.	4.65	VHE	4.79	VHE	4.72	VHE
The articles are original.	4.74	VHE	4.70	VHE	4.72	VHE
The articles contain illustrations and drawings.	4.68	VHE	4.79	VHE	4.73	VHE
Composite Mean	4.69	VHE	4.76	VHE	4.72	VHE

As to the literary page, it contains poems, essays, and short stories received a mean of 4.72 (VHE) for both faculty and students. Similarly with, the articles are original and articles contain illustrations and drawings received the highest mean of 4.73, very highly effective for both set of respondents.

As a whole, the literary page received a mean of 4.72 rated as very highly effective (VHE).

Table 1d. Quality of the School Paper of ASIST in terms of the Parts Along News Page

News Page	Students		Faculty		As a Whole	
	Mean	Descriptive Rating (DR)	Mean	Descriptive Rating (DR)	Mean	Descriptive Rating (DR)
The news articles are interesting.	4.39	VHE	4.31	VHE	4.35	VHE
The news provides complete information.	4.42	VHE	4.58	VHE	4.50	VHE
There exists a tie-up of school news and community, city, or provincial, and national affairs?	4.39	VHE	4.40	VHE	4.39	VHE
The news articles are clear and short.	4.10	HE	4.01	HE	4.05	HE
Composite Mean	4.32	VHE	4.32	VHE	4.32	VHE

The news page as a whole received a very highly effective rate with a mean of 4.32 for both set of respondents. The lowest mean, 4.05 or highly effective (HE) fell on the statement the news articles are clear and short while the statement, the news provides complete information received a very highly effective (VHE) rate for both faculty and students with a mean of 4.50.

Table 1e. Quality of the School Paper of ASIST in terms of the Parts Along Feature Page

Feature Page	Students		Faculty		As a Whole	
	Mean	Descriptive Rating (DR)	Mean	Descriptive Rating (DR)	Mean	Descriptive Rating (DR)
There are enough number and variety of special features like: school features, student opinions, humor columns, personality sketches, homemaking tips, parents' columns, alumni and faculty notes, trivias, puzzles, and quizzes – to interest variety of readers.	4.48	VHE	4.32	VHE	4.40	VHE
The articles are well written and carry clear and colorful pictures, illustrations, or drawings.	4.35	VHE	4.30	VHE	4.33	VHE
Composite Mean	4.42	VHE	4.31	VHE	4.37	VHE

Table 1e shows that the statement *enough number and variety of special features like: school features, student opinions, humour columns, personality sketches, homemaking tips, parents' columns, alumni and faculty notes, trivia, puzzles, and quizzes – to interest variety of readers* received a mean of 4.40 rated as very highly effective for both students and faculty. This is higher than the mean 4.33 for the statement *articles are well written and carry clear and colorful pictures, illustrations, or drawings* for both faculty and students.

As a whole, the feature page received a mean of 4.37 rated as very highly effective for both set of respondents.

Table 1f. Quality of the School Paper of ASIST in terms of the Parts Along Sports Page

Sports Page	Students		Faculty		As a Whole	
	Mean	Descriptive Rating (DR)	Mean	Descriptive Rating (DR)	Mean	Descriptive Rating (DR)
The sports stories are complete and organized.	4.35	VHE	4.30	VHE	4.33	VHE
The sports stories include events in the school and the province.	4.48	VHE	4.23	VHE	4.35	VHE
The page contains enough fact stories, actual coverage stories and features on the athletes.	4.32	VHE	4.57	VHE	4.45	VHE
Composite Mean	4.39	VHE	4.37	VHE	4.38	VHE

It clearly shows the effectiveness of the sports page as evidenced by the overall composite mean of 4.38 rated as very highly effective for both the faculty and students. The item on the *sports stories are complete and organized* gained a mean of 4.33 rated as very high effective for both set of respondents while the item on *the page contains enough fact stories, actual coverage stories and features on the athletes* gained a mean of 4.45 rated as very highly effective for both set of respondents.

Table 1g. Quality of the School Paper of ASIST in terms of the Parts Along Circulation of the School Paper

Circulation of the School Paper	Students		Faculty		As a Whole	
	Mean	Descriptive Rating (DR)	Mean	Descriptive Rating (DR)	Mean	Descriptive Rating (DR)
The Office circulates the school paper once a year.	3.97	HE	4.27	VHE	4.12	VHE
The Office circulates the school paper twice a year.	3.84	HE	4.26	VHE	4.05	HE
Each student receives his/ her own copy of the School Paper.	4.29	VHE	4.48	VHE	4.39	VHE
Composite Mean	4.03	HE	4.34	VHE	4.18	HE

There were varied results from the set of respondents as evidenced by the differences in their mean. The items the Office circulates the school paper once a year (Mean, 3.97) and the Office circulates the school paper twice a year (Mean, 3.84) rated as highly effective for students while it was 4.27 and 4.26 respectively for the faculty, rated as very highly effective.

As a whole, circulation effectiveness gained a mean of 4.18 rated as highly effective.

Table 1h. Summary Table on the Quality of the School Paper of ASIST in terms of the Parts

	Students		Faculty		As a Whole	
	Mean	Descriptive Rating (DR)	Mean	Descriptive Rating (DR)	Mean	Descriptive Rating (DR)
a. Lay out and Make up	4.40	VHE	4.43	VHE	4.41	VHE
b. Editorial Page	4.35	VHE	4.38	VHE	4.37	VHE
c. Literary Page	4.69	VHE	4.76	VHE	4.72	VHE
d. News Page	4.32	VHE	4.32	VHE	4.32	VHE
e. Feature Page	4.42	VHE	4.31	VHE	4.37	VHE
f. Sports Page	4.39	VHE	4.37	VHE	4.38	VHE
g. Circulation	4.03	VHE	4.34	VHE	4.18	HE
Overall Mean	4.37	VHE	4.42	VHE	4.39	VHE

The school paper of the Abra State Institute of Sciences and Technology has a very highly effective quality one in terms of its parts, with an overall mean of 4.39. However, the set of respondents gave varied results as to the circulation with a mean of 4.18 rated as highly effective.

These results can be attributed to the dedication and commitment of the editorial board to do their respective functions and duties to serve the school. It also shows the support of the administration to the undertakings of the editorial board.

Table 2a. Effectiveness of the School Paper of ASIST in terms of the Editorial Board

School Paper of ASIST in terms of the Editorial Board	Technical Adviser		Staff		As a Whole	
	Mean	Descriptive Rating (DR)	Mean	Descriptive Rating (DR)	Mean	Descriptive Rating (DR)
The Office						
The Office is accessible to all Units for a better and effective way of communication.	3.33	FE	2.88	FE	3.10	FE
The Office is spacious and well-ventilated suited for working.	2.67	FE	2.88	FE	2.77	FE
The Staff are comfortable in working at the Office.	2.67	FE	3.13	FE	2.90	FE
The Staff can use the Office anytime.	3.33	FE	3.38	FE	3.35	FE
Composite Mean	3.00	VHE	3.06	FE	3.03	FE
The Adviser						
The adviser is very supportive to the Staff.	4.67	VHE	4.50	VHE	4.58	VHE
The adviser is qualified to lead his/ her Staff.	5.00	VHE	4.50	VHE	4.75	VHE
The adviser monitors the Staff.	5.00	VHE	4.38	VHE	4.69	VHE
He/ She handles the Staff well.	4.67	VHE	4.63	VHE	4.65	VHE
He/ She promotes camaraderie among and between his/ her Staff.	4.67	VHE	4.00	HE	4.33	VHE
He/ She leads the Staff to do their tasks and meet deadlines.	4.67	VHE	4.00	HE	4.33	VHE
He/ She treats his/ her Staff equally.	5.00	VHE	4.25	VHE	4.63	VHE
The adviser acknowledges positions of the Staff.	4.33	VHE	4.13	HE	4.23	VHE
He/ She supports the stand of the Staff.	5.00	VHE	4.50	VHE	4.75	VHE
He/ She empowers the Staff.	3.33	FE	4.38	VHE	3.85	HE
Composite Mean	4.63	VHE	4.33	VHE	4.48	VHE
Overall Mean	3.82	HE	3.69	HE	3.76	HE

Table 2a shows evidences on the effectiveness of the school paper to the editorial board specifically on their office. It has gained a mean of 3.03 rated as fairly effective. The item on the Office is spacious and well-ventilated suited for working received the lowest mean (2.77) rated as fairly effective and the item the Staff are comfortable in working at the Office gained a mean of 2.90 rated as fairly effective too.

As a whole, the Office received a composite mean of 3.03 rated as fairly effective for both set of respondents.

As to the adviser, it has received a composite mean of 4.48 rated as very highly effective for both set of respondents. The items on the adviser is qualified to lead his/ her Staff and He/ She supports the stand of the Staff gained the highest mean of 4.75 rated as very highly effective for both set of respondents. The lowest was on the item He/ She empowers the Staff with a mean of 3.85 rated as highly effective.

The advisers of “The Technocrat” are high profiled ones. They had been in the academe from 10-35 years, had attended various seminars and trainings on Campus Journalism, had won several awards in press conferences: individual and group awards and The designated technical advisers of the school paper handled the school paper from 3 years to 8 years whose ranks vary from Instructor 3- Assistant Professor 3.

As a whole, the effectiveness of the school paper as to the editorial board got a mean of 3.76 rated as highly effective.

Table 2b. Effectiveness of the School Paper of ASIST in terms of the Procedures

School Paper of ASIST in terms of the Procedures	Technical Adviser		Staff		As a Whole	
	Mean	Descriptive Rating (DR)	Mean	Descriptive Rating (DR)	Mean	Descriptive Rating (DR)
Fellow Staff						
They support other members of the Staff.	4.67	VHE	3.63	HE	4.15	HE
They manage to work beyond class to beat the deadline.	4.33	VHE	3.63	HE	3.98	HE
Composite Mean	4.50	VHE	3.63	HE	4.06	HE
Selection of the Staff						
The Staff underwent the selection process like: screening, examination, and interview.	3.67	HE	3.13	FE	3.40	HE
The Staff campaigned for its membership.	4.00	HE	3.00	FE	3.50	HE
The Staff helped in the selection of its new members.	4.00	HE	4.00	HE	4.00	HE
The Staff recruited new members.	3.67	HE	4.13	HE	3.90	HE
Qualified instructors are members of the selection committee.	4.33	VHE	4.25	VHE	4.29	VHE
Composite Mean	3.93	HE	3.70	HE	3.82	HE
Funds						
The Staff, including the Technical Adviser handle the collection for the publication.	1.00	NE	2.75	FE	1.88	SE
The Staff are free to manage their finances.	2.33	SE	2.88	FE	2.60	FE
The funds of the Office are well audited by proper authorities.	3.33	FE	3.13	FE	3.23	FE
Composite Mean	2.22	SE	2.92	FE	2.57	SE
Procurement of Supplies						
1. Supplies based from the WFP (Work and Financial Plan) are easily requested.	2.00	SE	3.25	FE	2.63	FE
2. They are easily delivered.	2.33	SE	2.88	FE	2.60	FE
3. Delivered supplies are the requested ones.	2.67	FE	2.88	FE	2.77	FE
4. Supplies are delivered in good condition.	3.67	HE	3.38	HE	3.52	HE
Composite Mean	2.67	FE	3.09	FE	2.88	FE
Overall Mean	3.13	FE	3.21	FE	3.17	FE

As to the procedures, the items on they manage to work beyond class to beat the deadline and they support other members of the Staff received a mean of 3.63 rated as highly effective solely for the staff.

Specifically on the selection of members, the item on the Staff campaigned for its membership received the lowest mean of 3.00 rated as fairly effective while the item on qualified instructors are members of the selection committee gained the highest mean of 4.29 rated as very highly effective.

As to funds, the item on, the Staff, including the Technical Adviser handle the collection for the publication received the lowest mean of 1.00 rated as not effective by the Staff while the item on the Staff are free to manage their finances gained a mean of 2.33 rated as slightly effective by the staff. As a whole, the effectiveness of the school paper as to funds gained a composite \bar{x} (2.57, slightly effective).

As to procurement of supplies, the item, Supplies are delivered in good condition gained $\bar{x}=3.38$, fairly effective by the staff. It earned a composite ($\bar{x}=2.88$) but an overall ($\bar{x}=3.17$, fairly effective) by both set of respondents.

Funds play the key role in publication. The editorial board, as the governing body of the publication manages its collection to be utilized for its operations like attendance to seminars, trainings, and press conferences, circulation, office supplies, and other related expenses.

In addition, Republic Act No. 7079 otherwise known as the "Campus Journalism Act of 1991" is an act providing for the development and promotion of campus journalism and for other purposes states that:

Sec. 4. Student Publication. — A student publication is published by the student body through an editorial board and publication staff composed of students selected but fair and competitive examinations. Once the publication is established, its editorial board shall freely determine its editorial policies and manage the publication's funds.

Table 3. T-test showing the Significant Difference between Faculty and Student Assessment on School Paper Management on Parts

Category	Mean Preferences		D	Variance		T-computed Value	T-critical Value	Decision
	Student	Faculty		Student	Faculty			
Lay out and Make Up	4.40	4.11	0.29	0.030	0.800	3.58	1.86 $p \leq 0.01$	Reject Ho
Editorial Page	4.35	3.80	0.56	0.040	0.190	5.98	1.89 $p \leq 0.01$	Reject Ho
Literary Page	4.69	3.96	0.72	0.002	0.020	13.11	2.92 $p \leq 0.01$	Reject Ho
News Page	4.32	3.70	0.62	0.020	0.090	6.12	2.35 $p \leq 0.01$	Reject Ho
Feature Page	4.42	3.86	0.56	0.008	0.004	29.15	6.13 $p \leq 0.01$	Reject Ho
Sports Page	4.38	3.54	0.84	0.007	0.008	48.98	2.91 $p \leq 0.01$	Reject Ho
Circulation of School Paper	4.03	3.18	0.85	0.054	0.058	10.94	2.92 $p \leq 0.01$	Reject Ho

The significant differences between the faculty and student assessment on the school paper management on layout and make up with a T-computed Value of 3.58 higher than the T-critical Value, 1.86. The editorial page has a T-computed Value of 5.98 was higher than the T-critical Value of 1.89. The literary page gained a T-computed Value of 13.11 higher than the T-critical Value of 2.92 while the news page had a T-computed Value of 6.12. The feature page posited a T-computed Value, 29.15 with a T-critical Value of 6.13. On the sports page, it has gained a T-computed Value of 48.98 with a T-critical Value of 2.91 and circulation of school paper obtained a T-computed Value of 10.94 with a T-critical Value of 2.92. All of these were significant at .01 level. These results can be attributed to the well managed duties and responsibilities of the editorial board. This clearly shows that they serve the students efficiently and effectively. Articles are clearly previewed by the Editor in chief prior the final editing of the Technical Adviser.

Table 4. T-test showing the Significant Difference between Technical Adviser and Staff Assessment on School Paper Management on the Editorial Board and Procedures

Category	Mean Preferences		D	Variance		T-computed Value	T-critical Value	Decision
	TA	Staff		TA	Staff			
The Office	3.00	3.06	0.06	0.15	0.06	-3.23	2.35 $p \geq 0.05$	Accept Ho
The Adviser	4.63	4.33	0.31	0.26	0.05	1.83	1.83 $p \leq 0.05$	Reject Ho
Fellow Staff	4.50	3.63	0.88	0.06	0.01	5.25	6.31 $p \leq 0.05$	Reject Ho
Selection of Staff	3.93	3.70	3.23	0.08	0.35	0.94	2.13 $p \geq 0.05$	Accept Ho
Funds	2.22	2.92	0.69	1.37	0.04	-1.22	2.92 $p \geq 0.05$	Accept Ho
Procurement	2.67	3.09	0.43	0.52	0.07	-1.32	2.35 $p \geq 0.05$	Accept Ho

Table 4 shows the significant differences between the technical adviser and the staff assessment to The Office(T- computed Value, -3.23 and T-critical Value, 2.35), the Adviser (T- computed Value, 1.83 and T-critical Value, 1.83), Fellow Staff (T-computed Value, 5.25 and T- critical Value, 6.31), Selection of Staff (T- computed Value, 0.94 and T-critical Value, 2.13), Funds (T-computed Value, -1.22 and T-critical Value, 2.92), and Procurement (T-computed Value, -1.32 and T- critical Value, 2.35). These were significant at 0.05 level.

The results were attributed to the low effectiveness of the school paper management specifically on the funds and procurement of supplies. These only imply that some provisions in the Republic are not well implemented.

CONCLUSIONS

1. The school paper is effective in terms of the parts, partly for the editorial board, and poorly on the procedures.
2. The advisers designated are high profiled ones who are capable, dedicated, and committed to fulfill their duties and responsibilities.
3. There are provisions in the Republic which are not well practiced and properly implemented for the school paper to effectively function for the school.

RECOMMENDATIONS

1. A more spacious office may be taken into consideration for the editorial staff to freely move and work productively, efficiently, and effectively.
2. The school may review republic act 7079, otherwise known as the Campus Journalism Act of 1991 for proper implementation.
3. Parallel study may be considered to look into other variables on the evaluation of school paper management.

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COMMON ERRORS IN THESES OF SELECTED STUDENT TEACHERS

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ABSTRACT

This study is focused on the analysis on the common errors in theses of selected student teachers of the Abra State Institute of Sciences and Technology. 50 selected student teachers from the Teacher Education Department who were chosen as the respondents of the study. Specifically, it aimed 1).to list down the common errors of the student teachers along verb tenses, run-on sentences, comma splices, fragments, redundant phrases, clauses, and sentences, misspelled words, and inappropriate words; and 2). to look into the most common error made by the students themselves. Findings showed that they displayed errors in the verb tenses, run-on sentences, comma splice, and fragments, redundant phrases, clauses, and sentences, misspelled words, and inappropriate words in different frequencies. The errors on the use of verb tenses ranked first with 211 committed by the students, 2nd run-on sentences, comma splices, fragments with 158 errors, 3rd on misspelled words with 124 errors, 4th was the use of inappropriate words with 36 errors, 5th was the errors on redundant phrases, clauses, and sentences with only 13. From the findings drawn, the researcher concluded that the student teachers committed grammatical errors in their theses despite the assistance from their technical team which comprised their adviser, critic, statistician, and the panel chair with his/ her members. They had difficulty on verb tenses but minimal in redundant phrases, clauses, and sentences. From these conclusions, the researcher recommends a research symposium for the student teachers including the lower levels to impart the necessary writing skills in writing researches; research classes may create avenues for more writing activities for students to readily evaluate their works in progress; and faculty members who are experts in research undertakings shall continue guiding the students in crafting their theses and other related research endeavors.

Keywords: Errors, Inappropriate words, Misspelled words, Redundant phrase, Student teachers, Theses, Verb tense

INTRODUCTION

Writing a thesis or any research paper is a difficult process Hourani (2008) because it is a specialized skill to hone any individual that requires time and effort. Professionals even find it too difficult to conceptualizing a research topic, then more so for students.

Research is a part of a student's life. From the start of any course, the teacher usually sends her students for any research activity. Such activities ignite their research skills, and these are carried on until their last year. As graduating students, thesis is a requirement prior to graduation.

In the Abra State Institute of Sciences and Technology, Bangued Campus, the students are given a thesis committee that comprises the adviser, critic, statistician with a panel chairman and her/ his two members. Proposals are critiqued before the members of the panel during the 1st semester followed by the defense prior to the deployment in the 2nd semester; thus, giving the students ample time to focus on their practice teaching during the 2nd semester. As an adviser, critic, chairman of the panel, the researcher found it too tedious correcting the manuscript of the students. Common errors as to format, spelling,

and erroneous construction in sentences, redundant phrases, clauses, and words beset her and other members of the committee. This research was conceptualized based on her experiences as a research adviser and research instructor. She wanted to gauge the extent of errors committed by the students along with the verb tenses, run-on sentences, comma splices, fragments, redundant phrases, clauses, and sentences, misspelled words; and inappropriate words.

Baker, R, et. Al (2013) stated that there will come a time in most students' careers when they are assigned a research paper. Such an assignment often creates a great deal of unneeded anxiety in the student, which may result in procrastination and a feeling of confusion and inadequacy. This anxiety frequently stems from the fact that many students are unfamiliar and inexperienced with this genre of writing. Writing a research paper is an essential aspect of academics and should not be avoided on account of one's anxiety. The process of writing a research paper can be one of the more rewarding experiences in academics. Becoming an experienced researcher and writer in any field or discipline takes a great deal of practice.

Writing a research paper follows certain steps. It is structured in such a way that topics are narrowed or delimited, chapters with several parts, sourcing out for resources, conclusions are drawn from the findings, and recommendations are drawn from the conclusions drawn. Writing the draft contributes to the anxiety which this process entails. Also, the most tremendous of all is the unlimited rules of grammar which the students need to review, memorize, or analyze as they go through with their tedious tasks. These are just some of the reasons why students find it difficult in conducting researches.

As noted by Corder (1967) cited by Hourani (2008) indicated that errors are significant in three different ways. First to teachers, in that they tell them how far towards the goal the learners have advanced and consequently, what remains for them to learn. Second, they provide the researchers evidence of how language is learnt or acquired, what strategies or procedures the learners are employing in their discovery of the language. Thirdly, they are indispensable to the learners themselves, because teachers can regard the making of errors as a device the learners use to learn. Research has provided empirical evidence pointing to emphasis on learners' errors as an effective means of improving grammatical accuracy. He further noted that, 'Knowing more about how grammar works is to understand more about how grammar is used and misused'. There is a need for students to recognize the significance of errors which occur in their writing, to fully grasp and understand the nature of the errors made. This requires English language teachers to be better equipped, more sensitive and aware of the difficulties that students face concerning grammar. In other words, it is a way the learners have for testing their hypotheses about the nature of the language they are learning.

Error analysis is an essential source of information for teachers to correct students' errors and improves the effectiveness of their teaching. Taking these ideas into consideration, this study attempts to identify the grammatical errors which students make in writing their theses to help teachers account for solutions in improving students' way of writing researches.

OBJECTIVE

The study identified and analyzed the common errors of students in writing their theses along:

- a) verb tenses,
- b) run-on sentences, comma splices, fragments
- c) redundant phrases, clauses, and sentences
- d) misspelled words; and
- e) inappropriate words,

METHODOLOGY

This study utilized both the qualitative and quantitative research design. It used the descriptive to describe the common errors made in research specifically along the different areas. 50 student teachers whose thesis were submitted to the Office of the Chairperson were selected for the study. Two faculty members with Associate Professorial rank and one Assistant Professorial rank checked the thesis of the students. The evaluators had taught Research subject to the Teacher Education students for several years and had finished, presented, and published worthwhile researches in the local, regional, national, and international fora. The research instrument was developed by the researcher herself and was validated by three experts.

The researcher with the fellow evaluators tallied the errors as to verb tenses, run-on sentences, comma splice, and fragments, redundant phrases, clauses, and sentences, misspelled words, and inappropriate words. The errors were ranked accordingly.

FINDINGS

Table 1. Ranking of Common Grammatical Errors

Common Grammatical Errors	Total Number of Errors	Rank
1. Does the paper use the correct verb tenses?	211	1
2. Does the paper contain run-on sentences, comma splices, fragments?	158	2
3. Are there redundant phrases, clauses, and sentences?	13	5
4. Does the paper contain misspelled words?	124	3
5. Does the paper contain inappropriate words?	36	4

The table clearly shows that the use of verb tenses ranked first with 211 as total number of errors committed by the students, 2nd is the error on run-on sentences, comma splices, fragments with a total number of 158, 3rd in rank is the error on misspelled words with a total number of 124, 4th is the use of inappropriate words with a total number of 36, 5th is the errors on redundant phrases, clauses, and sentences with a total number of 13.

A. Errors on Verb Tenses:

The student teachers committed the most errors in verb tenses. The following are some of the common errors in the use of tenses.

Incorrect: *It is raining for two days.*

Correct: *It has been raining for two days.*

Incorrect: *The baby is sleeping for three hours now.*

Correct: *The baby has been sleeping for three hours now.*

Here the error lies in using the present continuous instead of the present perfect continuous. We use the present perfect continuous tense to talk about an action which started in the past, has gone on till the present and is still continuing.

Incorrect: *I have seen him yesterday.*

Correct: *I saw him yesterday.*

Incorrect: *He has returned from London last week.*

Correct: *He returned from London last week.*

Here the error lies in using the present perfect tense instead of the simple past tense. The present perfect is a present tense. It can't be used with adverbs of past time.

Incorrect: *See that you will not do any damage.*

Correct: *See that you do not do any damage.*

It is wrong to use the future tense in the subordinate clause when the verb in the main clause is in the imperative mood.

Incorrect: *I will call you when the dinner will be ready.*

Correct: *I will call you when the dinner is ready.*

Incorrect: *He will help if you will ask him.*

Correct: *He will help if you ask him.*

When the verb in the main clause is in the future tense, the verb in the subordinate clause should be in the present and not in the future.

The student teachers had the following errors in verb tenses:

1. *They argues that without “exposure of pupils’ misconceptions and their resolution through conflict discussion, students may not know why a mistake occurred”.*

Here, the statement clearly contains a very simple and elementary rule in Grammar. The subject must agree with the verb in number. With the subject, “*They*”, the verb “*argues*” must be ‘**argue**’.

2. *Furthermore, taken as a whole, no relationship exist between science process skills and the attitudes of the respondents.*

The verb, “**exist**” must be in the past tense; thus, the statement must be ‘...relationship existed’.

3. *Many studies conducted on state anxiety indicates that foreign language anxiety has negative effect on the language learning process.*

The verb “**indicates**” must be ‘**indicated**’.

4. *....the researchers conclude that the Grade VI pupils of Bangbangar Elementary School who were enrolled during the School Year 2015- 2016*

The verb “**conclude**” must be ‘**concluded**’.

With the given examples above, the student teachers mainly commit errors on the use of the past tense of the verb.

5. *The researchers found out that the respondents were not fond of reading, especially materials where they feel like they are studying.*

The verb phrase “**feel like they are studying**” must be ‘**felt like they were studying**’.

6. *As a whole, it was find out that there is no significant relationship between the reading practices and the reading comprehension of the respondents.*

The verb phrase, “**... there is no significant relationship between...**” must be ‘**...there was no significant relationship between...**’

7. *This was the case for these tests because most of the students really did not enjoy reading and just so that they can be done with the tasks given to them, they just answered without even trying to comprehend what they were doing. This is the reason they got low in making inferences and predicting outcomes.*

This statement has numerous errors namely: comma splice, omission of words, use of inappropriate words, and verb tenses.

The verb phrase, “...**just so that they can be done...**” must be ‘**just so that they could be done**’ for verb consistency.

8. *Their reading practices were not significantly related to the reading comprehension because even if some like reading, when the researchers administered the tests, most of the respondents just wanted to be finished with the tasks given to them as fast as they can without even bothering to read the selections, hence, most of them got low in the tests.*

The verb phrase, “...**with the tasks given to them as fast as they can...**” must be ‘...**with the tasks given to them as fast as they could...**’

However, this is not the only error that can be found in his statement. There are other errors like: “...**to be finished with the tasks given to them...**” should be “...**to finish the tasks given to them...**” for clarity of ideas and simplicity of terms.

9. *The tools prepared are to identify their practices and how it affected their reading comprehension.*

With the statement above, it has the verb phrase, “**The tools prepared are...**” must have been written as ‘**The tools prepared were...**’

10. *As supported by the findings of the National Institute for Science and Mathematics Education Development, University of the Philippines, their findings show that the lowest performance in the National Achievement Test was the Mathematics subject.*

The statement in #10 broke the rule in writing which is a lengthy sentence. Also, it committed verb tenses error in the line, “...**their findings show...**” must be ‘...**their findings showed...**’

11. *Also Brigada Skwela is excellently practice in the said school.*

Rather than using “...**is excellently practice...**” it must have been written as ‘...**was excellently practiced**’

12. *Furthermore, the gathered data were tallied, analyze, and interpret through this statistical tools: Frequency Count and Percentage will be used to determine the status of Extra and Co-Curricular Activities of the respondents...*

This is an erroneous sentence because of inconsistency of tenses of verbs used and run-on sentence. With the line, “...**the gathered data were tallied, analyze, and interpret...**” must have been as ‘...**the gathered data were tallied, analyzed, and interpreted...**’

B. Errors on run-on sentences, comma splices, and fragments

A run-on sentence occurs when two or more independent clauses (also known as complete sentences) are connected improperly.

Example:

I love to write papers I would write one every day if I had the time.

There are two complete sentences in the above example:

Sentence 1: *I love to write papers.*

Sentence 2: *I would write one every day if I had the time.*

One common type of run-on sentence is a comma splice. A comma splice occurs when two independent clauses are joined with just a comma.

Example of a comma splice: *Participants could leave the study at any time, they needed to indicate their preference.*

Sentence 1: *Participants could leave the study at any time.*

Sentence 2: *They needed to indicate their preference.*

Some comma splices occur when a writer attempts to use a transitional expression in the middle of a sentence.

Example of a comma splice:

Sentence 1: *The results of the study were inconclusive*

Transitional expression (conjunctive adverb): *therefore*

Sentence 2: *More research needs to be done on the topic*

To fix this type of comma splice, use a semicolon before the transitional expression and add a comma after it. See more examples of this on the semicolon page.

Revision: *The results of the study were inconclusive; therefore, more research needs to be done on the topic.*

You can correct a run-on sentence by connecting or separating its parts correctly. There are several easy ways to connect independent clauses.

On Correcting Run-On Sentences

A run-on sentence can be fixed by connecting its parts correctly. There are several ways to connect independent clauses.

a) Use a period. The easiest way to fix a run-on is to split the sentence into smaller sentences using a period. This revision works especially well with longer sentences. Check, however, to make sure that this solution does not result in short, choppy sentences.

Revision example: *I love to write papers. I would write one every day if I had the time.*

b) Use a semicolon. Inserting a semicolon between independent clauses creates a grammatically correct sentence. Using a semicolon is a stylistic choice that establishes a close relationship between the two sentences.

Revision example: *I love to write papers; I would write one every day if I had the time.*

c) Use a comma and a coordinating conjunction. A comma, paired with a coordinating conjunction (such as *and*, *but*, or *or*), corrects a run-on sentence. This method emphasizes the relationship between the two clauses.

Revision example: *I love to write papers, and I would write one every day if I had the time.*

d) Use a subordinating conjunction. Turn one of the independent clauses into a dependent clause. A subordinating conjunction (such as *because*, *unless*, and *although*) connects two clauses to create a complex sentence. This option works to cement the relationship between the two parts of the sentence and may improve the flow of the clauses.

Example: *Because I love to write papers, I would write one every day if I had the time.*

However you decide to revise for run-on sentences, remember that maintaining sentence variety helps to keep the writing clear and interesting for your readers.

On Sentence Fragments

A sentence fragment is a string of words that does not form a complete sentence; there is a necessary component of a complete sentence missing. This missing component may be a subject (usually a noun) or a predicate (verb or verb phrase) and/or when the sentence does not express a complete idea.

Here is an example of a fragment with a missing subject.

Example of a fragment: *Shows no improvement in any of the vital signs.*

The sentence above is a fragment since there is no subject (Who shows no improvement?). Fragments can be corrected by identifying the missing element and including it.

Revision: *The patient shows no improvement in any of the vital signs.*

Here is an example of a fragment with a missing predicate, or action:

Example of a fragment: *The doctors, who were using peer-reviewed research articles that contributed to the body of knowledge in their fields, which was obstetrics.*

Notice here that although the sentence is quite long, it still contains no action (What are the doctors doing?). Once identified, the sentence can be corrected easily.

Revision: *The doctors, who were using peer-reviewed research articles that contributed to the body of knowledge in their field, improved their knowledge of obstetrics.*

Here are some errors done by the student teachers:

1. *Mathematics was said to be a difficult subject. Yet, it played a significant role in the society.*

This can be revised as:

Mathematics was said to be a difficult subject; yet, it played a significant role in the society.

2. *Mathematics should not be complicated: it should be interesting, it finds significance in experiences and life of the students, this allows the learners to appreciate the subject.*

Mathematics should not be complicated; it should be interesting. It finds significance in experiences and life of the students; thus allowing the learners to appreciate the subject.

3. *And the reading performance of the pupils along:*

In writing sentences, one must avoid starting them with “**And**”. The statement in #3 can be simply corrected as ‘**The reading performance of the pupils along:...**’

4. *Based from the findings of this research, the researchers conclude that the Grade VI pupils of Bangbangar Elementary School who were enrolled during the School Year 2015- 2016*

In order to complete the above statement, either one of the the following verb phrases must be inserted:

‘**were proficient in their science skills**’

‘**were not proficient in their science skills**’

5. *And all of the presented reading performance was appreciated by the respondents therefore their reading skill on this level developed*

The statement can be corrected as :

All of the presented reading performances were appreciated by the respondents; therefore their reading skill on this level developed.

6. *His time and dedication in helping the researchers.*

The statement is a fragment because it has an incomplete verb phrase to complete its meaning. It can be corrected as “ **His time and dedication in helping the researchers are useful.**”

7. *The researcher asked permission from the principal CES to conduct the study, upon approval, the researcher floated the survey checklist for the awareness, attitudes and practice of the respondents on how they conserve energy.*

This is an example of a comma splice. It used series of commas instead of periods to separate sentences. To correct this statement, it should have been written as:

“The researcher asked permission from the principal CES to conduct the study. Upon approval, the researcher floated the survey checklist for the awareness, attitudes, and practices of the respondents on how they conserve energy.”

C. Redundant phrases, clauses, and sentences

According to Klazema (2014) redundancy is often use to help pad out writing and make it seem longer than it really is, but instead of helping it just makes the writing difficult to read. Good writing is concise and informative. When something is redundant it means that it is excessive, unnecessary, or superfluous. Redundancy usually involves repeating something or adding in information that is completely unnecessary. A good way to test whether or not something is redundant is to see if the phrase in question could have something removed from it.

Not all usages of redundancy are bad. In fact, there are many instances where redundancy is considered to be okay, such as when a person is using it for emphasis.

This idea is considered when writing an essay, but not for technical writing such as the undergraduate theses.

Here are some examples and how to fix them:

Redundant: **There were three teachers that taught each and every hour at school today.**

Fixed: **There were three teachers that taught every hour at school today.**

Notice that the phrase “each and every” was redundant in the first sentence? Each and every essentially mean the same thing in this instance.

Redundant: **Everything being equal, the members of the Student Council will think about the argument, and come up with a final decision through a vote next week at an open meeting.**

Fixed: **The members of the Student Council will have a final decision next week at an open meeting after a vote.**

Here are some of the errors done by the student teachers:

1. *The descriptive method survey was utilized using attitudinaire towards science to determine the attitudes of respondents towards science and science process skills test to determine their skills performance level in science.*

The statement can be written simply as, ‘**The descriptive method survey was utilized using attitudinaire towards science process skills**’

2. *The researchers conducted an interview from several kindergarten teachers including the kinder teacher of the targeted school and it was found out that most of them do not really make use games in the instruction.*

The wordy statement can be simplified as: ‘**The researchers conducted an interview from several kindergarten teachers and it was found that most of them do not really use games in the instruction.**’

3. *Incorporating games in teaching math can reduce math anxiety and help your child develop a more positive attitude toward math.*

Sentence #3 can be corrected as ‘**Incorporating games in teaching math can reduce anxiety and help your child develop a more positive attitude towards it.**’

4. *The data collected was treated statistically using the following statistical tool:*

This can be revised as ‘**The data collected was treated statistically using the following tools...**’

D. Misspelled words

The following are the most commonly misspelled words: absence, address, advice, all right, arctic, beginning, believe, bicycle, broccoli, bureau, calendar, camaraderie, ceiling, cemetery, changeable, conscientious, conscious, decease, deceive, definite, descent, desperate, device, disastrous, ecstasy, embarrass, exercise, fascinate, February, fiery, fluorescent, foreign, government, grateful, guarantee, harass, height, humorous, independent, jealous, jewelry, judgment, ketchup, knowledge, leisure, library, license, maintenance, mathematics, mediocre, millennium, miniature, miscellaneous, mischievous, misspell, mysterious, necessary, neighbor, nuclear, occasion, occurrence, odyssey, piece, pigeon, playwright, precede, prejudice, privilege, pumpkin, raspberry, receive.

Here are some of the errors in misspelled words by the student teachers:

1. *In addition to, science process skills particularly on analyzing and predicting disclosed significant negative relationship which attitude specially on class participation.*

The word, “**specially**” must be written as ‘**especially**’

2. *Prof. Raymond Vasquez*

The name of the instructor is “**Reymond**”.

3. *Another follow-up research must be conducted to support the results of this study and to further help the learners with a batter way to appreciate the value of reading.*

The word, “**batter**” must have been written as “**better**”

4. *Most of them use worksheets and books while seldom integrating games in the teaching-process learning.*

“**Ganes**” in this statement was written erroneously. Supposedly, it should have been written as ‘**Gains**’.

5. *In the sight of the findings, the following conclusions are down:*

The statement must have been written as ‘**In the sight of the findings, the following conclusions were drawn**’

E. Inappropriate words

Writing is a series of choices. As the student teachers work on their researches, they choose their topic, approach, and sources. When writing, they have to choose the words they will use to express their ideas and decide how they will arrange those words into sentences and paragraphs. Inappropriateness of words becomes an error if there are unwanted words, misused, and wrong referents.

On misused words

The word doesn't actually mean what the writer thinks it does.

Example: *Cree Indians were a monotonous culture until French and British settlers arrived.*

Revision: *Cree Indians were a homogenous culture.*

On Words with unwanted connotations or meanings.

Example: *I sprayed the ants in their private places.*

Revision: *I sprayed the ants in their hiding places.*

On Using a pronoun when readers can't tell whom/what it refers to.

Example: *My cousin Jake hugged my brother Trey, even though he didn't like him very much.*

Revision: *My cousin Jake hugged my brother Trey, even though Jake doesn't like Trey very much.*

On Jargon or technical terms

This make reader's work unnecessarily hard. Maybe they need to use some of these words because they are important terms in your field, but don't throw them in just to "sound smart."

Example: *The dialectical interface between neo-Platonists and anti-disestablishment Catholics offers an algorithm for deontological thought.*

Revision: *The dialogue between neo-Platonists and certain Catholic thinkers is a model for deontological thought.*

On Loaded language.

Example: *Society teaches young girls that beauty is their most important quality. In order to prevent eating disorders and other health problems, we must change society.*

Revision: *Contemporary American popular media, like magazines and movies, teach young girls that beauty is their most important quality. In order to prevent eating disorders and other health problems, we must change the images and role models girls are offered.*

Here are some of the errors done by the student teachers on this area:

1. One of the most important process skills is to give emphasize on the unique skills which are, observing, communicating, hypothesizing, inferring, predicting, classifying, and measuring.

It could have been written as '**Process skills emphasize on observing, communicating, hypothesizing, inferring, predicting, classifying, and measuring.**'

2. His infinite encouragement, help and advises made the researchers determined to accomplish this study.

This wordy statement can be simplified as '**His encouragement helped the researchers accomplish this study.**'

From the salient findings of the study, the following conclusions were drawn:

CONCLUSIONS

1. The student teachers displayed errors in the verb tenses, run-on sentences, comma splice, and fragments, redundant phrases, clauses, and sentences, misspelled words, and inappropriate words despite the presence of their technical team which comprises their adviser, critic, statistician, and the panel chair with his/ her members.
2. The student teachers had difficulty on verb tenses but minimal in redundant phrases, clauses, and sentences.

3. From the conclusions above, the researcher humbly forwards the following recommendations:
4. A research symposium for the student teachers and lower levels to impart the necessary writing skills in writing researches must be conducted annually to student teachers and lower levels to impart the needed skills especially on writing researches.
5. Research classes may create avenues for more writing drills and activities to students and readily evaluate their works for progress.
6. Faculty members who are experts in research undertakings shall continue guiding the students in conducting their researches.

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MOTIVATIONS FOR CHOOSING TEACHING AS A CAREER: AN ABRENIAN PERSPECTIVE

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ABSTRACT

This study attempted to identify the motivations employed by the 150 student-respondents in choosing teaching as a career. It further ranked choices accordingly and identified as extrinsic, intrinsic, and altruistic motivations. From the summary of ranks, the researchers identified the first three and further identified the first three in each rank. In the 1st rank, findings showed that the student-respondents chose their admire to their teachers (19.8%), their interest in teaching (14.5%) and the brother or relative's advise to take teaching (11.5%). In the 2nd rank, the respondents chose as motivation that their teachers are well respected (32%), the inspiration they get from their teachers with 20.5% and lastly was the support from the family(18.2%). In the 3rd rank, the students chose the motivation that their teachers were well respected(15.7%), the inspiration from their teachers (11.2%), the wish of their parents, their ambition, they like children, teaches are well admired by people, they themselves admire their teachers, advise of relatives to take the course (9%). From these findings, it is then concluded that the respondents of this study were intrinsically motivated in pursuing such a profession as manifested by their admiration from their teachers, inspiration from their most favorite teacher, the respect which teaching can be gained from other people, their interest in the profession itself, their love of children, and their family status. Teachers played the most important source of the motivations; the researchers recommend them to display good professionalism and qualities of a teacher and be more dedicated and committed to do their tasks for students to sustain the motivations they have.

Keywords: Extrinsic, Intrinsic, Altruistic, Motivation

INTRODUCTION

Choices are always driven by motives. These motives or motivations vary from intrinsic, extrinsic, or altruistic. Either of these drives one to take action and inspires her for doing something. Without motivation, one accomplishes very little.

Extrinsic motivation refers to behavior that is driven by external rewards such as money, fame, grades, and praise. It arises from outside the individual, as opposed to intrinsic motivation, which originates inside of the individual. Those who are extrinsically motivated will continue to perform an action even though the task might not be in and of itself rewarding. A person who works in a manufacturing position, for example, might perform a number of routine tasks that are not enjoyable. Because this person is receiving an extrinsic reward (a paycheck) for completing these tasks, he or she will feel motivat-

ed to perform them. It is the tendency to engage in activities in order to gain some type of known, external reward. It is important to note that these rewards can be either tangible or psychological in nature. Money and trophies are two common types of tangible rewards. People engage in activities that they might normally not find terribly enjoyable or rewarding in order to earn a wage (Cherry, 2018).

On the other hand, intrinsic motivation refers to behavior that is driven by internal rewards. In other words, the motivation to engage in a behavior arises from within the individual because it is naturally satisfying to you. This contrasts with extrinsic motivation, which involves engaging in a behavior in order to earn external rewards or avoid punishment. When one pursues an activity for the pure enjoyment of it, she is doing so because she is intrinsically motivated. The motivations for engaging in the behavior arise entirely from within rather than out of a desire to gain some type of external rewards such as prizes, money, or acclaim. These rewards involve creating positive emotions within the individual which give one a sense of progress when she sees that the work is accomplishing something positive or competence when one learns something new or become more skilled at a task).

Motivationally, altruism is the desire to enhance the welfare of others at a net welfare loss to oneself. The economic literature shows many examples of how altruistic behavior can be generated from self-interested motivations. In addition, it is argued that altruistic acts may be caused by the emotions of the agents, notably pride and shame. A distinction is drawn between acts whose performance is conditional on seeing what other agents are doing, corresponding to quasi-moral norms of fairness or reciprocity, and acts whose performance is conditional on being observed by other agents, corresponding to social norms. Many subjects not only display cooperative and generous behavior, but are willing to spend resources on punishing those who do not (Elster. 2006).

In choosing a career, one has motives for the choice. Reasons vary for the choice. In the institution, remarkably for the last decades, the Teacher Education Department has the highest enrollees. It is the parameter then of this study to know the reasons and motives of the prospect teachers of choosing teaching as their career.

Indulging into teaching is like a candle that is consumed minute by minute. Teaching is a profession that teaches the student and the teacher herself.

As noted by Wal (nd), he chose to be a teacher because teaching is not just a profession, it is a mission. Children, who are like clay are moulded and shaped by the hands of a teacher. No career, no work can be more rewarding than that of a teacher who is occupied in building the personality of a student in order to equip him to face the challenges of a competitive world in the throes of transition and change. The love and affection, the respect that students shower on a teacher who is able to inspire them by example in all spheres far surpasses the joy that wealth can bestow. What great satisfaction it gives to see your students acquire new dimensions to their personality, gaining confidence and poise and all a result of your inspiration, of your instruction. As has been rightly said, an average teacher tells, a good teacher explains, an excellent teacher demonstrates and an outstanding teacher inspires. Teaching is chosen because being with children is like being endowed with perpetual youth. The love, laughter, mischief, creativity and imagination of children are like an eternal fountain of joy and vitality. He realised that through teaching he would be able to fulfill his soul's craving to make a contribution in shaping the world of tomorrow. He chose the profession because of the passionate conviction that in it lies my special destiny. Today after nearly four decades in this profession, each day he can wake up with a song in his heart, each day he can walk with a lighter step, each day he can be elevated to the higher levels of awareness because each day brings with it a set of new challenges and new situations to be tackled. Each day becomes a harbinger of a new dawn of hopes and expectations, of possibilities unanticipated, of experiences untold, of dimensions manifold. Teaching offers maximum scope for creativity to flourish. Innovation and experimentation, exploring uncharted territories by way of teaching methodologies give to one a great sense of power which is almost intoxicating.

OBJECTIVE

The study identified and analyzed the motivations of students in taking up teaching as a career.

METHODOLOGY

This study employed a quantitative research design. Responses were tallied and ranked. From the twenty- six choices, the students were asked to choose only five motivations and ranked them accordingly as to 1st, 2nd choice, and 3rd choice, and so on. Motivations ranked first until the third were tallied and from each rank, the first three motivations were included for the discussions of findings. A checklist of 26 choices was distributed to the students which were designed by the researchers and validated by three experts. There were 150 student- respondents who were purposively selected from first year to fourth year across programs in the department. They were purposively selected from Bachelor of Elementary Education and Bachelor of Secondary Education students.

FINDINGS

Table1: Summary Ranks of the 1st in Rank on the Motivations in Choosing Teaching as a Career

Motivations	f	%	SR
a.It is the wish of my parents because they cannot afford any other course	11	8.40	
b.My parents are teachers.	2	1.5	
c.My brother/relative who is going to support me to college advised me to take up education course.	15	11.5	3
d.My aunts are all teachers.	1	.8	
e.My relatives who are teachers inspired me take up the course.	7	5.4	
f.My parents can only afford this course for me.	2	1.5	
g.I have friends who are teachers.	3	2.3	
h.I admire teachers.	26	19.8	1
i.I don't like to be separated from my peers("barkada")	1	.8	
j.My friends and I decided to pursue the course	1	.8	
k.I have a sponsor support me financially.	3	2.3	
l.I was inspired by my favorite teacher.	0	0	
m.One of my teachers was able to help me with some of my personal problems.	0	0	
n.I was advised by my fourth year adviser.	0	0	
o.My teacher in Grade 1 inspired me a lot.	2	1.5	
p.Teachers are well respected.	3	2.3	
q.Teachers are well admired by people.	5	3.8	
r.The teaching profession is well appreciated by the community.	5	3.8	
s.Teaching is a very awarding profession.	3	2.3	
t.The government is exerting its efforts to improve the salary of teachers.	0	0	
u.I like children.	0	0	
v.It has been my ambition since childhood.	12	9.2	
w.I can help the youth.	5	3.8	
x.I am interested in teaching.	19	14.5	2
y.I am handling bible classes; I would like to improve my teaching skills.	0	0	
z.It is my personal choice; nobody influenced me.	5	3.8	
Total	150	100	

Table 1 presents that the respondents chose "*I admire teachers*" (19.8%) as the first motivation in choosing teaching as their career. Secondly, the respondents were motivated because they love teaching. This is validated by "*I am interested in teaching*" with 14.5% and lastly, "*My brother/relative who is going to support me to college advised me to take up education course.*" with 11.5% as the choice.

The prospect teachers were motivated well to pursue teaching because of their admiration from their teachers, their interest in the profession itself, and financial status of the family. The prospect teachers are driven to indulge into teaching through the inspiration from teachers, in general. Wyatt, et al (2017) posted the same study when they conducted a study among teachers in Queensland College of Teachers and found that intrinsic motives motivated the respondents well.

Intrinsic motivation refers to behavior that is driven by internal rewards. The motivation to engage in a behavior arises from within the individual because it naturally satisfies him/ her.

Their desire to pursue the profession is determined by the admiration from their teachers rather than from the gains of external rewards like money, prize, or any award. The admiration from their teachers satisfies their intentions of pursuing such a profession.

Table2: Summary Ranks of the 2nd in Rank on the Motivations in Choosing Teaching as a Career

Motivations	f	%	SR
a.It is the wish of my parents because they cannot afford any other course	4	10	
b.My parents are teachers.	0	0	
c.My brother/relative who is going to support me to college advised me to take up education course.	5	11.4	
d.My aunts are all teachers.	3	5	
e.My relatives who are teachers inspired me take up the course.	7	16	
f.My parents can only afford this course for me.	2	4.55	
g.I have friends who are teachers.	2	4.55	
h.I admire teachers.	4	10	
i.I don't like to be separated from my peers("barkada")	1	2.3	
j.My friends and I decided to pursue the course	0	0	
k.I have a sponsor support me financially.	8	18.2	3
l.I was inspired by my favorite teacher.	9	20.5	2
m.One of my teachers was able to help me with some of my personal problems.	0	0	
n.I was advised by my fourth year adviser.	0	0	
o.My teacher in Grade 1 inspired me a lot.	1	2.3	
p. <i>Teachers are well respected.</i>	14	32	1
q. Teachers are well admired by people.	5	11.4	
r. The teaching profession is well appreciated by the community.	1	2.3	
s. Teaching is a very awarding profession.	3	5	
t. The government is exerting its efforts to improve the salary of teachers.	4	10	
u.I like children.	5	11.4	
v.It has been my ambition since childhood.	5	11.4	
w.I can help the youth.	4	10	
x.I am interested in teaching.	6	13.7	
y.I am handling bible classes; I would like to improve my teaching skills.	2	4.55	
z.It is my personal choice; nobody influenced me.	2	4.55	
Total	150	100	

Table 2 presents the summary ranks of the 2nd in rank on the twenty six (26) motivations in choosing teaching as a career. First in rank is "*Teachers are well respected*" (32%) while second was the motivation on "*I was inspired by my favorite teacher*" with 20.5% and lastly, "*I have a sponsor to support me financially*" with 18.2%.

Notably, the prospect teachers were driven intrinsically by the respect from teachers, inspiration from their favorite teachers, and financial status of the family.

Similarly as to admiration or inspiration drawn from the teachers, the prospect teachers find high respect for teachers as the prime reason for pursuing teaching as a career.

In the study conducted by Sahin, et al. (ND) in *Motivations for choosing teaching as a career: a perspective of pre-service teachers from a Turkish context* found out that intrinsic motivations were important in choosing teaching as a career among the Turkish pre-service teachers. They also noted Özbek (2007) that the intrinsic motivations of pre-service teachers were more dominant than extrinsic motivations among the female respondents.

Table3: Summary Ranks of the 3rd in Rank on the Motivations in Choosing a Career

Motivations	f	%	SR
a.It is the wish of my parents because they cannot afford any other course	5	9	3
b.My parents are teachers.	2	2.2	
c.My brother/relative who is going to support me to college advised me to take up education course.	5	9	3
d.My aunts are all teachers.	0	0	

Motivations	f	%	SR
e. My relatives who are teachers inspired me take up the course.	2	2.2	
f. My parents can only afford this course for me.	3	3.4	
g. I have friends who are teachers.	4	4.5	
h. <i>I admire teachers.</i>	5	9	3
i. I don't like to be separated from my peers ("barkada")	0	0	
j. My friends and I decided to pursue the course	2	2.2	
k. I have a sponsor support me financially.	2	2.2	
l. <i>I was inspired by my favorite teacher.</i>	14	11.2	2
m. One of my teachers was able to help me with some of my personal problems.	1	1.1	
n. I was advised by my fourth year adviser.	0	0	
o. My teacher in Grade 1 inspired me a lot.	1	1.1	
p. <i>Teachers are well respected.</i>	10	15.7	1
q. <i>Teachers are well admired by people.</i>	5	9	
r. The teaching profession is well appreciated by the community.	1	1.1	
s. Teaching is a very awarding profession.	3	3.4	
t. The government is exerting its efforts to improve the salary of teachers.	4	4.5	
u. <i>I like children.</i>	5	9	3
v. <i>It has been my ambition since childhood.</i>	5	9	3
w. I can help the youth.	0	0	
x. I am interested in teaching.	2	2.2	
y. I am handling bible classes; I would like to improve my teaching skills.	3	3.4	
z. It is my personal choice; nobody influenced me.	2	2.2	
Total	150	100	

Table 3 presents the summary ranks of the 3rd in rank on the motivations in choosing teaching as a career.

The students chose "*Teachers are well respected*" with 15.7% as their first choice in the 3rd rank, "*I was inspired by my favorite teacher*" ranked 2nd with 11.2%, while there were six (6) motivations that were chosen ranked as 3rd. These were the following statements: "*It is the wish of my parents because they cannot afford any other course*", "*It has been my ambition since childhood*", "*I like children.*", "*Teachers are well admired by people*", "*I admire teachers*", and lastly "*My brother/relative who is going to support me to college advised me to take up education course*" with 9%.

One of the motivations drawn from the student-respondents was altruistic motivation as a third choice. Their love for children motivated them to pursue and find teaching as a career in the future.

Burns (2008) noted in his "*Why consider becoming a teacher*" that teachers get incredible joy in seeing the difference they make as students gain new insights, become more interested in a subject and learn about themselves. Every day, teachers mold the future through impacting their students' views and understandings. Teachers foster creativity, develop character, give students lenses with which to view the world and provide students with the skills they need to reach their potential and lead productive lives. Many individuals are attracted to teaching by a sense of service, because they want to make a clear, tangible difference in the lives of others. As a teacher, they see the fruits of their efforts everyday as they use their intelligence and creativity to help students become excited about and learn about the science in their lives.

Madhu Wal in his essay on "*Why I chose to be a teacher*" claimed that he chose to be a teacher because teaching is not just a profession, it is a mission. Children, who are like clay are moulded and shaped by the hands of a teacher. No career, no work can be more rewarding than that of a teacher who is occupied in building the personality of a student in order to equip him to face the challenges of a competitive world in the throes of transition and change. The love and affection, the respect that students shower on a teacher who is able to inspire them by example in all spheres far surpasses the joy that wealth can bestow. What great satisfaction it gives to see your students acquire new dimensions to their personality, gaining confidence and poise and all a result of your inspiration, of your instruction. As has been rightly said: an average teacher tells, a good teacher explains, an excellent teacher demonstrates and

an outstanding teacher inspires. He chose teaching because being with children is like being endowed with perpetual youth. The love, laughter, mischief, creativity and imagination of children are like an eternal fountain of joy and vitality.

Table 4: Final Summary of the Different Motivations According to Rank

Motivations	R
I admire teachers.	1
Teachers are well respected.	2
I was inspired by my favorite teacher.	3

The table presents that in all the motivations whether extrinsic, intrinsic, altruism, the three motivations chosen, 'I admire teachers ranked first; 'Teachers are well respected' ranked the second, and 'I was inspired by my favorite teacher' ranked the third.

It furtherly implies that the cited motivations that were ranked 1st to 3rd dominated the other 23 motivations which at the same time caused and inspired the respondents in taking up the course.

CONCLUSIONS

Based from the findings, it is then concluded that:

1. The respondents were intrinsically motivated in pursuing such a profession which include their admiration from their teachers, inspiration from their most favorite teacher, the respect which teaching can be gained from other people, their interest in the profession itself, their love of children, and their family status.

RECOMMENDATIONS

Since teachers played the most important source of the motivations, the researchers recommend the following:

1. Display of professionalism and qualities of teacher are encouraged to draw inspiration for the prospect teachers.
2. Be more dedicated and committed to do their tasks for students to sustain the motivations they have.

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VALUES INTEGRATION IN TEACHING AMONG PRE-SERVICE TEACHERS

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ABSTRACT

The study explored the level of values integration and the manner in which values were integrated with the teaching of the pre-service teachers of the Abra State Institute of Sciences and Technology (ASIST). Quantitative and qualitative methods of research were utilized particularly with the use of questionnaires and interview schedules. A total enumeration of the pre-service teacher respondents was made and purposive sampling of cooperating teachers and pre-service interns were done for the interview. For the statistical treatment of data, bivariate analysis, t-test, and ANOVA were utilized. Results suggested that pre-service teachers always integrated values in teaching. The manner in which values had the most integration is during the lesson proper. The values mostly integrated are respect for human rights, respect for life, inculcating discipline and concern for the environment. The more values that are integrated in teaching, the manner in which values are integrated become better. It is then recommended that the practice of values integration in teaching among pre-service teachers should serve as an example for incoming teacher interns. It may continuously be improved through the conduct of values education seminars and orientations. Pre-service teachers are also encouraged to explore other means of integrating values in their lessons not only in the classroom. The outcome of this study shall be utilized as a basis for conducting enhancement and training programs for future pre-service teachers of the College with values integration and other related topics.

Keywords: values, values integration, teaching, manner of integration, pre-service teachers

INTRODUCTION

With the many years of teaching experience of the researcher, it has been observed that some college students lack the values of respect, discipline, obedience, and honesty. A question on whether there were lapses in the teaching of values at home or during their elementary or high school years at school has been posted. Teaching values to the children serve as the foundation of a good life.

Since students spend majority of their time at school, it should be a place that supports families' and communities' efforts to establish strong values in students. Educators are tasked with the job of helping children see that values are not only an important part of the educational process but also to their overall development as an individual (Kale, 2019).

Value-based education is essential to develop an individual and help him/her lifelong in many ways: It gives a positive direction to the students to shape their future and even helps them to know the purpose of their lives. It teaches them the best way to live that can be beneficial to individuals as well as the people around them. Value education also helps the students to become more and more responsible and sensible. It helps them to understand the perspective of life in a better way and lead a successful life as a responsible citizen. It also helps students to develop a strong relationship with family and friends. It develops the character and personality of the students. Value education develops a positive view of life in the student's mind. Value-based education is essential for the holistic development of a child. Value education develops a well-balanced individual with a strong character and value (Kale, 2019).

While technological advances are wont to throw up all kinds of questions about pedagogical practices and the evolution of the learning environment, the role of values in education gets far less attention.

This seems strange, given that developing a basic set of values has always been a cornerstone of a students' education (Micheal, 2016). Good character is not formed automatically; it is developed over time through a sustained process of teaching, example, learning and practice. It is developed through character education. The intentional teaching of good character is particularly important in today's society since the youth face many opportunities and dangers unknown to earlier generations. They are bombarded with many more negative influences through the media and other external sources prevalent in today's culture (Pala, 2011)

One of the main purposes of any university is to prepare students for a wide range of professional tasks and future success. Accordingly, developing the human and social potential of learners is a necessary component of a holistic and well-integrated education (Velázquez. 2014).

Values development may be achieved through integration in the different subject areas. Values integration involves the development of the values system of the learner as a part of the totality of his education. The learning process in any subject area covers the acquisition not only of concepts and skills but also of values. The identification of values to be integrated arises from the nature of the discipline and its content. For example, learning science concepts and acquiring scientific skills should lead to the development of the scientific attitude-intellectual honesty, respect for the emergence of new knowledge and system in phenomenal patterns, and preciseness and discipline in work performance. The experience of the decision-making process in the social sciences should develop objectivity, appreciation of knowledge and its application to the choice-making activity, truthfulness, and the valuing of historical experience of aesthetic values. Health and physical education should bring about a respect for life and the human body (Marte and Marte, 2005).

In general, the success of the integration of values in the different subject areas depends on the teacher's creativity in making use of situations to facilitate the student's values development, as well as on his perceptive skills to identify points in a lesson that would serve as entry points for specific values (Marte and Marte, 2005).

The study had the following hypotheses: there is a significant difference in the values integrated with teaching and manner in which values are integrated when grouped according to sex; there is a significant difference in the values integrated with teaching when grouped according to course and subject taught; there is a significant difference in the manner in which values are integrated when grouped according to course and subject taught; and there is a significant relationship between the values integrated in teaching and the manner in which values are integrated.

STATEMENT OF THE PROBLEM

This study determined the level of values integration and the manner in which values are integrated in teaching by the pre-service teachers.

Specific Objectives:

1. What is the profile of the respondents in terms of gender, course and subjects taught during their practice teaching?
2. What is the level of values integration in teaching?
3. What is the manner in integrating values in teaching?
4. Are there significant differences in the values integrated in teaching and manner in which values are integrated when grouped according to sex?
5. Are there significant differences in the values integrated in teaching when grouped according to course and subject taught?
6. Are there significant differences in the manner in which values are integrated when grouped according to course and subject taught?
7. Is there a significant relationship between the values integrated in teaching and the manner in which values are integrated?

REVIEW OF LITERATURE

Values Education as a part of the school curriculum is the process by which values are formed in the learner under the guidance of the teacher and as he interacts with this environment. But it involves not just any kind of teaching-learning process (Revised Version of the DECS Values Education Program, 1997).

First of all, the subject matter itself, values, has direct and immediate relevance to the personal life of the learner. Second, the process is not just cognitive but involves all the faculties of the learner. The teacher must appeal not only to the mind but the hearts as well, in fact, the total human person. Third, one learns values the way children learn many things from their parents. Children identify with parents, and this identification becomes the vehicle for the transmission of learning, be it language or the values of thrift and hard work. Hence, the teacher's personal values play an important role in values learning (Revised Version of the DECS Values Education Program, 1997).

Values can be properly integrated in the school curricula. In this regard, there are several approaches to integrating values in the school curricula across levels. One of them is the so-called vertical integration approach, wherein the value concepts are integrated from the lowest to the highest level of education. Under this scheme, there is what is called total-vertical and partial-vertical integration. The former means that values are integrated in all subjects and in all levels of education. On the other hand, the latter is the integration in some selected subjects/courses in all levels of education. Natural and unnatural integration are also common approaches used in integration concepts in the educational setting. The former utilizes the subject matter or activity undertaken to emphasize concepts or values the teacher wishes to bring about. The teacher does not need to think of preparing a new subject matter or activity just to teach a value he wants the learners to be aware of. Practically all lessons have values already infused in them. Activities to undertake to accomplish the objectives of the lesson are also rich in values. What the teacher should do is to identify the values properly using the discovery strategy. On the contrary, the unnatural integration is one in which the teachers are asked to add an activity to their lesson plan such that a particular value is touched. This may become artificial, especially when the specific value to be taken up does not jibe with the subject matter on hand. It is unfortunate that some administrators are resorting to this scheme just to comply with the directives on values education. Obviously, the former scheme is a much better scheme than the latter (Marte and Marte, 2005).

A Department of Education (DepEd) memorandum number 41 series of 2003 or the Values Education in the Basic Education Curriculum has an objective to ensure effective implementation of Values Education which is one of the emphases of the restructured Basic Education Curriculum, values education teachers should be utilized fully to help the other subject area teachers integrate values development in the subject area they teach. Moreover, the DepEd Order is being issued for the following reasons: to effectively reinforce the role of every teacher as a values education teacher thus strengthening the Department's collective efforts in developing desirable values among the students; to be able to meaningfully integrate values development in the lessons of every teacher in each discipline; to be able to assist teachers in the valuing processes while at the same time developing the competencies in the subject area they teach; to ensure that values education is purposefully planned as regular lessons in the subject and not taken as incidental lessons in the process; to ensure that trained values education teachers or those who majored in values education are duly recognized to perform functions relevant to their expertise and competence; and to properly evaluate the result of interventions conducted both inside and outside the classroom. DepEd Order No. 31 s. 2012 entitled, Policy Guidelines on the Implementation of Grades 1 to 10 of the K to 12 Basic Education Program (BEP) effective school year 2012-2013, provides details on the time allotment per learning area across grade levels. Edukasyon sa Pagpapakatao (EsP), one of the learning areas, is taught thirty (30) minutes per day or one hundred fifty' (150) minutes per week in the elementary. In the Junior High School (JHS), it is taught two (2) hours per week or one (1) hour a day for two (2) days per week.

RESEARCH METHODOLOGY

Research method

This study made use quantitative and qualitative methods of research. It was quantitative because it determined the level of values integration in teaching and the manner in which the values were integrated. It is also qualitative because interviews were made among some of the pre-service teachers, cooperating teachers and faculty observers. The data gathered were used to back up the statistical results of the study.

Population and Locale of the Study

The total enumeration of the main respondents was utilized. They were the 164 pre-service teachers of the Abra State Institute of Sciences and Technology, Bangued Campus in the different Education programs, who were deployed in the various public and private schools of the province of Abra. Moreover, to supplement the quantitative part of the study, an interview was conducted. Purposive sampling was utilized for the cooperating teachers, faculty observers and pre-service teachers who were interviewed. Also, all four supervising instructors were asked for the interview.

Data Gathering Instruments

There were two sets of instruments utilized in this study. A self-administered and adopted questionnaire (Evasco, 2015) was used to gather data on values integration in classroom teaching. Another instrument is a semi-structured interview schedule which measured the best practices and experiences of selected pre-service teachers in integrating values in their classroom teaching. The interview schedule was validated by three experts. Observations from cooperating teachers and supervising instructors were also collected through the use of the teaching demonstration observation forms. A camera was also used to capture several activities conducted by the pre-service teachers during their preliminary and final demonstrations.

Data Gathering Procedure

Permission was asked from the Superintendent of the Department of Education Division Officer for the data gathering, observation and interview of the respondents. Another permission was also asked from the College of Teacher Education Dean for the interview of the faculty observers and administration of the survey questionnaire to the pre-service teacher respondents. After which, the questionnaires and interviews were administered.

Statistical Treatment of Data

The following statistical tools were used to analyze and interpret the data:

1. Frequency and Percentage were used to determine the profile of the pre-service teacher respondents along sex, course and subject taught;
2. Weighted Mean was applied to look into the level of values integration in teaching and the manner in which the values were integrated;
3. T-test was utilized to show the differences in the values integrated in teaching and manner in which values are integrated when grouped according to sex;
4. Analysis of Variance or ANOVA was employed to look into the differences of the values integrated in teaching and the manner in which the values are integrated when grouped according to course and subject taught; and
5. Bivariate Analysis was also used to determine the significant relationship between the level of values integration in teaching and the manner in which the values are integrated.

FINDINGS

This section presents the results of the study that was conducted.

Problem 1. What is the profile of the pre-service teachers in terms of sex, course and subject taught?

Table 1. Profile of the Pre-service Teacher Respondents

Profile	Frequency (f)	Percentage (%)
Sex		
Male	64	39.02
Female	100	60.98
Total	164	100.00
Course		
BSEd	47	28.66
BTTE	12	7.32
BEEd General Education	87	53.05
BEEd PSEd	18	10.98
Total	164	100.00
Subjects Taught		
English	18	10.98
Filipino	20	12.20
Science	19	11.59
Mathematics	16	9.76
Aral. Pan / Makabayan	13	7.93
Tehnology and Livelihood Education (TLE)	24	14.63
Music, Arts, Physical Education and Health (MAPEH)	9	5.49
Mother Tongue Based Multilingual Education (MTB-MLE)	28	17.07
Edukasyon sa Pagpapakatao (ESP)	17	10.37
Total	164	100.00

Along sex, majority or 60.98% are females while 39.02% are males. The pre-service teachers were dominated with females. In terms of course, majority of them or 53.05% were Bachelor of Elementary Education students followed by the Bachelor of Secondary Education with 28.66%. Least of the respondents or 7.32% were from the Bachelor of Teacher Technical Education.

On subjects taught, the table shows that most of the respondents (17.07%) taught Mother Tongue. This is due to the fact that most of the respondents were Bachelor of Elementary Education Pre-school majors. In reference to Republic Act 10157 or The Kindergarten Education Act of 1911, *the State shall hereby adopt the mother tongue-based multilingual education (MTBMLE) method. The mother tongue of the learner shall be the primary medium of instruction for teaching and learning in the kindergarten level (Ocampo, 2017).*

On the other hand, table 1 further shows that MAPEH or Music, Arts, Physical Education and Health was least (5.49%) taught by the pre-service teachers.

Problem 2. What is the level of values integration in teaching?

Table 2. Level of Values Integration in Teaching

The Values Integrated in Teaching	Mean	Descriptive Rating (DR)
Inculcating discipline	4.51	A
Promotion of sense of cooperation	4.44	A
Empowerment of individuals	4.25	A
Promotion of equal rights and opportunities of women and men	4.45	A
Promotion of sense of accomplishment	4.37	A
Promotion of sense of duty	4.35	A
Recognition of the freedom of expression	4.30	A
Respect for life	4.54	A
Respect for human rights	4.60	A
Right attitude toward change	4.35	A
Maximum utilization of resources	4.22	A
Accepting Challenges	4.30	A
Promotion of sense of commitment	4.27	A
Promotion of sense of compassion	4.26	A
Rejection of violence in all forms	4.02	VO
Commitment to continuous improvement	4.32	A
Promotion of civic duty, pride and rights	4.38	A
Concern for the environment	4.51	A

Promotion of accountability	4.26	A
Promotion of healthy competition	4.28	A
Promotion of sense of community	4.28	A
Appreciation of Beauty	4.34	A
Devotion to the principle of democracy	4.18	VO
Devotion to the principle of cultural diversity	4.16	VO
Devotion to the principle of solidarity	4.06	VO
Devotion to the principle of justice	4.08	VO
Devotion to the principle of tolerance	3.95	VO
Devotion to the principle of pluralism	3.85	VO
Grand Mean	4.28	VH

Norm:

Point Value	Statistical Limit	Descriptive Rating (DR)	Overall Descriptive Rating
5	4.20 – 5.00	Always (A)	Very High (VH)
4	3.40 – 4.19	Very Often (VO)	High (H)
3	2.60 – 3.39	Sometimes (S)	Average (A)
2	1.80 – 2.59	Not All the Time (NAT)	Low (L)
1	1.00 – 1.79	Never (N)	Very Low (VL)

As revealed on table 2, the level of values integration of the pre-service teachers is Very High with a grand mean of 4.28. This implies that they always integrate values in all their lessons.

Of the twenty-eight values integrated in teaching, item 9 or respect for human rights was rated the highest with a mean of 4.60 described as always. This implies that most of the pre-service teachers always integrate this value in their lessons. This is supported with the observations of supervising instructors that the pre-service teachers let their students discover their basic rights as persons through constant reminders and class activities. Human rights are the basic rights and freedoms that belong to every person in the world, from birth until death. They apply regardless of where a person comes from, what he believes in or how he chooses to live his life (Equality and Human Rights Commission, 2018).

Still on the table, item 8 or respect for life plays second with a mean of 4.54 also described as always. This means that pre-service teachers inculcate in the minds of their students the value of life through their lessons. Item 1 or inculcating discipline also has a mean of 4.51 described as always. This is supported with the statement of some cooperating teachers that the pre-service teachers were able to integrate discipline in all their lessons like the simple reminders of being silent, greeting, sitting down, forming lines, raising of hands and the like. Similarly, item 18 or concern for the environment also had a high mean of 4.51 described as always. This implies that the respondents include in their lessons discussions on how the students should take care of their surroundings.

On the other hand, still on table 2, it can be gleaned that item 28 or devotion to the principle of pluralism got the lowest mean of 3.85 and described as very often. This may indicate that not all the time, the pre-service teachers include this value in their lessons however it was still frequently integrated in the lessons.

Problem 3. What is the manner in integrating values in teaching?

Table 3. Manner in which Values are Integrated in Teaching

Manner in which Values are Integrated	Mean	Descriptive Rating (DR)
During the lesson proper	4.51	A
During the synthesis part of the lesson	4.24	A
During the summary/conclusion part of the lesson	4.31	A
During the preliminary activity as part of motivation of the students	4.28	A
During the enrichment part of the teaching process	4.26	A
Depending on the responses of the students, hence, done incidentally	4.11	VO
Values are also integrated even in the assessment/evaluation part	4.21	A
Grand Mean	4.28	A

Norm:

Point Value	Statistical Limit	Descriptive Rating (DR)
5	4.20 – 5.00	Always (A)
4	3.40 – 4.19	Very Often (VO)
3	2.60 – 3.39	Sometimes (S)
2	1.80 – 2.59	Not All the Time (NAT)
1	1.00 – 1.79	Never (N)

As shown on the table, the manner in which values are integrated has a grand mean of 4.28 described as always. This implies that the manner in which the pre-service teachers integrate values in teaching is done all the time differently.

It can be seen that the manner where values had the highest integration during classroom teaching of the pre-service teachers is *during the lesson proper* with a mean of 4.51 described as always. This implies that the values are integrated mostly during the discussion of the main lesson. This conforms to Evasco’s study (2015), wherein she found out that values integration takes place mainly in the discussion proper as revealed both on the faculty survey and the observation and the values integrated are dependent on the lesson. Moreover, this is supported by the statements of the supervising instructors that the pre-service teachers’ lesson plans indicate inculcation of values particularly during the discussion of the lesson or sometimes the lesson itself is about values. This is also true with what one cooperating teacher had pointed out that *“the subject ESP or Edukasyon sa Pagpapakatao is teaching values in itself.”* The teaching of ESP has cognitive, behavioral (psychomotor) and affective dimension. It begins with the student’s understanding of the concept of responsibility to himself, his family, fellowmen, country, world and God which lead to decision-making and responsible action (Ibay, 2017). Another cooperating teacher mentioned, *“The pre-service teacher cites examples during her lesson discussion which sometimes relate with real life situations. This I think is an indirect means of including values in teaching.”* A supervising instructor observed that, *“another activity wherein value focus is observed is during meeting time or the formal start of the lesson.”* This holds true in the study of Evasco (2015) that the integration of values is best seen when faculty members relate the actual lesson with real-life situations in order to emphasize its applicability.

Still on table 3, the manner of integrating values which got the lowest mean is item 6 or depending on the responses of the students, hence, done incidentally with a mean of 4.11 described as very often. This is supported with one statement from a pre-service teacher that *“Sometimes, the answers of my pupils can also be a point of discussion especially if they want me to explain more though this do not happen all the time.”*

It can also be gleaned on the table that most of the manner of integrating values were always experienced by the pre-service teachers. This is backed up with the observations of the Supervising Instructor for Bachelor of Elementary Education major in Pre-School, *“Value focus is based on the content focus. The content focus is the general topic of the week. Usually, value focus is integrated in all Blocks of Time or the class program for the kindergarten. However, I observed that interns or the pre-service teachers did the value focus before and after the storytelling time. Common ways done by pre-service teachers in integrating values were asking questions, citing situations, picture analysis based on the story being presented.”*

Problem 4. Are there significant differences in the values integrated in teaching and manner in which values are integrated when grouped according to sex?

Table 4. t-Test Showing the Differences in the Values Integrated in Teaching and Manner in which Values are Integrated when Grouped According to Sex

Values	Mean		Mean difference	t-comp value	t-crit value	t-prob	Decision
	Male	Female					
Values Integrated in Teaching	4.276	4.278	-0.002	-0.029	1.980	0.977 (p>0.05)	Not Significant
Manner in which Values are Integrated	4.286	4.270	0.016	0.205	1.981	0.838 (p>0.05)	Not Significant

The t-comp value of -0.029 which is lower than the t-crit value of 1.980 with an associated probability of 0.977 (p>0.05) resulted to rejecting the null hypothesis. Hence, there existed no significant difference in the values integrated in teaching when the respondents were grouped according to sex. This further implies that whether male or female, the same values are integrated in their lessons. On the other hand, the t-comp value of 0.016 lower than the t-crit value of 1.981 with a probability of 0.838 (p>0.05).

Further, this implies that the manner of integrating values in teaching is the same whether the pre-service teacher is a male or female. Results may be supported with the observations of the supervising instructors that most of the pre-service teachers included in their lesson plans values to be taught to their students and during discussions, they let their students discover for themselves the importance of learning. In addition, as a support to the result, Oktan and Caganaga (2015) in their study found out that gender does not have an impact on classroom management because teaching is not about gender; it is more about teachers' motivation and the power of context.

Problem 5. Are there significant differences of the values integrated in teaching when grouped according to course and subjects taught?

Table 5. ANOVA Summary Table in the Differences of the Values Integrated in Teaching when Grouped According to Course and Subject Taught

Profile	F-comp value	f-crit value	f-prob	Decision
Course	0.036	2.661	0.991(p>0.05)	Not Significant
Subject Taught	0.721	1.999	0.673(p>0.05)	Not Significant

When grouped according to course, it was found that the F computed value of 0.036 that was lower than its F critical value at 2.661 with an associated probability of 0.991 (p>0,05) resulted to the rejection of the null hypothesis. Therefore, there existed no significant differences in the values integration of the pre-service teachers in teaching when grouped according to their course. This means further that regardless of the course whether teaching in the kindergarten, elementary or high school, the same values are integrated in their lessons.

Teachers have a chance to help students develop the attitudes and skills necessary for the journey toward their future. This is true for moral character as well. As in any domain, moral character skills must be practiced in order to be developed. Teachers must be oriented to providing good practice opportunities for students. For example, if students do not get practice in helping others, they are less likely to do it independently when the occasion arises (KENPO, 2010).

On the same table, when the respondents were grouped according to subjects taught, the F computed value of 0.721 which is lower than the F critical value of 1.999 having a 0.673 (p>0.05) probability showed no significant differences. This implies that regardless of the subjects taught, the pre-service teachers still integrated values in their lessons. This is supported with the idea of the so-called vertical integration approach, wherein the value concepts are integrated from the lowest to the highest level of education. Under this scheme, there is what is called total-vertical integration which means that values are integrated in all subjects and in all levels of education (Marte and Marte, 2005). In relation to this, one female pre-service teacher said that, "We can integrate values in all subjects for the students to understand and remember that everything they learn in school is important in their everyday life whatever they are doing and wherever they are."

Problem 6. Are there significant differences of the manner in which values are integrated when grouped according to course and subjects taught?

Table 6. ANOVA Summary Table in the Differences of the Manner in which Values are Integrated when Grouped According to Course and Subject Taught

Profile	F-comp value	F-crit value	F-prob	Decision
Course	0.122	2.661	0.947(p>0.05)	Not Significant
Subject Taught	0.234	1.999	0.984(p>0.05)	Not Significant

When grouped according to course, the F computed value of 0.122 that was lower than its F critical value at 2.661 with an associated probability of 0.947 (p>0.05) resulted to the rejection of the null hypothesis. Therefore, there existed no significant differences in the manner in which values are integrated when grouped according to their course. This means further that the manner of values integration is the

same regardless of their course. Observations of supervising instructors and Teacher Education faculty members proved this result. According to the BEED pre-school supervising instructor, “*Common ways done by pre-service teachers in integrating values were asking questions, citing situations, picture analysis based on the story being presented. Values were integrated as stipulated in their plans.*” For one BEED General Education faculty member he mentioned, “*Others have their valuing through real life situations.*” Moreover, for the BSED supervising instructor, she stated that “*some were noted to include values integration in their lesson plans. They include them in their discussion and collect value-oriented learning experiences from their students.*”

Table 6 further shows that when the pre-service teachers when grouped according to subjects taught, the F computed value of 0.234 was lower than its F critical value at 1.999 with an associated probability of 0.984 ($p > 0.05$) which means that the null hypothesis is rejected. Hence, there existed no significant differences in the manner in which values are integrated when grouped according to subjects taught. This means further that regardless of the subjects taught, the manner of values integration is the same. In relation to this, similarities among the various observed pre-service teachers were found. One pre-service teacher who taught English subject said: “*Most often, integration of values happen when I am teaching Literature. Since the text contains a collection of ideas, beliefs and attitudes that are portrayed by the characters or the setting, which may either be worth emulating or need discarding to the learners.*” For a Filipino pre-service teacher, he mentioned that “*stories being read in class are being analyzed and let students identify the lessons derived.*” A cooperating teacher also mentioned that “*Edukasyon sa Pagpapakatao or ESP is teaching values itself. The pupils are able to take note of the actual things they should do to respect other people and become responsible in their own ways.*”

Problem 7. Is there a significant relationship between the level of values integration and the manner in which values are integrated?

Table 7. Coefficient of Correlation Between the Level of Values Integration and the Manner in which Values are Integrated

r value	r prob	Decision
0.590	0.000 ($p < 0.01$)	Highly Significant

As disclosed in the table, the level of values integration is highly significant with the manner in which values are integrated ($r=0.590$) at 0.01 level. This means that the more values that are integrated in teaching, the manner in which values are integrated also increases. This could be due to the fact that the pre-service teachers include the valuing part in their lesson plans as observed by their supervising instructors. Relative to this, Dr. Evangelista of the Department of Education (2006) pointed out that: *Teacher plans for a values-based lesson by reflecting it in her lesson plan indicating value, the objective/s, strategies and assessment.*

The result of this study is supported with the observations of supervising instructors, other faculty observers and cooperating teachers that the pre-service teachers have lots of activities for their students every time they meet their classes which they equally integrate values. *In this way, they let their students learn instantly life’s values and experiences throughout the execution of their lessons (Supervising Instructor).*

FINDINGS

The salient findings of the study are as follows:

1. The profile of the respondents shows that: on sex, there are more females or 60.98% than males with 39.02%. On course, majority or 53.05% of the Pre-service teachers were Bachelor of Elementary Education and least or 7.325 were Bachelor of Technical Teacher Education students. On subjects taught, Mother Tongue Based Multilingual Education were mostly taught by the pre-service teachers with a percentage of 17.07.

2. The level of values integration in teaching of the pre-service teachers is very high with a mean of 4.28. It is noted also that most of the values that were always integrated in their teaching are: respect for human rights (X=4.60), respect for life (X=4.54) and inculcating discipline (X=4.51)
3. The manner in which values are integrated has a mean of 4.28 which is described as always. It is observed that the manner where values had the highest integration during classroom teaching of the pre-service teachers is during the lesson proper with a mean of 4.51 described as always while the lowest is depending on the responses of the students, hence, incidentally with a mean of 4.11 described as very often.
4. There existed no significant difference in the values integrated in teaching when the respondents were grouped according to sex as shown in the t-comp value of -0.029 lower than the t-crit value of 1.980 with an associated probability of 0.977 ($p>0.05$).
5. No significant differences of the values integrated in teaching were found when the pre-service teachers were grouped according to course and subjects as shown with the F computed value of 0.721 which is lower than the F critical value of 1.999 having a 0.673 ($p>0.05$) probability and the F computed value of 0.036 that was lower than its F critical value at 2.661 with an associated probability of 0.991 ($p>0.05$) respectively.
6. There are no significant differences of the manner in which values are integrated when grouped according to course and subject taught as proven by the F computed value of 0.122 lower than its F critical value at 2.661 with an associated probability of 0.947 ($p>0.05$) and the F computed value of 0.234 was lower than its F critical value at 1.999 with an associated probability of 0.984 ($p>0.05$).
7. The level of values integration is highly significant with the manner in which values are integrated ($r=0.590$) at 0.01 level. This implies that the more values that are integrated in teaching, the manner in which values are integrated becomes better.

CONCLUSIONS

Based on the findings, the following conclusions were drawn:

1. Pre-service teachers always integrate values in teaching. On the many values that are integrated; respect for human rights, respect for life, inculcating discipline and concern for the environment were notable.
2. It is during the lesson proper that values were highly integrated.
3. Regardless of the sex, course or subjects taught by the pre-service teachers, values integration and the manner in which values are integrated in teaching are the same.
4. The manner in which values are integrated do not change even when the pre-service teachers are grouped according to course and subjects taught.
5. The more values that are integrated in teaching, the manner of integrating values also becomes better.

RECOMMENDATIONS

From the findings and conclusions given, the following recommendations are hereby forwarded:

1. The practice of values integration in teaching among pre-service teachers should serve as an example for incoming teacher interns. It may continuously be improved through conduct of values education seminars and orientations.
2. Pre-service teachers are encouraged to explore other means of integrating values in their lessons not only during class time but also outside the four corners of their classroom.
3. The outcome of this study shall be utilized as a basis for conducting enhancement and training programs for future pre-service teachers of the College with values integration and other related topics.
4. A parallel study may be conducted to look into other factors relative to values integration.

SHORT ACKNOWLEDGMENT

This research has been supported by the Abra State Institute of Sciences and Technology administration. The respondents and all important persons related to the author are also acknowledged. Moreover, through Global Researchers Association and Convergence for Excellence (GRACE) Inc, this paper is made into reality for its publication. Thank you all very much!

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LIFE AND CAREER SKILLS AMONG SCHOLARS OF POVERTY ALLEVIATION PROGRAM IN NUEVA VIZCAYA STATE UNIVERSITY – BAMBANG CAMPUS

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ABSTRACT

This study was carried out to determine the life and career skills of the 4P's scholars of the Nueva Vizcaya State University – Bambang Campus. It was guided with the purpose of analyzing the factors which affect their human relations, stress tolerance and decisiveness. This study employed the descriptive method of research and used a structured questionnaire as the main data-gathering tool. Pearson-r was used to determine the significant correlation among the five dimensions of the perceived life and career skills of the respondents. Findings showed that the respondents' life and career skills along flexibility and adaptability, initiative and self-direction, social and cross-cultural skills, productivity and accountability, and leadership and responsibility are very good. Further, there are significant correlations between and among the dimensions of life and career skills of the respondents except for social and cross cultural skills when compared with productivity and adaptability, and initiative and self-direction. These findings urged individual attention and mentoring to students; flexible mindset essential to lifelong learning; adaptability and commitment to personal and social evolution; collaborative learning; cultural sensitivity; and a sense of own power to create change in the world.

INTRODUCTION

Ken Kay, President of the Partnership for 21st Century Skills, stated that 21st century skills set “is the ticket to economic upward mobility in the new economy” (Gewertz, 2007). Our world economy has evolved from an industrial era and is now on the way to creativity era, while at the same time our schools are stagnant in the industrial model. The 21st century skills are key elements in supporting our youth not only in surviving but excelling in the new global environment.

Moreover, the Framework for the 21st Century Learning stated, that schools must move beyond a focus on basic competency in core subjects to promoting understanding of academic content at much higher level by weaving 21st century interdisciplinary themes into core subjects”. 21st century skills bridge the knowledge, skills and dispositions of students from the core academic area to real life applications. Robert Sternberg described the necessary for 21st century skills when he stated, “When we teach only the facts, rather than to go beyond facts, we teach students how to get out of date”.

In line with the attainment of the 21st Century Skills, the government proposed program which is the Pantawid Pamilya Pilipino Program or (4P's). The Department of Social Welfare and Development is the executive department of the Philippine Government responsible for the protection of the social welfare rights of Filipinos and to promote social for the benefit of the children. They help to implement a program that responds to the needs of the people.

Virola (2011), Secretary General of the National Statistical Coordination Board, said in his presentation of the 2009 Official Poverty Statistics that a Filipino needed Php 974 in 2009 to meet his or her

monthly food needs, and Php 1,403 to stay out of poverty. In 2009, a family of five needed Php 4, 869 monthly income to meet food needs, and Php 7, 017 to stay out of poverty. Results of the latest Social Weather Stations (SWS) survey also revealed that one in every five Filipino households, or an estimated 4.3 million families, experienced involuntary hunger in the third quarter of the year 2011

Since 2007, the Pantawid-Pamilyang Pilipino Program (4Ps) of the Philippines is the conditional cash transfer program implemented by the Department of Social Welfare and Development (DSWD), along with cooperative partner institutions such as the Department of Education, Department of Health, Department of the Interior and Local Government, and various other government institutions. The 4Ps was patterned after the conditional cash transfer programs in Latin American and African countries which have been proven successful as a poverty reduction and social development measure (DSWD, 2011).

These concepts have helped the researchers to venture how the 4 P's scholars of the Nueva Vizcaya State University cope-up with their day-to-day struggles of their educative journey by assessing some of their life and career skills which are most vital in their overall scholastic performance.

STATEMENT OF THE PROBLEM

This study aimed to determine the life and career skills of the 4P's scholars of the Nueva Vizcaya State University – Bambang Campus. Specifically, this study sought to answer the following problems:

1. What is the perception of the 4Ps scholar of NVSU-Bambang Campus of their life and career skills along flexibility and adaptability, initiative and self-direction, social and cross-cultural skills, productivity and accountability, and leadership and responsibility?
2. Is there a significant interrelationship between and among the dimensions of the perceived life and career skills of the respondents?
3. Based from the findings of the study, what intervention could be developed to enhance the life and career skills of the respondents?

REVIEW OF RELATED LITERATURE

The 4Ps is targeted at chronic poor households with children aged 0-14 years old who are located in poor areas. The cash grants range from Php500 to Php1,400 per household per month, depending on the number of eligible children. At the core of a CCT program is a social contract where a state provides financial resources to a family in exchange for that family's fulfilment of certain tasks such as ensuring that its children's attendance in school, regular visits to community health centers, participation in government-sponsored feeding programs and attendance in more specific trainings, to name a few (Somera, 2010), and according to Fernandez & Olfindo (2011), today, the program is seen more broadly as "a vehicle for enhancing coordination within the government in assisting the poor and for increasing the effectiveness of social protection programs."

The SGP-PA program for the last school year included some 4,000 beneficiaries nationwide who were benefit from the 500-million financial scholarship grant. Qualified beneficiaries shall be enrolled in leading state universities and colleges (SUCs) to take up priority and other degree programs that the CHED may deem critical to national development. These courses include Information Technology, Multi Media, Programming, Computer Science, etc. The implementation of the SGP-PA is part of the long-term instrument and commitment to break the vicious poverty cycle affecting our populace. Inter-agency efforts are being harnessed to ensure the sustainability of the Pantawid Pamilya and the SGP-PA demonstrates this convergence," Secretary Corazon Soliman said. The national SGP-PA committee tasked to oversee its implementation comprise of the Commission on Higher Education as the head agency and the

members include the Department of Social Welfare and Development (DSWD) and the Department of Labor and Employment (DOLE).

For the student-beneficiaries to be retained in the program, they must be able to comply with set conditions and responsibilities. The students are required to carry a full load every semester as prescribed in the curriculum and graduate within the required period of the program. They must also maintain satisfactory academic performance in accordance with the policies and standards of the state universities and colleges where they are enrolled (SUCs). After graduation, a return of service in the Philippines for two years is also required by the program. And lastly, grantees must adhere to the terms and conditions as stipulated in the contract.

RESEARCH METHODOLOGY

This study employed the descriptive method of research and used a structured questionnaire as the main data-gathering tool. This method was adopted since the study intends to describe certain phenomena, and it involved fact finding or information gathering with analytical interpretation. The descriptive method of research was utilized because according to Kerlinger and Lee (2000), it is a research method that involves the collection of data in order to test the hypothesis and to answer questions on the status of the respondents under study.

This research endeavor was conducted at the Nueva Vizcaya State University – Bambang Campus for school year 2014-2015 specifically with the 4P’s Scholars of the Nueva Vizcaya State University – Bambang Campus as respondents of the study.

The main instrument used to obtain the data and information needed in the study was the questionnaire. The questionnaire was prepared in such a way that the researchers can elicit accurate information about their profile and their perceptions regarding life and career skills.

To gather data, this study used the *Life and Career Skills Questionnaires* which consists of five dimensions that gave description on the perceived life and career skills of the respondents. The items in each dimension were based from the indicators provided by the Partnership of 21st Century Skills (P21). The checklist was developed and validated by Vadil (2013) with 0.78 as reliability coefficient. Said research instrument was used by Vadil (2013) in his research study entitled “21st Century Skills of K-12 Teachers in Nueva Vizcaya.”

Five options were offered in all of the dimensions to be used for a response, which included the following:

Scale	Mean Range	Qualitative Description	Interpretation
5	4.20 – 5.00	Always	Excellent
4	3.40 – 4.19	Often	Very Good
3	2.60 – 3.39	Sometimes	Good
2	1.80 – 2.59	Seldom	Poor
1	1.00 – 1.79	Never	Very Poor

The data gathered through the questionnaire were analyzed using the following: mean which was computed to determine the perceived level of life and career skills of the respondents and *Pearson-r* which was used to determine degree of correlation among the five dimensions of the perceived life and career skills of the respondents. The 0.05 level of significance was used to test the hypotheses of this research investigation.

FINDINGS

After computing for the necessary statistical tools, in order to come-up with the most appropriate interpretations of data, the following tables give answer to the enumerated problems of the study.

Perception of the 4Ps scholar of NVSU-Bambang Campus of their life and career skills along flexibility and adaptability, initiative and self-direction, social and cross-cultural skills, productivity and accountability, and leadership and responsibility

Along with flexibility and adaptability, it can be gleaned in table 1 that the respondents under study have ‘very good’ flexibility and adaptability skills as shown by 3.64 computed grand mean. The above results could be interpreted to mean that the 4Ps scholar often adapt to varied roles, jobs responsibilities, schedules and context; always incorporate feedback effectively; always understand, negotiate and balance diverse views and beliefs to reach workable solutions, particularly in multi-cultural environments. The same group of respondents perceived that they sometimes deal positively with praise, setbacks and criticism; and sometimes work effectively in a climate of ambiguity and changing priorities.

In terms of initiative and self-direction, the respondents have a ‘very good’ initiative and self-direction skills as shown by 3.70 computed grand mean. The above findings could be interpreted to mean that the 4Ps scholars often utilize time and manage workload efficiently; have commitment to learning as a lifelong process; and always reflect critically on past experiences in order to inform future progress.

Table 1: Respondents’ Perception of their Life and Career Skills

Sub-Components of Life and Career Skills	Mean	Qualitative Description
Flexibility and Adaptability	3.64	Very Good
Initiative and Self-Direction	3.70	Very Good
Social and Cross Cultural Skills	3.99	Very Good
Productivity and Accountability	3.84	Very Good
Leadership and Responsibility	3.63	Very Good
Grand Mean	3.76	Very Good

For their social and cross cultural skills, the respondents manifest a “very good” social and cross cultural skills as dimension of their life and career skills as shown by 3.99 grand mean score. It could be interpreted that the 4Ps scholar under investigation often know when it is appropriate to listen and when to speak; always conduct themselves in a respectable, professional manner; and respond open-mindedly to different ideas and values.

It is also reflected in table 1 that the 4Ps scholars under investigation have a ‘very good’ productivity and accountability skills as shown by 3.84 computed grand mean. Findings in table 1 could be interpreted to mean that the respondents often present themselves professionally and with proper etiquette; respect and appreciate team diversity; often collaborate and cooperate effectively with teams; often present themselves professionally, and always reliable, punctual, and participate actively. Moreover, the same group of respondents sometimes set and meets goals, even in the face of obstacles and competing pressure; often prioritize, plan and manage work to achieve the intended result; and often work positively and ethically.

Lastly, it can also be gleaned in table 1 that the respondents have a ‘very good’ leadership and responsibility as evidenced by 3.63 computed grand mean. These findings could be interpreted to mean that that the respondents often demonstrate integrity and ethical behavior in using influence and power; often inspire others to reach their very best via example and selflessness; and often use interpersonal and problem-solving skills to influence and guide others toward a goal.

Analysis of relationship between the dimensions of the perceived life and career skills of the respondents

It can be gleaned in table 2 that there is a significant correlation between the respondents’ perceived flexibility and adaptability with their initiative and self-direction as shown by the computed r-value of 0.203 which is higher than the critical r-value of 0.198 for 97 degrees of freedom at a 0.05 level of significance. The said correlation could be attributed to the fact that an individual can manifest initiative and self-direction in life if he is adaptable and flexible in any undertakings that come along his or her life.

Table 2: Correlation Coefficient between the Perceived Flexibility and Adaptability of the Respondents with the Rest of Dimensions of their Life and Career Skills

Dimensions	Computed r-value	Remarks
Initiative and Self Direction	0.203	Significant
Social and Cross Cultural Skills	0.572	Very Significant
Productivity and Accountability	0.349	Significant
Leadership and Responsibility	0.625	Very Significant

Alpha level: 0.05 df: 97 Critical r-value: 0.198

The same table shows that there is a very significant correlation between the respondent's perceived flexibility and adaptability with their social and cross cultural skills as shown by the computed r-value of 0.572 which is very much higher compared with the critical r-value of 0.198 for 97 degrees of freedom at a 0.05 level of significance. The above findings could be interpreted to mean that in order to display a better social skills and understanding of diversity of culture, an individual should have a very good level of flexibility and adaptability.

When productivity and accountability as dimension of the respondents' life and career skills is compared with their perceived flexibility and adaptability, a significant correlation was noted as shown by the computed r-value of 0.349 which is higher than the critical r-value of 0.198 for 97 degrees of freedom at a 0.05 level of significance.

Another dimension of life and career skills is leadership and responsibility which yielded a very significant correlation with the respondents' flexibility and adaptability. The computed r-value of 0.625 is very much higher than the critical r-value of 0.198 for 97 degrees of freedom at a 0.05 level of significance. Hence, a very significant and positive correlation was established between these variables. The above results could be interpreted to mean that to be a great leader and responsible individual, one must flexible in all his action and could easily adapt to different situations.

Table 3: Correlation Coefficient between the Perceived Initiative and Self-Direction of the Respondents with the Rest of Dimensions of their Life and Career Skills

Dimensions	Computed r-value	Remarks
Social and Cross Cultural Skills	0.162	Not Significant
Productivity and Accountability	0.802	Very Significant
Leadership and Responsibility	0.738	Very Significant

Alpha level: 0.05 df: 97 Critical r-value: 0.198

It can be seen in table 3 that there is no significant correlation between the perceived initiative and self-direction of the respondents with their perceived social and cross cultural skills because the computed r-value of 0.162 is lower than the critical r-value of 0.198 for 97 degrees of freedom at a 0.05 level of significance. However, when the perceived initiative and self-direction of the respondents is compared with their productivity and accountability, a very significant correlation was established because the computed r-value of 0.802 is very much higher than the critical r-value of 0.198 for 97 degrees of freedom at a 0.05 level of significance.

The same table reflects that when the perceived initiative and self-direction of the respondents is compared with their leadership and responsibility as dimension of life and career skills, a very significant correlation was established because the computed r-value of 0.738 is very much higher than the critical r-value of 0.198 for 97 degrees of freedom at 0.05 level of significance. The above results concur with the concept that responsible leader always display initiative in whatever they do, and always have sense of directions in their daily life, hence, they are always productive and accountable for their actions.

Table 4: Correlation Coefficient between the Perceived Social and Cross Cultural Skills of the Respondents with the Rest of Dimensions of Their Life and Career Skills

Dimensions	Computed r-value	Remarks
Productivity and Accountability	0.163	Not Significant
Leadership and Responsibility	0.238	Significant

Alpha level: 0.05 df: 97 Critical r-value: 0.198

It can be gleaned in table 4 that there is no significant correlation between the perceived social and cross cultural skills of the respondents with their productivity and accountability as dimension of their life and career skills as shown by the computed r-value of 0.163 which is lower than the critical r-value of 0.198 for 97 degrees of freedom at 0.05 level of significance. However, when the perceived social and cross cultural skills of the respondents is compared with leadership and responsibility, a significant correlation was noted because the computed r-value of 0.238 is higher than the critical r-value of 0.198 for 97 degrees of freedom at 0.05 level of significance.

The above results concur with the concept that, responsible leaders who adhere and appreciate cultural diversity and display higher level of social skills are more effective and charismatic compared with those who possess a very low level of cultural literacy.

Table 5: Correlation Coefficient between the Perceived Productivity and Accountability and Leadership and Responsibility of the Respondents as Dimensions of Their Life and Career Skills

Compared Variables	Computed r-value	Remarks
Productivity and Accountability Leadership and Responsibility	0.681	Very Significant

Alpha level: 0.05 df: 97 Critical r-value: 0.198

Data in table 5 show that there is a very significant correlation between the respondents’ perceived productivity and accountability and their leadership and accountability as dimensions of their life and career skills because the computed r-value of 0.681 is very much higher than the critical r-value of 0.198 for 97 degrees of freedom at a 0.05 level of significance.

The above findings concur with the ideas and concepts of early researchers that responsible leaders who took accountability of their actions and decisions are more productive, sets examples to others, model behavior worthy of emulation by the members, and passionate enough to meet the goals of his group or team.

Intervention developed to enhance the life and career skills of the respondents

These significant findings of this research undertaking become the bases of developing a training design entitled “**Life and Career Skills Enhancement Seminar-Workshop**” that will enhance the flexibility and adaptability, initiative and self-direction, social and cross-cultural skills, productivity and accountability, and leadership and responsibility of 4Ps scholars of NVSU-Bambang Campus in order for them to overcome the challenges of college life and become better player of the 21st century workplace.

Life and Career Skills Enhancement Seminar-Workshop (Training Design)

Title: “Complementing College Life Learning for a Better Career and Productive Life in the 21st Century and Beyond”

Background. This seminar workshop is a research-based training program designed to enhance primarily the life and career skills of 4Ps scholars enrolled at the Nueva Vizcaya State University-Bambang Campus. It will focus on the discussion of flexibility and adaptability, initiative and self-direction, social and cross-cultural skills, productivity and accountability, leadership and responsibility and dealing with setbacks and criticisms.

Rationale. The broad idea of 21st-century education/learning revolves around the notion that schooling as we have known it for the last 150 years is a 19th century invention that must change to keep pace with the demands of the new economy. Schools, skills and learning that were designed to prepare students for work and life in the industrial economy need to be rethought and re-engineered to serve the

needs of people in this century – dictated by a changing world that has been transformed by technological advances, the “Knowledge Revolution”, a global economy and environmental changes.

Target Audience. 4Ps Scholars of NVSU-Bambang Campus

Duration. Three (3) days or Six (6) Wednesday afternoon

Venue. NVSU Training Center, Bambang, Nueva Vizcaya

Objectives. Generally, this conference aims to enhance the life and career skills of 4Ps scholars to further empower them to meet the challenges posted by the rigors of college life, and eventually towards the attainment of the goals and objectives of their chosen career and field of specialization. Specifically, the conference aims to:

- Strengthen the respondents’ identified life and career skills needing improvement which are necessary for the effective and efficient realization of their chosen career.
- Equip them with the salient skills to become more flexible and to adapt to changes brought about by modern technology.
- Enhance their initiative and manifestation of self-direction for them to cope with the challenges of 21st century education
- Guide them in obtaining clear and positive insights about the importance social skills, appreciating diversity, and of dealing positively with praise, setbacks, and criticisms.
- Reorient the participants on how to become a responsible and productive leader in their own way.

Training Course Contents. To realize the above-stated objectives, the conference will focus on the discussion of the following topics:

- How to Become Flexible in a Changing Environment
- Tips on Adaptation to College Life
- How to Enhance Initiative to Attain Goals in Life
- Essence of Diversity in the University
- The 5S for Productivity
- The Virtue of Being Responsible and Right Attitude
- How to Deal Positively with Praise
- How to Deal Positively with Setbacks and Criticism

Methodology

- Selection of Participants and Training Implementation. For better result of this seminar-workshop, all 4Ps scholars are required to attend the seminar-workshop. However, in order to avoid paralysis of school operations, this will be done during Wednesday afternoon.
- Learning Delivery and Methodologies. The speakers and lecturers of this conference will utilize open-minded discussion, lecturette, reflection sessions, research results presentation, group dynamics, and concept paper development. An open forum shall be made every after a topic discussion to clarify salient issues about the topic. These learning approaches ensure active and maximum involvement of the participants and consequently lead to better assimilation and absorption of knowledge and cultivation of skills.
- Team Building. The participants will be grouped into host teams to manage the daily seminar-workshop proceedings. The after session hours will be utilized for bonding and socialization activities to strengthen team work and harmonious esprit de corps among participants
- Evaluation. To assess the attainment of the goals of the seminar-workshop, an evaluation before and after the conduct of the activity will be undertaken. The participants are expected to evaluate objectively the competence of resource speakers and lecturers, time schedule, preparation of handouts, and other related factors.

- Awards. Only participants who shall have attended all sessions shall be awarded with a Certificate of Completion at the end of the conference. Resource speakers and lecturers shall likewise be accorded with a Certificate of Appreciation.

Budget Proposal Matrix

Source of Fund	Amount
Registration Fee (P20.00/participant)	2,000.00
Student Development Fund	25,000.00
Total	27,000.00

Expenses	Particulars	Amount
Snack	6 snacks @ P25/pax	15,000.00
Honoraria & Token	8 lecturers @ P500/pax	4,000.00
Contingency Fund	Handouts/Miscellaneous Expenses	8,000.00
	Grand Total	27,000.00

Seminar-Workshop Implementation Chart

	ACTIVITIES	Day												
		1	2	3	4	5	6	7	8	9	10	11	12	
1	Presenting the Seminar-Workshop Design to SC-SSC & Seek Approval for the conduct of it.	■	■											
2	Organizing working committee for the conduct of the			■										
3	Inviting speakers and lecturers				■	■	■							
4	Preparing/Producing Needed Materials					■	■	■						
5	Seminar/Workshop venue preparation							■						
6	Seminar-Workshop Proper								■	■	■	■		
7	Post –Conference of Steering and Working Committees												■	
8	Terminal Report Preparation													■

CONCLUSIONS

Based from the salient findings of this study, the following conclusions were drawn

1. The respondents' life and career skills along flexibility and adaptability, initiative and self-direction, social and cross-cultural skills, productivity and accountability, and leadership and responsibility are very good.
2. There are significant correlations between and among the dimensions of life and career skills of the respondents except for social and cross cultural skills when compared with productivity and adaptability, and initiative and self-direction.
3. A training design to enhance the life and career skills of the respondents was designed/developed by the researchers.

RECOMMENDATIONS

Based from the foregoing findings and conclusions, the following recommendations were offered:

1. Even as 21st century classrooms evolve technologically, the physical student-teacher relationship will remain the cornerstone of education. The individual attention and mentoring that a good teacher can provide remains an invaluable resource that is without a purely technological equal or potential replacement to enhance students' self-direction and initiative.
2. The university should address specific skills needed for the 21st century by emphasizing the flexible mindset essential to lifelong learning, focusing on individual student needs, and incorporating the use of cutting-edge technology.

3. From the perspective of 21st century learning, the skills considered most essential that needs enhancement among 4Ps scholars in the 21st century include: collaboration; systems thinking; empathy and communication; technological skills; civic engagement; and intrapersonal intelligence.

4. Adaptability demands commitment to personal and social evolution, and 21st century learning therefore incorporates methods which foster flexibility and avoid rigidity. This kind of commitment to lifelong learning is recognized as being essential among 4Ps scholars for them to have successful adaptation to the ever-accelerating changes they face in a global society.

5. The importance of social skills has been acknowledged in 21st century education theory. Collaborative learning projects lead to improved understanding of material, and they also encourage leadership and cooperation, two skills that are of utmost importance for 4Ps scholars to become successful in their chosen career.

6. Due to the effects of globalization, students face multi-cultural groups. Hence, the conduct of cultural sensitivity training courses can help them become more competent in dealing with others from diverse backgrounds.

7. Teachers should introduce students to their world, and moreover inculcate in them a sense of their own power to create change in the world. Teachers should not just transmit knowledge to students; they should instil in them a sense of their place in the larger world, and urge them to be active participants in it.

ACKNOWLEDGMENT

The researchers are indebted wholeheartedly and earnestly to the administration of the Nueva Vizcaya State University led by the university president, Dr. Andres Z. Taguiam; vice presidents, Dr. Wilfredo A. Dumale, Jr. (research, extension and training) Dr. Jocelyn P. Cabrera (academic affairs), and Dr. Araceli V. Domagas (administration and finance). Equal gratefulness is expressed for the inspiration given by Dr. Carlo F. Vadil, campus administrator of NVSU-Bambang campus, Dr. Elma P. Apostol, dean of the College of Teacher Education, and to all who directly and indirectly handed their great contributions for the success of this research undertaking.

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SOCIOCULTURAL PARADIGMS IN THE WORKS OF 21ST CENTURY ILOKANO WRITERS OF SOUTHERN NUEVA VIZCAYA

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ABSTRACT

This qualitative study which employed the Critical Theory Design aimed to name 21st century Ilokano writers coming from Southern Nueva Vizcaya, divulge their literary works which were subjected to critical discourse analysis (CDA) and bring out sociocultural devices whose implications are relevant to education, economy and environment. The literary works which were subjected to analysis were "Dagiti Pasugnod ni Angelo" by Sherma E. Benasa, a native of Bambang, Nueva Vizcaya, and "Ta Ay-ayatenka La Ngamin" by Roy V. Aragon of Dupax del Norte. After analysis, sociocultural devices were ascertained as modern courtship (gender issues in courtship and qualities of love interest), sex education, teenage pregnancy, abortion and respect for the dead. The extracted themes may serve as conduit of social and cultural ideals that hand in meaning to education, economy and environment. This study hence prompted efforts for appreciation of Ilokano literature used as a local icon in teaching language subjects, for an attempt to preserve and enrich the literature of the place by composing poems, short stories and novels in the Iloko language, and for conduct of other studies using the Iloko lit.

Keywords: 21st Century Ilokano writers, Socio-cultural paradigms, Southern Nueva Vizcaya

INTRODUCTION

Philippine literature is a mixture of various vibrant colors radiated by the diverse cultures of its people. One among these rays that sprouted a variety of genres that make the local literature rich is the Ilokano literature. This regional literature has continued to proliferate despite the challenges that beset it. The Ilokano literature specifically generates as many Iloko writers who have honed their respective crafts thereby promoting the ingenuity of the Ilocanos as one of the major folkloric groups of the country.

Hau (2000) associated her contention to Ilokano literature when she said that Philippine literature is "fundamentally shaped by series of paradoxes". According to her, the likes of Ilokano literature does not take place in the everyday life of Filipinos because only few of them can afford reading it despite its nature as record of everyday life due to the experiences, hopes, sentiments, and aspirations of the residents of a given community which are embodied in it.

Ilokano literature, next to the Tagalog, is believed by scholars to be the richest and most highly developed in the Philippines. Ilokano literature can be traced back at least to the early 17th century. There are a large number of religious documents, poems, riddles (burburcha), proverbs, epic stories, folksongs, and other literary works that belong to this tradition. Today, there is a sizable body of Ilokano literature, including newspapers and periodicals like the Bannawag (Saculles, 2018).

This study focused on the works of Ilokano writers coming from the southern part of the province of Nueva Vizcaya, where the researchers find comfort in their home and workplace. These writers emerged through the dawn of the 21st century as a new breed of young and vibrant Ilokano writers. The works of

the specified writers were analyzed to bring out devices that characterize the present society thereby serving as reflection of the Ilokano culture and tradition which are worth keeping and proliferating.

OBJECTIVES OF THE STUDY

The study aimed at bringing about desirable themes of selected short stories of Ilokano writers of the southern Nueva Vizcaya that divulge the culture and society of Ilokano in the place.

Specifically it aimed to:

1. name 21st century Ilokano writers coming from Southern Nueva Vizcaya and divulge their bio-notes;
2. identify literary works specifically short stories written by these authors that could be subjected to critical discursal analysis (CDA);
3. carry out CDA of these literary pieces and determine sociocultural constructs that could be derived from the selected short stories written by the named Ilokano writers; and
4. discuss the implications of these sociocultural constructs to education, economy and environment.

REVIEW OF LITERATURE

This study revolves around the critical theory that designates a philosophy and a research methodology that focuses on the interrelated issues of technology, politics and social change. This critical methodology operates comparatively, by "measuring" consensual truths against actual social conditions (ACM Ubiquity, 2018). Further, Mbaleka (2018) defines critical theory research as a qualitative research design that seeks to study and understand society but rather to critique and change society.

In particular, this study used the Critical Discourse Analysis (CDA) in dealing with the selected short stories of Ilokano writers from southern Nueva Vizcaya. CDA, according to Davoodi (2018), dealt with the idea that language is more than a simple means of communication and tried to analyze language as a social behavior to see how social/political power can be conveyed through language. Utilizing CDA as an approach for literary criticism can help researchers to look at literary texts from a new angle which provides opportunities for understanding the hidden layers of the texts regarding social and political aspects. Consequently, this study aimed at providing a practical framework for choosing appropriate literary texts for analyzing from a CDA perspective along selected sociocultural devices set for this study.

As to the fields that these devices were discussed for implication or meaning, the Sustainable Development Goals (SDGs) (or Global Goals for Sustainable Development) set by the United Nations General Assembly, are put into consideration. They are a collection of 17 global goals set by the assembly as part of Resolution 70/1: "Transforming our World: the 2030 Agenda for Sustainable Development."

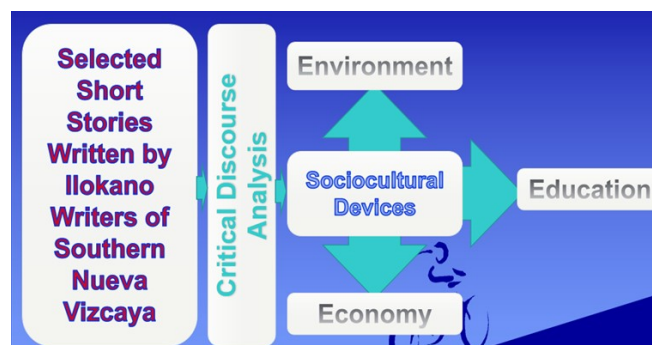


Figure 1. Conceptual paradigm of the study

The SDGs actually are the enhanced 10 Millennium Development Goals (MDGs) set as well by same international entity, but were deemed insufficient because it primarily focused on economic development. With the launching of SDGs, a three-pronged thrust was established to ensure success of the SDGs along development in **economy, education and environment**.

It is for this reason that, the framework in figure 1 was considered in this study.

METHODOLOGY

This qualitative research employed the Critical Theory Design characterized by a critical theory that designates a philosophy and a research methodology that focuses on the interrelated issues of technology, politics and social change. This critical methodology operates comparatively, by "measuring" consensual truths against actual social conditions (ACM Ubiquity, 2018). Further, Mbaleka (2018) defines critical theory research as a qualitative research design that seeks to study and understand society but rather to critique and change society.

Further, this study employed the Critical Discourse Analysis (CDA) which, according to Davoodi (2018), deals with the idea that language is more than a simple means of communication and tries to analyze language as a social behavior to see how social/political power can be conveyed through language.

This study set the lenses on Ilokano writers of southern Nueva Vizcaya where the workplace of the researchers, the Nueva Vizcaya State University, is located. With the purpose of bringing out devices which may render essence to the learners to emulate the ideals of Ilokano writers and become a part of the pool of those who preserve the Ilokano literature, likewise, to bring about desirable themes of selected short stories of Ilokano writers of the southern Nueva Vizcaya that unveil the culture and society of the place.

FINDINGS

After employing qualitative research, the following answers to the research questions were derived. The selected short stories were subjected to Critical Discourse Analysis to bring about themes for critiquing as to their social and cultural implications.

21st century Ilokano writers coming from Southern Nueva Vizcaya

Sherma Espino Benosa

A native of Bambang, Nueva Vizcaya, Sherma E. Benosa is a Filipino linguist, author, editor, and translator (English, Filipino, Ilokano). Born on March 25, 1978 to Manuel Domingo Benosa and former Sherly Manzano Espino, Sherma is the eldest and the only female among four siblings. She attended Bambang North Central School (1986–1991) for her elementary education; Nueva Vizcaya State Polytechnic College, now NVSU, (1991–1995) for her secondary education; and University of the Philippines-Diliman for her baccalaureate degree (BA Linguistics, 1995–1999) and master's degree (MA Language Education, 2004-2007)

Roy Vadil Aragon

Roy V. Aragon (born October 31, 1968) is a Filipino writer writing in the Iloko and Filipino languages. He is a native of Mabasa, Dupax del Norte, Nueva Vizcaya. He is an award-winning fictionist and poet, and also works as a translator. Among his awards and prizes are two third-place prizes and one second-place prize in the Don Carlos Palanca Memorial Awards for Literature's short story contest in the Iloko and Filipino divisions, received in 1999, 2001, and 2014 respectively. He has also won numerous prizes in Ilokano literary contests, such as the Gov. Roque Ablan Awards for Iloko Literature (GRAAFIL).

Literary works specifically short stories written by the selected Ilokano authors

The selected short stories which were subjected to critical discourse analysis were “Dagiti Pasugnod ni Angelo” by Sherma E. Benasa and “Ta Ay-ayatenka La Ngamin” by Roy V. Aragon. Both masterpieces were the sources of sociocultural paradigms covered in this study whose implications were discussed in the succeeding section. The following unwraps the selected stories in capsule forms.

“*Dagiti Pasugnod ni Angelo*” by Sherma E. Benosa. The story was narrated by Angelo who is the soul of an unborn child. He was aborted because he was the result of a one-sided relationship and eventually of early pregnancy. His father’s fear of being departed from his well-to-do parents when they would have known of his forbidden love affair, hindered him to withstand the pregnancy of Angelo’s mother. He then abandoned the mother which in turn let her decide to abort Angelo. In the entire prose, Angelo’s language spoke of his jealousy, sorrow and hatred as he saw her mother cared so much for his stepbrother Ryan. He could have cared for Ryan equally had he been born but the feelings turned into wrath as he saw her mother loved Ryan so much, the kind of love he never sensed. The story ended with the longing of Angelo for inclusion in the prayers of his family that he may now succumb into eternal repose.

“*Ta Ay-ayatenka La Ngamin*” by Roy V. Aragon. The story was recounted by a third person as he observed how a young Joyce in her college days struggled to lure the heart of Roland who turned a woman-hater because of a thwarted love affair in the past. Instead of paying attention to the manifestations of Joyce, Roland showed diligence on his studies and focused on his being the literary editor of the school organ, but Joyce could not just resist her emotions toward Roland who eluded her every time the young lady made some moves to show her admiration and love. Joyce continued despite the disheartenment of friend Cielo. The story ended with a hope for a sprouting love affair after Roland expressed that she had to bear with time and distance as he was still in the process of recovering from pains of his past relationship. He said that there is a proper time and chance for them to get into a mutual relationship only if she could wait. The young lady’s persistence paid off at least.

Critical Discoursal Analysis (CDA) of selected Ilokano literary pieces and their sociocultural devices

After analysis of the short stories, sociocultural devices were extracted for discussion. The devices are ascertained as modern courtship (gender issues in courtship and qualities of love interest), sex education, teenage pregnancy, abortion and respect for the dead. Table I displays the summary of the devices.

Table 1. Sociocultural devices derived from the selected short stories

Devices	Literary piece	Excerpt illustrating device	Translation
Modern Courtship			
• Gender Issues in Courtship	“ <i>Ta Ay-ayatenka La Ngamin</i> ” by Roy V. Aragon	“ <i>No apay ket ngamin nga alasentayo no ti babai ti mangipaduyakyak iti ayatna iti tipona a lalaki,</i> ” kinuna ni Joyce	“Why do we see it bad if a lady expresses her love to a man?” said Joyce
• Qualities of Love Interest	“ <i>Ta Ay-ayatenka La Ngamin</i> ” by Roy V. Aragon	“ <i>Awan kaniak ti kinaraki wenno kinaguapo. Ti babai koma ket saan nga agdepende wenno paadipen iti kinaguapo wenno kinamacho ti lalaki.</i> ”	“I don’t care about the looks. A lady should not be enslaved by good looks or masculinity.” Joyce responded.
Sex Education	“ <i>Dagiti Pasugnod ni Angelo</i> ” by Sherma E. Benosa	“ <i>Tinilmon kadi ni Anti Mariel diay bebina, ha, Mommy?</i> ”	“Did aunt Mariel swallow the baby mom?” Ryan asked.
Teenage Pregnancy	“ <i>Dagiti Pasugnod ni Angelo</i> ” by Sherma E. Benosa	“ <i>Kas kadagiti dadduma nga agayan-ayat, inturayan ida ti rugsoda. Ken ti kinaliwayda. Nadarangda iti sulisog ti lasag. Ania pay, nainawak.</i> ”	Just like other lovers, they were tempted with the desires of their flesh. Hence, I was conceived.
Abortion	“ <i>Dagiti Pasugnod ni Angelo</i> ” by Sherma E. Benosa	“ <i>Ngem idi dummanon ti mainum iti bassit-usit a pakabuklak, napaikkisak gapu iti saem a kasla mangpigpigis kaniak. Nagikkissak. Nagsangitak a nangawag kenni Mommy tapno isalakannak.</i> ”	I immediately took part as I thought it will quench my thirst and ease my hunger...but it was a poison that slowly and mercilessly killed me.
Respect for the Dead	“ <i>Dagiti Pasugnod ni Angelo</i> ” by Sherma E. Benosa	“ <i>Kangrunaanna, agbalinak koma met a paset ti karagragna. Ti kararagda a sangapamilia. Tapno maukarkanak metten manipud iti pannakaibaludko iti tawid-a-basol.</i> ”	I wish I could be a part of her prayers that I may lay in eternal rest, that I may cease roaming around in the world of the living.”

Modern Courtship. The short story “*Ta Ay-ayatenka La Ngamin*” written by Roy V. Aragon clearly conveys the modern style of courtship that deviates from the traditional Filipino courtship.

Gender Issues in Courtship. The story started with the dialogue of Joyce expressing her love to Roland. It was unusual that she was courting Roland. It stated:

“Tell me Roland. Tell me if my love is forbidden,” Joyce baffled with teary eyes stared at Roland who stood against her. “Please tell me if I have sinned because of this love.”

Modern Filipina ladies are not only decisive on their choices. Those who do not really want their suitors would not hesitate on letting them know of this fact (Filipino Courtship: Traditional vs. Modern, 2011). They likewise are expressive of their feelings to the extent that they let the man know if they have “crush” on them. Courtship has evolved into the lady wooing the man in situations the latter could not contain enough confidence to court, and what is distasteful is the lady courts the man even if the feeling is not mutual.

In the story, Joyce initiated moves to attract Roland. The thoughts of Joyce that courting may not only be a man-thing are shown in the lines:

“Why do we see it bad if a lady expresses her love to a man?” said Joyce to herself. “Why is courting exclusively a man-thing if a lady feels the same way a man feels?”

Gone were the days of “paninilbihan” and “haranas”. The rituals of “panliligaw”, “pamamanhikan” or “paghingi ng kamay” have become extinct. Nowadays, it is enough that a man shows up in a lady's house and mingles with the woman's family. He is no longer expected to chop wood or fetch water but at least show he is deserving enough of her love. Further, digital courtship emerged with the onset of gadgets and applications. Presence became dispensable in courtship which is otherwise during the past. Courting under Filipino tradition gives very big importance on the value of respecting the woman and her family and strictly adhering with proper rules set by society for pursuing a lady (Filipino Courtship: Traditional vs. Modern, 2011).

Qualities of Love Interest. The prose likewise recounts preferences of love interest. This understandably manifested in the lines:

“Joyce, why do you get crazy over Roland when you can have Arnel or Richard who are even more masculine and handsome” Cielo said. “You just don’t understand me Chie. I don’t care about the looks. A lady should not be enslaved by good looks or masculinity.” Joyce responded.

This standpoint of Joyce assumes universality among modern lovers that one of the foremost consideration is physical beauty which overshadows the true essence of beauty that it is not what is seen in a person but felt.

There are two life lessons that we can acquire from the classic story “*Beauty and the Beast*”. Sometimes the right choice isn't always the easiest (Life Lessons From "Beauty And The Beast", 2018). Also, true beauty comes from within; it's about being kind to others and not only thinking about yourself (Berman, 2018).

Sex Education. The short story “*Dagiti Pasugnod ni Angelo*” written by Benasa is a sort of revisiting the issue on what age (educational level) should a learner be taught of reproductive health (RH) to open their minds to the realities of sex and sexuality as well as reproductive processes.

The inquisitive mind of young Ryan in the story brought out the following questions:

“Mommy, how did aunt Mariel get pregnant? Asked Ryan. He went back to mommy as they entered to the house. Did aunt Mariel swallow the baby?” Ryan asked further as he grabs her mom’s floral skirt as she ignored him.”

The Philippine education system has been beefed up by the integration of RH education in the K-12 program under the Department of Education (Mateo, 2016). It is further reported that students as young as seven years old – or those in Grade 1 – will now have “age-appropriate, developmental and culture-sensitive” sexuality education to ensure that they are protected from sexual exploitation.

Teenage Pregnancy. One important issue needing attention in these period of internet and millennialism is teenage pregnancy which could be defined as an unintended pregnancy during adolescence. It is illustrated in the short story “Dagiti Pasugnod ni Angelo” by Benasa particularly in the lines:

“In my mother nightmares, I see her dark past. She was known to be a young, beautiful and intelligent lady in her school in Manila but she yielded into temptations of my handsome father who was a son of a rich businessman.”

Without bearing in mind the consequences, the young people engage in premarital sex because of the pleasure alongside. Aside from the physical attraction and desire, there could be other reasons like peer pressure. During adolescence, teenagers often feel pressure to make friends and fit in with their peers (Jolley, 2018). Some other reasons are absent parents because they may be working as overseas foreign workers (OFW), lack of knowledge, sexual abuse or rape and teenage drinking which is common among students in secondary or tertiary schools.

The story also added:

“Just like other lovers, they were tempted with the desires of their flesh. Hence, I was conceived. But my mother was not happy instead anxious about her pregnancy.”

One in ten young Filipino women age 15-19 has begun childbearing: 8 percent are already mothers and another 2 percent are pregnant with their first child according to the results of the 2013 National Demographic and Health Survey (NDHS).

Abortion. Another social monster that keeps haunting the present society is the repercussion of unwanted pregnancy - abortion. It is the ending of pregnancy due to removing an embryo or fetus before it can survive outside the uterus (Grimes & Stuart, 2010). When deliberate steps are taken to end a pregnancy, it is called an induced abortion, or less frequently as an "induced miscarriage".

In the story, abortion was illustrated in the lines:

“Then mother rose from bed and took something. I immediately took part as I thought it will quench my thirst and ease my hunger...but it was a poison that slowly and mercilessly killed me. I was shouting and crying but she cannot hear me.”

The mother sorted to an alternative form of abortion available nearby the Quiapo church in Manila. Women seeking to terminate their pregnancies sometimes resort to unsafe methods, particularly when access to legal abortion is restricted. They may attempt to self-abort or rely on another person who does not have proper medical training or access to proper facilities. This has a tendency to lead to severe complications, such as incomplete abortion, sepsis, hemorrhage, and damage to internal organs (Okonufa, 2006). As narrated in the story:

“What are you looking for? Something that will induce menstruation?” said the vendor. I was confused. I did not hear mother’s answer. “You take this. It is effective in bringing forth your monthly cycle.” the old woman said. My mother whispered “Is this not harmful?” then the old woman answered “Of course not, many have availed of that already. You can have it for P50 only.” My mother took advantage of it. I was confused what was that for. What I understood it was a beverage she had to take. That then made me thirsty.”

Despite uncertainties, women who keep their pregnancy a secret due to some social deterrents, they sort to untested methods. Unsafe abortions are a major cause of injury and death among women worldwide. Although data are imprecise, it is estimated that approximately 20 million unsafe abortions are performed annually, with 97% taking place in developing countries (Grimes et al., 2006).

Respect for the Dead. The unborn child in the story of Benasa expressed his longing for inclusion in the prayers of her mother and of his family before he finally take his eternal repose.

“I wish I could be a part of her prayers that I may lay in eternal rest, that I may cease roaming around in the world of the living, that I may be freed from hatred and jealousy.”

This scenario in the story expresses the Filipino way of showing veneration to their dead. Filipinos are known for their celebration of respect and sanctification in remembrance of the dead. The story depicted otherwise that is why the unborn child craved for the prayers of the family. Commonly, a mass or service is officiated by a priest to pray for the soul of the dead on the last day of the funeral. But in the case of aborted child especially that it is unwanted, such practice is not observed. Filipinos’ celebration of funerals for their dead is not just to remember life of their departed and mourn for the death but a symbolism of love they have as a family. Sending them flowers to share life, death and love to the family of the deceased is a great gesture to show care. (Life, death and love: Filipino funeral customs and practices, 2014)

Implications of the selected sociocultural devices to education, economy and environment

The extracted sociocultural devices from the selected short stories in this study are relevant conduit of social and cultural ideals that hand in meaning to education, economy and environment.

Education

Education in the city VS. education in the province. The diasporic activities of high school graduates from the province to the city is brought about by longing of the graduates to finish programs which are exclusively offered in the cities. Further, enrolling in a university in the cities especially Manila gives the students a sense of sophistication and an assurance of being absorbed in a future workplace.

Diligence. The stories featured in this study showcased the importance of diligence and determination to finish education. In the story of Aragon, the main characters despite their being compassionate pursued their studies by preparing rigidly for examinations and participating in school activities, while in the story of Benasa, the female lead character experienced disruption in her studies because she got pregnant.

Extra-curricular involvement. The literary piece of Aragon likewise mentioned of extra-curricular activities to avoid undesirable engagements like premarital sex. The school publication is one remarkable curricular activity one may consider in high school or college since it hones students holistically not only in writing but more importantly in relating themselves with others, promptness, truthfulness or honesty, integrity, creativity and leadership among others.

Economy

The economic implications of the short stories may be encapsulated in the role of economic status in choosing future partners and economic status as a no-hindering-factor to education. The present society especially those which belong to well-off families consider the economic status of the partners chosen by their children. The rich seem to be for the rich and the poor for their own kind. This is the influence of foreign cultures like that of the Chinese which introduced economic practices as part of decision making related to marriages. This however is defied by relationships which are founded on true love and even on modern love.

Environment

The stories did not exclude environmental concerns which is now one of the greatest thrusts in combating climate change which is an ecological issue that has brought about one spirit across the globe.

CONCLUSIONS

After addressing the research questions posted in this study and carrying out the process of critical discourse analysis, the following standpoints could be noted.

1. The 21st century Ilokano writers coming from Southern Nueva Vizcaya whose literary works were subjected to analysis were Sherma E. Benasa, a native of Bambang, Nueva Vizcaya, a Filipino linguist, author, editor, and translator; and Roy V. Aragon of Dupax del Norte, an award-winning fictionist and poet, and also works as a translator.
2. The selected short stories which were subjected to critical discourse analysis were “Dagiti Pasugnod ni Angelo” by Sherma E. Benasa and “Ta Ay-ayatenka La Ngamin” by Roy V. Aragon. Both literary pieces were the sources of sociocultural paradigms covered in this study. “Dagiti Pasugnod ni Angelo” was all about the grievances of an unborn child while “Ta Ay-ayatenka La Ngamin” recounted the struggles of a young lady to capture the heart of her love interest.
3. After analysis of the short stories, sociocultural devices were extracted for discussion. The devices are ascertained as modern courtship (gender issues in courtship and qualities of love interest), sex education, teenage pregnancy, abortion and respect for the dead. These themes proffer lessons to the young people who are deemed beneficiaries of the moral sentiments of this study.
4. To further punctuate this study with substance, the extracted sociocultural devices from the selected short stories are made as relevant conduit of social and cultural ideals that hand in meaning to education, economy and environment.

RECOMMENDATIONS

With the salient results of the study, it is strongly recommended that:

1. appreciation of Ilokano literature may be used as a local icon in teaching language subjects because they reflect the ideals, concerns and thoughts of the local community. Analysis of these pieces may include translation and language lessons as to critical analysis and structures of English. With this, the lesson is facilitated while the Ilokano culture is being preserved, shooting two birds at a time.
2. students and faculty of Nueva Vizcaya State University, who have the passion for writing, may attempt to preserve and enrich the literature of the place by composing poems, short stories and novels in the Iluko language which masterpieces reflect the society and culture of the place.
3. further studies may be conducted about Ilokano literary pieces using poems and novels which were not covered by this study. Writings of other Ilokano writers from Nueva Vizcaya especially those who come from the north may be subjected to critical discourse analysis to bring out devices which are descriptive of the culture of the Novo Vizcayanos.

ACKNOWLEDGMENT

The researchers are indebted wholeheartedly and earnestly to the administration of the Nueva Vizcaya State University led by the university president, Dr. Andres Z. Taguiam; vice presidents, Dr. Wilfredo A. Dumale, Jr. (research, extension and training) Dr. Jocelyn P. Cabrera (academic affairs), and Dr. Araceli V. Domagas (administration and finance). Equal gratefulness is expressed for the inspiration given by Dr. Carlo F. Vadil, campus administrator of NVSU-Bambang campus, Dr. Elma P. Apostol, dean of the College of Teacher Education, and to all who directly and indirectly handed their great contributions for the success of this research undertaking.

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MULTI-PERSPECTIVE VALUATION OF GENDER AND DEVELOPMENT HIGHLIGHTS IN CREATIVE ARTICLES OF “KASARIAN”

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ABSTRACT

An unceasing battle that has been fought by humanity is the struggle against disparity among the sexes. Gender and development (GAD) issues shall ever be multifarious as long as the yearning for superiority lingers. In a state university in Cagayan Valley, Philippines, this concern is no exception. As a manifestation of standpoints based on schema of undertakings, the university publication embarked on a literary folio aptly dubbed as “Kasarian” which encapsulates the experiences of the student creative writers pertinent to GAD. Selected poems, essays and short stories are put on the light to make up this qualitative research specifically interpretive in nature using the method of content analysis. The literary articles handed information used in the valuation of GAD in the viewpoints of health and safety, gender stereotyping, politics and education, and economic empowerment which are leaned more particularly on the outlooks of the women who are deemed disadvantaged in these facets of life that sprout from various social units like the family, school, community and the media. This study culminates with the responses of the social units to the challenges of GAD particularly to the women in a worldwide perspective.

Keywords: Creative articles, Gender and development, “Kasarian”, Multi-perspective valuation

INTRODUCTION

Historic times witnessed how the women were turned into commodities that satisfied longing for authority over other people, that tested the extent of the power of money, that gratified sensual and sexual desires, and that lodged in the dictates of culture and tradition.

The concerns on gender equality have become ubiquitous recognizing the struggles and contributions of the preconceived inferior gender. The cry of the women for equality is more resounding since they had been reduced into no less than servers, housekeepers and nurturing mothers.

Education and time have carved the future of the women to emerge and prove their worth in the society. Because of their substantial contributions in the society, they have secured an indelible spot in fields of science, technology, medicine, education, business, politics and the like.

The recognition of women achievements has become so enormous that inspired the conventionally considered weaker or inferior sex to strive for equality and equity. To no cognizance, some efforts and accomplishments even overpowered the predetermined superior sex. This is to consider the scenario in a worldwide perspective where women are discernible. How about the other part of the world where women remain meek, submissive and callous to changes?

This study is rooted on the theory of Gender and Development (GAD) which focuses on the socially constructed differences between men and women (Bertrand, 2006) and the need to challenge existing gender roles and relations (Reeves, 2000). GAD marked a shift in thinking about the need to understand how women and men are socially constructed and how ‘those constructions are powerfully reinforced by

the social activities that both define and are defined by them' (Razavi & Miller, 1995). GAD focuses primarily on the gendered division of labor and gender as a relation of power embedded in institutions (Reeves, 2000).

It is in this light that the editorial board of school paper of a state university in Cagayan Valley considered a literary folio dubbed “*Kasarian*” which published prose and poetry articles that evolved on issues attached to gender and development.

Some of the experiences relatable to gender and development issues are enveloped in the literary folio as result of the creativity of student scribes. In this study, the challenges to gender and development are highlighted through the “*Kasarian*” particularly on selected poetry and prose articles. The conceptual framework follows.

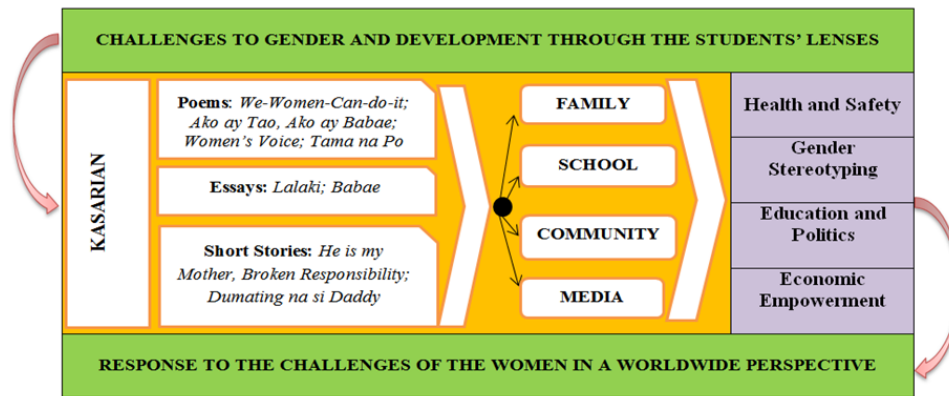


Figure 1. The conceptual prototype of the gender and development challenges as contained in the literary folio *Kasarian*

OBJECTIVES OF THE STUDY

The foregoing model unravels the sources of analysis of this study from the selected pieces of *Kasarian*. This research undertaking was made possible to:

1. ascertain selected prose and poetry articles of the literary folio “*Kasarian*” that rendered gender and development highlights for multi-perspective valuation;
2. point out challenges brought out by these articles to gender and development along health and safety, gender stereotyping, education and politics and economic empowerment, after content analysis;
3. discuss how the issues extracted may be pigeon-holed into the social units of family, school, community and media;
4. expound on the response to the challenges of women in a worldwide perspective

METHODOLOGY

This qualitative study employed the interpretive approach particularly content analysis. To carry out the analysis, literary criticism along feminist approach was used to aptly characterize the standpoints of student writers on gender and development issues. Women have been somewhat underrepresented in the traditional cannon, and a feminist approach to literature redresses this problem. (Burriss, 2017)

The content analysis further divulged issues as categorized under social units of family, school, community and media. Further, same approach was used to effect triangulation and discussions on related

constructs such as health and safety, gender stereotyping, education and politics and economic empowerment.

Experiences pertinent to gender and development issues are enveloped in the literary folio *Kasarian* (published second semester, SY 2015-2016) which is a result of the acumen of student creative writers of a certain state university of Cagayan Valley, Philippines. In this study, the challenges to gender and development are highlighted through the literary folio particularly on selected poetry and prose articles.

Eight student writers whose ages range from 17-25 come from the four colleges of the state university namely teacher education, industrial technology, engineering and arts and sciences. The creative writers of the literary folio are not exclusively representing the editorial board of the university publication. They aptly embody the typical student of the university who composes a population of mixed cultures coming from various indigenous groups dominated by Kalanguya, Isinai, Ifugao and Ilocano.

The pieces subjected to analysis were chosen purposively representing various literary genres of the folio and were analyzed by five selected language and literature professors or experts of the university to include one of the researchers.

FINDINGS

After carefully processing the thoughts and ideas expressed by the student creative writers in their literary articles, the following results were derived to address the objectives of this qualitative research.

Selected Prose and Poetry Articles of the Literary Folio “Kasarian”

The selected articles for analysis which were derived from the literary folio “*Kasarian*” is a repertoire of poems, essays and short stories that convey the thoughts and opinions of student writers in a medium of either Filipino or English. This expression emanates from experiences, and most often from the students’ respective cultural and traditional orientations.

The poems are entitled: *We-women-can-do-it* by Lory Fe Lupaas; *Ako ay Tao, Ako ay Babae (I am a Human, I am a Woman)* by Mary Jean Bongcato; *Women’s Voice* by Lovimer Grace Ingusan; and *Tama na Po (Please Stop It)* by Rosanna Bongcato. Moreover, the essays include the anonymously written *Lalaki (Man) and Babae (Woman)*. Lastly, the short stories are *He is my Mother* by Eirelle Jane Pradez; *Broken Responsibility* by “Mommy Love”; and *Dumating na si Daddy (Dad has arrived)*, anonymous.

The said creative outputs of the student writers came into light in the genre of either prose or poetry that emanated thoughts, feelings and attitudes toward gender and development which are reflexive of the beliefs, practices and cultures of the immediate society the student creative writers thrive in. These outputs were subjected to feminist criticism that brought about themes deemed timely and useful in the age of globalization.

Challenges to Gender and Development

The issues raised by the selected prose and poetry articles refer to health and safety, gender stereotyping, education and politics as well as economic empowerment of the women. The detailed analyses are proffered in the following thematic discussions.

Health and Safety. The women have struggled to free themselves from physical and emotional harm the opposite sex has caused and been causing, especially in ancient times when they were seen more of a commodity than the man’s co-equal.

Schiebinger (1999) asserted that historically there has been a need to study and contribute to the health and well-being of a woman that previously has been lacking. She describes six contributions that

must occur in order to have success: political movement, academic women studies, affirmative action, health equality, geo-political forces, and *professional women not being afraid to talk openly about women issues*. The two highlighted factors speak of health and safety issues of the women.

Considering the literary articles included in “Kasarian”, health and safety issues were raised particularly in the following creative outputs.

Experiences of students are recounted through the lines:

“Women are hit. Women can’t resist. Physically weak? Perhaps not.” **We-women-can-do-it**

“Stop it you man! Love the woman. Stop the violence. Instead stop the crying... After putting Eve on shame who stumbled on filthy mud. Don’t worry women, there’s still hope. Fight like Gabriella!” **Tama na Po (Stop it)**

These thoughts speak of battery of women which is suffered by one in five women aged 15-49 who has experienced physical violence since age 15 (National Statistics Office, 2008). The 2008 National Demographic and Health Survey (NDHS) conducted by the National Statistics Office (NSO) introduced the “Women Safety Module” which aimed to capture the extent and types of Violence Against Women (VAW) experienced by women (15-49 years old). Information was collected on spousal violence - covering all forms of VAW: physical violence; sexual violence; emotional violence; and economic violence.

The poem **We-women-can-do-it** further reads:

“I am fighting. A girl I am. Who says not, who says I can’t? But I can put my shoe to what I want.”

And the poem **Women’s Voice** states,

“Yet I don’t complain about the many chores. I’m just knocking on your head. I am a woman and a wife to be loved and cared for, not your slave to be ruled over. As if I’m your mere property.”

This speaks of how women have struggled to fight against physical violence and worse slavery. The NDHS further revealed that one in five women aged 15-49 has experienced physical violence since age 15; 14.4 percent of married women have experienced physical abuse from their husbands; and more than one-third (37%) of separated or widowed women have experienced physical violence, implying that domestic violence could be the reason for separation or annulment

On the other side of the mirror, struggles are not the woman’s alone but the opposite sex somehow experience issues of health and safety as they perform their respective roles, or more appropriately, their preferred roles.

The literary folio includes the following thoughts pertaining to such contention.

“One day my mother saw my uncle laughing and acting femininely. A punch suddenly landed on my uncle’s face and kicks were all over his body knocking him down. ‘Be a man or forget that I’m your father’ anger was on the top of his voice barely shaking. There was one to be there for him instead he was bullied, rejected and despised. His father left no chance as he enrolled him into a military school. He felt too much sorrow that he burst out and aflame a confrontation with his father...” **He is my mother**

This short story relates the struggles of a “woman” trapped in a man’s body. He longed for acceptance by his family but that seemed elusive. The situation is even aggravated by physical and emotional torture. The torture is not confined within the four walls of his home but in his academic environment as well because of bullying. Nevertheless, he compensated this battle with hard work and diligence to succeed in the end.

Another short story which recounts man's health and safety as he carries out his expected roles as head of the family narrates:

"Akira can't remember how she got where his dad works. She saw a neighbor talking through phone to the German co-workers of his dad in the Department of Environment and Natural Resources who were trying to save him after having shot in an encounter with unknown forces. Unfortunately, along the way, his dad passed away." **Mama dumating na si daddy (Dad has arrived)**

In the discharge of functions expected of the men, there are inevitable perils especially that they engage in more strenuous tasks just to meet the needs of their families. In the short story, the father needed to work in a highly risky environment which thus put an end to his life. To lessen incidence of harming the men in their work places, measures could be taken into consideration. In the Labor Code of the Philippines, Macaraya, B. (2017) wrote on the conditions of occupational safety and health of employees.

Gender Stereotyping. Gender stereotyping roots from the dictates of irrepressible forces like education, family nurture, religion, culture and tradition varying from one social group into another and even from local to international contexts.

The United Nations Human Rights Office of the High Commissioner (2017) defines gender stereotyping as the practice of ascribing to an individual woman or man specific attributes, characteristics, or roles by reason only of her or his membership in the social group of women or men. Gender stereotyping is wrongful when it results in a violation or violations of human rights and fundamental freedoms. An example of this is the failure to criminalize marital rape based on societal perception of women as the sexual property of men.

Issues on such a theme are given accounts in the selected essays *Lalaki (Man)* and *Babae (Woman)*, the poem *Ako ay tao, ako ay si babae (I am a Human, I am a Woman)* and the short stories *He is my mother* and *Mama dumating na si daddy (Dad has arrived)* as follows.

The essay *Lalaki (Man)* unravels the lines:

"I am Adam – handsome, sturdy and brave – that's why I serve as a husband to my wife, protector and provider of my family. As a husband, I care for my wife that she shall bear our children. As a protector, I shall always be ready to make myself a shield to keep my family safe. As a provider, I shall work for the needs of my family."

On the other hand, the essay *Babae (Woman)* reveals the women's views as:

"I am the light of our home, a star above the skies, and a lovely flower...but sometimes a provider to my family. I am the star that sparks brightness to my family. I am the flower that gives inspiration to my husband that I shall bear our kids and nurture them. I am the light that gives guidance to my husband and children."

The two foregoing essays retell the stereotyped roles of man and woman in their family. The man who provides the needs of his family serves as partner to his wife who is capable of bearing the children in the family. The mother in turn guides the children until they become mature and capable of performing their roles as men and women. The wife hence keeps the house in order, while the father seeks for a living.

In same context, the poem *Ako ay tao, ako ay si babae (I am a Human, I am a Woman)* relays the message that mothers must stay home as it reads:

"Mostly mom is pitied. She's weak so she has to stay home. She is expected to be worth emulating. Yet her freedom is forgotten."

However, the poem reminds the readers of the freedom that mothers should enjoy as a human being. This is a gentle reminder that mothers especially nowadays can enjoy a lot of rights like having the suffi-

cient education by finishing a degree of her choice and having employed lucratively in workplaces where she could render her services based on skills she has acquired.

Going back to the essay *Babae (Woman)* which mentions the line... *“but sometimes a provider to my family”* referring to the mother as a provider. This line is an outlier in the two essays which means that the woman in this context deviates from her traditional roles. Student writers of the literary folio are “millennials” who live in a society where single mothers thrive and continually struggle to sustain their own families as solo parents.

Further, some other measures have been taken to oppose stereotyping. In the short story *He is my mother*, the following lines are written:

“A knock was heard in front of the door when he opened it much to his surprise to see his sister. She was holding a baby girl in her arms and begged my uncle to look after me. He then took me in his arms and raised me like his daughter with all the love he didn't receive... He was my grandfather's son. He was my mother's twin brother. He was my mother.”

This story tells about how a man served as a mother to a child who was left to him by his sister. The unmarried man tried his best to raise the child into a responsible lady who considers him her mother. This is the repercussion of having hated by his parents as he experienced physical violence from his father. The successful rearing of the young lady is evidence that man can likewise nurture children even without the women. Such situation is opposed to stereotyping as the man got away from the usual functions of a man.

Education and Politics. In the olden times, two areas in which women hardly gain recognition are education and politics. Sometimes, this still holds true. This contention is supported by the poem **Women-can-do-it** which is a poetry piece that deals on the insistent battle of women for recognition in various facets of the society. A line of the poem reads:

“I am fighting. Leadership, education, military, business? Widen your view, women can do.”

Another line in *Ako ay tao, ako ay si babae (I am a Human, I am a Woman)* substantiates the women's insistence for recognition as it reads:

“I shall rise in my community. I shall not render myself innocent. I shall regain my rights. Because this is what I promised my mom.”

This clearly signifies the persistence of the so called inferior sex to bust the myth that the women are physically weak – that the women can involve themselves in politics as stalwarts of good governance; that they can acquire academic degrees that can allow them to excel in the professional world; that they can serve to safeguard the interest of the nation for peace and order; and that they can excel in the world of enterprise.

One article of the literary folio furthermore relays the story of a mother who struggles for her education sacrificing being with her baby daughter while in school. In the creative output **Broken Responsibility** the gloom and remorse of a mother is conveyed in the lines:

“How I wish I could be with her every second of my life. My duty as her mom has been taken away from me. Instead of hitting the books and cramming for exams, I should have been looking after her. I should have been attending to her needs. I should have been playing with her arms, connecting with her language and joining her with her sweet little dreams....”

This manifests the longing of the women for education, thus the surge in the number of women who attain college degrees. The Philippine Commission on Women (2014) reported that the 2008 Functional Literacy, Education and Mass Media Survey (FLEMMS) shows that of the estimated 68 million Filipi-

nos 10 years old and over in 2008, 95.6% are basically literate. The basic literacy rate among females is 96.1% while 95.1% among males. This is evident in the elementary and high school completion rates where females were consistently higher than males.

Same thing is true in the political arena, the Philippine Commission on Women reported in September 2013 of the May 2013 automated national and local elections showed that around 19.97 percent (3,503) of the elected posts, including ARMM elections, are won by women candidates, higher than the 18.4 percent turnout in 2010.

Shah (2017) averred that participation of Filipino women in Philippine politics was encouraged during the Beijing Declaration in 1995 at the United Nations' Fourth World Conference on Women. From 1992 to 2001, Filipino women had been elected as local chief executives, functioning as mayors, governors, and captains of villages.

These achievements of the women prove their worth in the fields of education and politics which smashed the preconception that women are weak that they are only confined as housekeepers and care takers.

Economic Empowerment. In an attempt to create gender equality, denoting women having same opportunities as men, including ability to participate in the public sphere; GAD policies aim to redefine traditional gender role expectations (Development Assistance Committee, 1998). In the labor market, women tend to earn less than men. However, the efforts of the women to excel in this arena are enormous.

In the folio, the poem *We-women-can-do-it* is a poetry piece which deals on the insistent battle of women for recognition in various facets of the society. One of which is in the domain of enterprise.

The poem reads:

"I am fighting. Leadership, education, military, business? Widen your view, women can do."

The women do not only excel in education and politics but in the world of business. Susan Co, a Filipino businesswoman, was hailed among eleven Philippine business tycoons who made it to Forbes Magazine's 2013 roster of richest people on the planet whose group dominates local retailing, residential and mall development, and banking (Dumlao, 2013).

Role of the Family, School, Community and Media in Addressing Gender and Development Issues

The wellhead of gender and development issues is the social units in which the women thrive. It is for this reason that in these entities the concerns for equality be addressed to aptly structure solutions to the abounding GAD difficulties.

The family. *"The family is the natural and fundamental group unit of society and is entitled to protection by society and the state"* - (Universal Declaration of Human Rights Article16, 2017). Traditionally, the man is the main breadwinner of the family while it was usually the woman's responsibility to look after the home. Looking after the home incorporated activities such as raising children, cleaning, cooking, looking after sick or elderly relatives.

The school. The school offers equal rights to the women to avail education along their personal preferences. The preconceived man's courses like engineering, aeronautics, vocational degrees which are earlier dominated by men like welding, automotive and electronics are increasingly becoming the women's interest. On the other hand, measures need to be developed to facilitate cultural change in men so that they become producers and not merely consumers of domestic labor. These should include compulsory teaching on gender issues at primary and secondary school level, the development of positive role

models for men doing domestic labor in the media, and incentives via employers and tax breaks to encourage men to take on proper care responsibilities for dependents.

The community. The role of the community is fittingly conveyed in the theory of liberal feminism which is an individualistic form of feminist theory, which focuses on women's ability to maintain their equality through their own actions and choices. Liberal feminists argue that society holds the false belief that women are, by nature, less intellectually and physically capable than men; thus it tends to discriminate against women in the academy, the forum, and the marketplace. Other issues important to liberal feminists include but are not limited to reproductive rights and abortion access, sexual harassment, voting, education, fair compensation for work, affordable childcare, affordable health care, and bringing to light the frequency of sexual and domestic violence against women. (Hooks, 1984)

The media. Gomez (2017) said many "women's issues" are characterized as private troubles, issues that affect only a few individuals, rather than public issues, that affect the larger society. Economic and political institutions need to be addressed in order to expose private troubles. By bringing issues that affect women into the public sphere there is more opportunity to effect change and empower women. Hoffman (2017) asserted that the portrayal of women in the media reinforces gender stereotypes by focusing on how women look and behave. Women are primarily portrayed as passive, human interests, or their voices are included as the "token" women's perspective.

Response to the Challenges of Women in a Worldwide Perspective

Worldwide efforts have been seen to address such challenges. Women organizations, activities and laws have sprung across nations to protect the women just like the Women's Equity Action League which is a national membership organization of the United States of America, with state chapters and divisions, founded in 1968 and dedicated to improving the status and lives of all women primarily through education, litigation, and legislation.

Moreover, the feminist movement (also known as the women's liberation movement, the women's movement, or simply feminism) refers to a series of political campaigns for reforms on issues such as reproductive rights, domestic violence, maternity leave, equal pay, women's suffrage, sexual harassment, and sexual violence, all of which fall under the label of feminism and the feminist movement.

According to Walter (2001), feminism in **China** started in the 20th century with the Chinese Revolution in 1911. In China, feminism has a strong association with socialism and class issues (Lin, 2006). Some commentators believe that this close association is damaging to Chinese feminism and argue that the interests of party are placed before those of women.

Caroline Moser developed the Moser Gender Planning Framework for GAD-oriented development planning in the 1980s while working at the Development Planning Unit of the University of **London**. Working with Caren Levy, she expanded it into a methodology for gender policy and planning. The Moser framework follows the Gender and Development approach in emphasizing the importance of gender relations (March, 1999).

In the **Philippines**, the 2008 National Demographic and Health Survey (NDHS) conducted by the National Statistics Office (NSO) introduced the "Women Safety Module" which aimed to capture the extent and types of Violence Against Women (VAW) experienced by women (15-49 years old). Information was collected on spousal violence - covering all forms of VAW: physical violence; sexual violence; emotional violence; and economic violence. In this way, proper action could be taken to protect the Filipino women.

More and more laws are implemented to ensure gender equality and women protection along health and social welfare, politics, education, business and the like.

CONCLUSIONS

With the foregoing findings, the following conclusions were derived:

1. Selected poems, essays and short stories are put on the light to make up this qualitative research specifically interpretive in nature using the method of content analysis. Experiences pertinent to gender and development issues are featured in the literary folio particularly on selected poetry articles dubbed: Women Can-do-it; Ako ay Tao, Ako ay Babae (I am a Human, I am a Woman); Women's Voice; and Tama na Po (Please Stop It). Other sources of analysis include likewise selected prose articles like the essays titled Lalaki (Man) and Babae (Women), and short stories titled: He is my Mother, Broken Responsibility; and Dumating na si Daddy (Daddy has Arrived).
2. The literary articles handed information used in the valuation of GAD in the viewpoints of health and safety, gender stereotyping, politics and education, and economic empowerment.
3. The literary articles pertained particularly on the outlooks of the women who are deemed disadvantaged in different facets of life that sprout from various social units like the family, school, community and the media.
4. The responses to the challenges to women were addressed by various movements and legal provision to protect their rights of asserting themselves in numerous walks of life.

RECOMMENDATIONS

With the foregoing synthesis of findings, the researchers recommend that:

1. Diverse activities, organizations and even laws that speak the language equality, health and welfare, stereotyping, economic empowerment, education and politics may be reoriented to the women to serve as aegis not only for them but also to their counterpart that they perform their functions and roles with utmost effect.
2. The findings of this study may serve as a reminder to the women that they have rights to live equally with their opposite sex in all facets of life.
3. In the context of media under which the school publication of the state university covered by this study, the mighty pen may serve as their tool as weapon to gently end the struggle against gender disparity.

ACKNOWLEDGMENT

The researchers are indebted wholeheartedly and earnestly to the administration of the Nueva Vizcaya State University led by the university president, Dr. Andres Z. Taguiam; vice presidents, Dr. Wilfredo A. Dumale, Jr. (research, extension and training) Dr. Jocelyn P. Cabrera (academic affairs), and Dr. Araceli V. Domagas (administration and finance). Equal gratefulness is expressed for the inspiration given by Dr. Carlo F. Vadil, campus administrator of NVSU-Bambang campus, Dr. Elma P. Apostol, dean of the College of Teacher Education, and to all who directly and indirectly handed their great contributions for the success of this research undertaking.

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NON-COGNITIVE ATTRIBUTES AS CONDUIT TO IMPROVED ACADEMIC PERFORMANCE

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ABSTRACT

In this descriptive study, non-cognitive attributes were investigated on how they may bring forth better academic performance to the first year tertiary students of a state university in Cagayan Valley, Philippines. This study which involved 138 randomly selected student respondents considered the academic units and entrance examination ratings as grouping constructs. The results revealed that majority of the first-year tertiary student respondents belong to the College of Industrial Technology, whose level of performance in the entrance examination is good (73.25). Further, their level of academic effort (2.98) and confidence (2.64) is high while their level of academic performance is satisfactory (2.40). Significant differences existed in the respondents' academic performance when grouped according to academic unit ($p=0.0280$) and entrance examination ratings ($p=0.0007$). Finally, it was ascertained that the respondents' levels of academic effort ($p=0.0004$) and confidence ($p=0.0000$) correlated significantly with their academic performance. The results prompted better perspectives along developing learning resources, considering strategies like collaborative learning and kinesthetic activities, and developing academic tools and instruments to address the learners' needs.

Keywords: Academic confidence, Academic effort, Academic performance, Entrance examination, Non-cognitive attributes

INTRODUCTION

The ultimate goal of any educational institution is optimize academic achievement or performance that the students will be able to meet the standards of their future workplaces.

In one perspective, academic performance is the extent to which a student, teacher or institution has achieved their short or long-term educational goals. Cumulative general point average (GPA) and completion of educational degrees such as high school and bachelor's degrees represent academic achievement. It is commonly measured through examinations or continuous assessments but there is no general agreement on how it is best evaluated or which aspects are most important — procedural knowledge such as skills or declarative knowledge such as facts (Ward et al., 1996).

In another perspective, there are more to academic performance than cognitive factors. There are inconclusive results over which individual factors successfully predict academic performance. Elements such as test anxiety, environment, motivation, and emotions require consideration when developing models of school achievement (Ziedner, 1998).

Individual differences in academic performance have been linked to differences in intelligence and personality (von Stumm, 2011). Students with higher mental ability as demonstrated by IQ tests and those who are higher in conscientiousness (linked to effort and achievement motivation) tend to achieve highly in academic settings. A recent meta-analysis suggested that mental curiosity (as

measured by typical intellectual engagement) has an important influence on academic achievement in addition to intelligence and conscientiousness (von Stumm, 2011).

Two of non-cognitive factors are assumed in this study to have relationship on academic performance – academic effort and academic confidence.

Initially, this assumption is based on the attribution theory which states that individuals are considered as active beings that “seek to understand and master their environment and themselves” (Elliot et al., 2005). Based on this assumption, it is argued that the outcome of individuals’ behavior can be determined by both external attributions and internal attributions. External attributions refer to those factors that individuals are unable to control (e.g. difficulty of the task) while internal attributions refer to those factors that individuals are able to control (e.g. effort, confidence, like the amount of time students spent on homework). According to this model, both internal attributions and external attributions play a role in affecting individuals’ subsequent behavior, like task engagement and persistence (Elliot et al., 2005).

In this research titled “Non-cognitive Attributes as Conduit to Improved Academic Performance” carried out in a state university of Cagayan Valley, Philippines, the focus is placed on internal attribution – effort and confidence and their role in affecting students’ academic achievement. It is assumed that when students put more effort and confidence into their studies, they are more likely to perform better in their academics. Otherwise, they are less likely to achieve a satisfactory result.

The conceptual framework presented in the succeeding figure divulges the interplay of psycho-academic constructs investigated in this study.

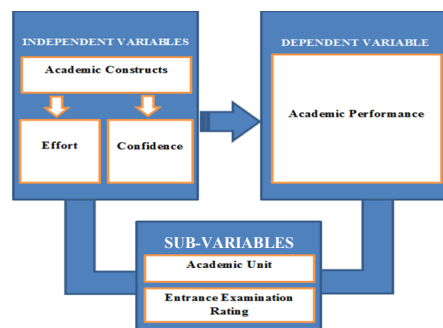


Figure 1. Conceptual paradigm of the study

Considered as sub-variables in the study are the academic units to which the target respondents belong and their performance in the entrance examination conducted before being admitted in the university. These constructs were used as basis for grouping in the analysis of differences in their academic effort and confidence as well as in their academic performance.

STATEMENT OF THE PROBLEM

This study specifically ventured into the analysis of data collected that addressed the following research questions:

1. What are the academic units and entrance examination ratings of the first year tertiary students of Nueva Vizcaya State University – Bambang Campus?
2. What is the respondents’ level of academic effort and confidence?
3. What is the respondents’ level of academic performance?
4. Are there significant differences in the respondents’ academic confidence, effort and performance when grouped according to academic units and entrance examination ratings?
5. Do the respondents’ level of academic effort and confidence correlate significantly with their academic performance?

REVIEW OF RELATED LITERATURE

Some researchers argued that internal attributions play a more influential role than external attributions. It was found that when students considered themselves as exerting great effort into studying the academic subject and hardworking, they also tended to achieve better academically (Elliot et al. 2005).

This study considers Bandura's self-efficacy theory which states that self-efficacy is confidence (Bandura, 1986), which is a belief that one is competent to handle the task at hand. In the academic arena, people with high academic confidence - that is, those who believe they can perform well in scholarly activities- are more likely to view difficult tasks as something to be mastered rather than something to be avoided.

According to the theory, confidence is enhanced by four factors: enactive attainment (successful performances), vicarious experiences, verbal persuasion, and psychological state (emotional arousal). Academic self-confidence is easily influenced by situational elements differentiating it from the general self-confidence which is not easily influenced by situational elements (Zorkina & Nalbome, 2003).

METHODOLOGY

This descriptive research utilized comparative-correlational approach to unveil significant differences in the respondents' academic confidence, effort and performance when grouped according to academic units and entrance examination ratings and significant relationship of respondents' academic constructs along effort and confidence with academic performance.

The study which involved 138 randomly selected first-year tertiary students of Nueva Vizcaya State University – Bambang Campus, representing 33.25% of the total population, made use of an adapted questionnaire to unravel data on academic units and entrance examination ratings of the respondents as well as their level of academic effort and confidence. Such number of respondents conformed with the provisions for a descriptive research for large population as discussed by Cudia and Tallungan (2015). The registry method was used to acquire information on the respondents' academic achievement since the data were taken from the archive of the university registrar. Only grades during their first year (SY 2016-2017) were considered for analysis.

The questionnaire was subjected to the process of validation through the assistance of research experts. Moreover, reliability index using Cronbach Alpha (equivalent to 0.8720) was established to assure quality of the research instrument.

The statistical tools made on descriptive data were frequencies, percentages and means while on inferential data, analysis of variance (ANOVA) and correlational coefficients (particularly Pearson r) computed at 0.05 level of significance.

FINDINGS

After having thoroughly analysed the data collected to address the research questions of this study, the answers are presented in the succeeding tabular and textual presentations.

Academic unit and entrance examination rating as sub-variables characterizing the first year tertiary students of Nueva Vizcaya State University – Bambang Campus

To answer the research question on profile of respondents as to academic unit they belong and their ratings in the college entrance examination, frequencies and percentages were used as seen in table 1.

Table 1 Frequency and percentage distribution of respondents according to academic unit

College	Sample	Percentage (%)
College of Industrial Technology	60	43.48
College of Teacher Education	20	14.49
College of Engineering	24	17.39
College of Arts and Sciences	34	24.64
Total	138	100.00

The randomly selected 138 respondents representing 33.25% of the total population of first year tertiary students of the state university are distributed among four colleges of the campus. Sixty (60) come from the College of Industrial Technology which number of samples takes 43.48% of the total sample size. Moreover, 34 (or 24.64%) respondents come from the College of Arts and Sciences, 24 (or 17.39%) from the College of Engineering; and 20 (or 14.49%) from the College of Teacher Education.

Before the respondents were admitted to their respective colleges, they underwent through the entrance examination to facilitate their choices of baccalaureate programs they will enrol. Besides, the administrators could use the data to screen who could be enrolled in the board and non-board programs offered by each college. This may increase the chances of the students and the colleges to perform better in board examinations in the future.

To present the data pertinent to this research question, frequencies and percentages were used as displayed in table 2.

Table 2 Frequency and percentage distribution of respondents according to their college entrance examination rating

Range	Frequency	Percentage	Qualitative Description
81-100	51	36.96	Very Good
61-80	59	42.75	Good
41-60	24	17.39	Average
21-40	4	2.90	Fair
Total	138	100.00	
Mean		73.25	Good

The respondents posted a mean entrance examination score falling within the range of 61-80 which is qualitatively described as good. This could be accounted on the number of respondents which is 59 or 42.75% of the total respondents who obtained a mean score between 61 and 80. Fifty-one (51) or 36.96% of the respondents obtained scores between 81 and 100 qualitatively categorized as very good; while 24 or 17.39% of the respondents got scores between 41-60 or average; and only 4 or 2.90 % scored between 21 and 40 or fair.

The standardized entrance examination administered to incoming freshmen and transfer students otherwise named Filipino Intelligence Test (FIT) measures the proficiency of the students along verbal ability (vocabulary, analogy, numerical ability) and non-verbal ability. The results of this test are used as bases for admission in the academic unit under which the preferred program of an enrollee is offered. As well, it is used to recommend whether a student may take a board or non-board course.

Respondents' level of academic effort and confidence

To describe the respondents' academic constructs along effort and confidence, means were computed and presented in table 3.

Table 3 Academic constructs characterizing the respondents along academic effort and confidence

Academic Constructs	Mean	
Effort	2.98	High
Confidence	2.64	High

Academic Effort. This construct defines the struggles of the students to surpass the challenges of their curricular undertakings. In this domain, the freshmen students of the university characterize their academic effort with a grand mean of 2.98 which is qualitatively categorized as high.

This finding is attributed to the respondents' expression of their willingness to pass all their subjects, 3.60 or very high. This indicator is followed by the respondents' efforts to prepare for examinations by studying hard prior to the tests, 3.08 or high, which area is tantamount to their effort of not giving up easily when faced with a difficult question or problems in schoolwork, 3.08 or high. Further, their academic effort is defined by their paying close attention to their teachers' lessons, 3.01 or high.

On the other hand, the respondents displayed less attention to: concentrating a lot in class, 2.73; preparing hard for homework, 2.73; and being usually interested in schoolwork, as indicators of academic efforts despite their being categorized as high as well.

This result of the study concurs with the study of Elliot (2005) who found out that when students considered themselves exerting great effort into studying the academic subject and hardworking, they also tended to achieve better academically.

Hurdling student life is so tough that it necessitates not only focus on academic activities like passing examinations, religiously attending classes and listening attentively to the lesson of the day. It likewise entails time to participate in co- and extra-curricular activities which ensure holistic student development. The benefit of such is gargantuan though, e.g. enhancement of talents or skills that could teach the students survival skills needed in their future professional world; spiritual, physical, emotional and moral development ; acquisition of life and career skills in case they will not land a job vertical to their baccalaureate degrees.

Academic Confidence. This academic construct is a behavioral trait that defines the level of a learner's self-assurance that he is able to carry out a given task (Bandura, 1986). This assurance is based on a scheme of physical and cognitive capabilities that the learner possesses. In this domain, the respondents are described to have a high level of academic confidence with a mean of 2.64.

This level is attributed to specific activities, practices or preferences of the respondents. Among these components are thinking that they can finish their studies by working hard, 3.61 or very high; following lessons easily, 2.81 or high; and always doing well in tests. In the contrary, they express their timidity by obtaining low marks on indicators like: feeling smarter than most of their classmates, 2.21; feeling that their teachers do not consider them to be good in their work, 2.39; feeling that they are able to do better than their friends in most subjects, 2.39; and feeling that they are good in most of their subjects, 2.49.

In this study, the respondents display a higher level of effort than their level of confidence. This attitude implies that they exert more actions in their academic endeavors more than having assured of success to perform such activities. In this finding that it could be inferred that there are some other elements that push the respondents to exert more efforts to study well. Some of which could be the motivation made by teachers, administration and outside forces like the community and parents.

Respondents' level of academic performance during their first year in the university

The grades of the respondents in their first year level were collated and analyzed to come up with a description of their academic performance. The results of such process are shown in table 4.

Table 4 Frequency and percentage distribution of respondents according to their academic performance during their first year in the university

Range	Frequency	Percentage	Qualitative Description
1.00 – 1.25	0	0	Excellent
1.26 – 1.75	2	1.45	Very Good

1.76 – 2.25	51	36.96	Good
2.26 – 2.75	51	36.96	Satisfactory
2.76 – 3.00	34	24.64	Fair
Total	138	100.00	
Mean		2.40	Satisfactory

Table 4 unveils the frequency and percentage distribution of respondents according to their academic performance during their first year in the university. The respondents' garnered a mean grade of 2.40 which is qualitatively categorized as satisfactory. This overall mean could be supplementary with the greatest number of respondents who obtained a mean grade falling within the range of 1.76 – 2.25 and 2.26 – 2.75 with frequencies of 51, each taking 36.96% of the total respondents. Only two respondents or 1.45% pegged a GPA between 1.00 and 1.25 or very good.

Differences in the respondents' academic confidence, effort and performance based on their academic unit and entrance examination ratings

The sub-variables academic unit and entrance examination rating were used to group the respondents through which differences in academic performance were analyzed. ANOVA yielded the F-values with corresponding p-values as displayed in table 5.

Table 5 Analysis of differences in respondents' academic confidence, effort and performance according to academic unit and entrance examination ratings

Variable	Academic unit		Entrance exam rating	
	F-value	p-value	F-value	p-value
Academic confidence	1.2131	0.3094	1.6801	0.1766
Academic effort	0.3168	0.8132	0.6583	0.5798
Academic performance	3.1722*	0.0280	6.2418*	0.0007

**Significant at 0.05 level*

Academic confidence and sub-variables. Comparison of respondents' academic confidence when grouped according to academic units and entrance examination ratings yielded computed F-values of 1.2131(p=0.3094) and 1.6801(p=0.1766) correspondingly.

Since the computed p-values are greater than the level of significance, the null hypotheses along this domains are accepted, meaning there are no significant differences in the respondents' level of academic confidence when grouped according to academic units and entrance examination.

Academic effort and sub-variables. Comparison of respondents' academic effort when grouped according to academic units and entrance examination ratings yielded computed F-values of 0.3168 (p=0.8132) and 0.6583 (p=0.5798) correspondingly.

Since the computed p-values are greater than the level of significance, the null hypotheses along this domains are accepted, meaning there are no significant differences in the respondents' level of academic effort when grouped according to academic units and entrance examination.

Academic performance and sub-variables. Significant differences in academic performance transpired when respondents are grouped according to their academic units and entrance examination ratings with computed F-values equal to 3.1722 (p-value=0.0280) and 6.2418 (p-value=0.0007) respectively.

These findings imply that some respondents collectively performed significantly well in academics than other respondents belonging to another academic unit. As well, respondents having higher level of entrance examination ratings significantly differ in their academic performance than those who got lower entrance examination results.

Relationship of respondents' academic confidence and effort with their academic performance

Correlational procedures were carried out particularly computation of Pearson r to unravel relationship of respondents' academic confidence and effort with their academic performance. The results of the analysis are shown in table 6.

Table 6 Analysis of relationship of respondents' academic confidence and effort with their academic performance

Variable	Academic Performance	
	Correlation coefficient	p -value
Academic confidence	0.4241*	0.0000
Academic effort	0.3524*	0.0004

**Significant at 0.05 level*

Academic confidence and academic performance. Analyzing correlation of respondents' academic confidence with their academic performance, the computed correlation coefficient is 0.4241 with p -value of 0.0000 which is less than the level of significance set for this study. This means that the null hypothesis along this domain is rejected. Hence, there is a significant relationship between respondents' academic confidence and academic performance.

This result runs parallel with the findings of Alias (2016) whose study aimed to determine if giving a positive or negative stimulus to engineering students can affect their cognitive performance and if academic self-confidence is the mediating factor. The results indicate that cognitive performance among engineering students is improved when giving positive verbal input and the opposite is observed when given a negative verbal input. From this study, it can be said that the self-confidence is the mediating factor between positive verbal input and cognitive performance.

Same result was unveiled by Shoemaker (2010), from Kansas State University's Department of Horticulture, Forestry, and Recreation Resources, who explained: "In psychological literature "knowing" refers to performance accuracy, while "knowing how much they know" relates to confidence. This is his assertion after finding out that students' confidence at the conclusion of course was correlated with their academic performance in three of the four years that were examined. "It is more likely that confidence was impacted as students moved through the course because all the activities associated with a course means a course is a domain-specific construct, and the students' reported confidence at the end of the semester was correlated with academic performance," Shoemaker remarked.

Academic effort and academic performance. The correlational procedure conducted to ascertain relationship of respondents' academic effort with their academic performance yielded a correlation coefficient equal to 0.3524 with p -value of 0.0004 which is less than the level of significance set for this study. This means that the null hypothesis along this domain is rejected. Hence, there is a significant relationship between respondents' academic effort and academic performance.

In his study of effort and academic achievement, Li (2016) found that there was no general consensus about the relationship between effort and academic achievement. Some studies suggested that there was a positive relationship between the two variables, while some other studies suggested that there was a negative relationship between the two variables.

In a study conducted in America, Stewart (2008) was interested in studying how both individual factors (like effort) and structural factors (like school environment) could affect students' academic performance. It was found that the amount of effort that students exerted in their studies was positively associated with their academic performance which result concurs with this study.

Even though most studies stated that there is a positive relationship between effort and academic achievement like this study, there were few studies arguing the opposite. For example, in a study conducted by Chen (2007) who ventured into the relationship between university students' effort (in term of the time they spent in learning) and their academic performance (in term of the grades they achieved).

After controlling some external variables like learning ability and prior academic achievement, the results indicated that effort was significantly and negatively correlated with academic performance.

CONCLUSIONS

After having presented the foregoing results of this academic endeavor, the following conclusions were derived:

1. Majority of the first-year tertiary student respondents belong to the College of Industrial Technology, followed by respondents from the College of Arts and Sciences, College of Engineering and College of Teacher Education, whose level of performance in the entrance examination is good.
2. The respondents' level of academic effort is high as well as their level of academic confidence.
3. The respondents' level of academic performance during their first year in the university is satisfactory.
4. Significant differences exist in the respondents' academic performance when grouped according to academic unit and entrance examination ratings while no significant differences were observed in their academic confidence and effort when grouped according to academic units and entrance examination ratings.
5. The respondents' levels of academic effort and confidence correlate significantly with their academic performance. Hence, the stated non-cognitive attributes are significant factors in having high academic performance.

RECOMMENDATIONS

With the above research findings, the following recommendations are offered:

1. Since the first year tertiary students are considered lifelong learners in the context of the K-12 curriculum, administrators and faculty members may consider developing learning resources which can improve their academic achievement.
2. The faculty members of the university may consider strategies like collaborative learning and kinesthetic activities which may offer opportunities to the students to acquire non-cognitive skills like academic effort, academic confidence, motivational behavior, leadership skills, psychomotor skills and social maturity among others which may serve as internal attributes that can help them improve their academic performance.
3. Subject teachers may use the data pertinent to the entrance examination ratings of the students as benchmark information in understanding abilities of the students and thereby in developing academic tools and instruments to address the learners' needs.
4. Other researchers may venture into other non-cognitive constructs like self-efficacy, attitude toward a subject, physical dynamics, social skills, and also cultural constructs and how they may possibly correlate with academic performance.

ACKNOWLEDGMENT

The researchers are indebted wholeheartedly and earnestly to the administration of the Nueva Vizcaya State University led by the university president, Dr. Andres Z. Taguiam; vice presidents, Dr. Wilfredo A. Dumale, Jr. (research, extension and training) Dr. Jocelyn P. Cabrera (academic affairs), and Dr. Araceli V. Domagas (administration and finance). Equal gratefulness is expressed for the inspiration given by Dr. Carlo F. Vadil, campus administrator of NVSU-Bambang campus, Dr. Elma P. Apostol, dean of the College of Teacher Education, and to all who directly and indirectly handed their great contributions for the success of this research undertaking.

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ENGLISH LANGUAGE AND CRITICAL THINKING SKILLS AS REQUISITES TO PROBLEM SOLVING IN A SOCIO- CULTURALLY DIVERSE MATHEMATICS LEARNING COMMUNITY

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ABSTRACT

This study determined primarily at correlating English language and thinking skills with problem solving skills, involved randomly selected teacher education students of a state university in Cagayan valley, specializing in mathematics who are females in majority; belonging mostly to families with monthly income between Php5,001-10,000; mostly in the second year college level; and affiliated with diverse cultural groups with Ilocano as the most dominant. The study employed the descriptive research design to properly characterize the English language, critical thinking and problem solving skills of the respondents. The correlational approach was used to divulge extent and significance of relationship between the dependent and independent variables of the study. The respondents registered a level of English language skills qualitatively categorized as advanced; critical thinking skills, low proficiency; and problem solving skills, high proficiency in a series of testing activities. Using 0.05 level, sex and ethnicity are socio-cultural constructs correlated significantly with English language skills while monthly family income and year level are otherwise. Further, selected socio-cultural constructs are not correlated significantly with critical thinking and problem solving skills. The level of the respondents' English language skills is significantly correlated with their problem solving skills while the level of respondents' critical thinking skills is otherwise. The results indicated better perspectives on learning diagnosis, pedagogy, integration and differentiated learning.

Keywords: Critical Thinking Skills, English Language Skills, Problem Solving Skills

INTRODUCTION

Mathematics as a subject could be made meaningful in the lives of every individual for it ascertains the learner's outlook in mathematics as a subject and how it is being applied. The learners may be taught mathematical skills in order to suit the technological and specific changes or advances that take place in the society. Mathematics education aims to help learners to be mathematically literate so that they may have the competence expected for intellectual participation in a society characterized by using technology. Some of the important skills to be developed in mathematics instruction are computation, logical reasoning and problem solving.

The effort to make problem solving activities in the mathematics classroom is enormous. Authentic learning, contextualization, bilingualism and integration, all components of outcomes-based education, are embraced to make mathematics learning more palatable. Placing integration at the focal point of strategizing for effective mathematics learning, the English language can be considered a tool for better academic performance in mathematics.

How much can language learning affect mathematics education which is deemed equally important? In the global learning community, English language skills have become essential to the learners as future members of the workforce and eventually become a part of the nation's success. Language is the primary

means with which people communicate and relate with each other (Richard & Renandya, 2003). It a formative force that serves as the conduit for learning new concepts and gaining knowledge. Identities, territories, personal and social spaces are determined by language. Although language is inherently local, it eventually becomes global.

The mathematics curriculum has a preparatory value because it prepares the learners from simple to more complex and sophisticated concepts in mathematics.

In another perspective, mathematical problem solving skills could be developed hand in hand with critical thinking which is an intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action. Further, problem solving is facilitated by critical thinking which is actually that mode of thinking - about any subject, content, or problem - in which the thinker improves the quality of his or her thinking by skilfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them.

It is in this light, the researchers embarked into this study which is a microcosm of learners coming from various social and cultural cohorts in southern Nueva Vizcaya. Problem solving in mathematics is the most weakness of the students, students do not understand well the problem, that's why the researchers want to know if the English language and critical thinking skills correlates significantly to problem solving skills and apply this to mathematics major students.

OBJECTIVES OF THE STUDY

In general, this study aimed at unveiling the correlation of English language and critical thinking skills with problem solving skills in the case of the mathematics major students under the secondary teacher education department of the College of Teacher Education, Nueva Vizcaya State University-Bambang Campus, SY 2015-2016.

Specifically, it aimed at systematically obtaining answers to the following research questions:

1. What is the socio-cultural profile of the mathematics major students of NVSU-Bambang in terms of sex, monthly family income, year level and cultural affiliation?
2. What is the level of respondents' English language, critical thinking and problem solving skills?
3. Do the socio-cultural constructs characterizing the respondents correlate significantly with their English language, critical thinking and problem solving skills?
4. Do the respondents' English language and critical thinking skills correlate significantly with their problem solving skills?

METHODOLOGY

The study employed the descriptive research method to properly characterize the English language, critical thinking (independent variables) and problem solving (dependent variable) skills of the respondents. The correlational approach was used to divulge extent and significance of relationship between the dependent and independent variables of the study.

The study which was conducted at the Nueva Vizcaya State University (NVSU)-Bambang under the College of Teacher Education, second semester of SY 2015-2016, involved 43 randomly selected respondents representing 87.76% of the enrolled Bachelor of Secondary Education (BSED) major in mathematics students of the said academic unit, satisfying the provisions of the Central Limit Theorem that 30 respondents could suffice a correlational study.

Socio-cultural data were collected through a personal data sheet and proficiency data were gathered from the respondents through a language proficiency test with parts categorized as correct usage, subject

-verb agreement, vocabulary, reading comprehension, listening comprehension and writing. On the other hand, critical thinking and problem solving skills were measured through examinations. The tests, which were expert validated was subjected to analysis of internal validity under the Classical Test Theory using the Kuder-Richardson Formula 20, or K-R20 (Culligan, 2016).

Statistical tools used to unveil answers to the research questions were means, percentages and Pearson product moment correlation coefficient (Pearson-r) using 0.05 level of significance.

FINDINGS

After carefully organizing the data collected relevant to the solutions of the foregoing research problems, the following results were disclosed.

Socio-cultural Profile of the Mathematics Major Students of NVSU-Bambang

The succeeding tables are presented to reveal the data collected referring to the socio-cultural constructs characterizing the mathematics major students NVSU-Bambang in terms of sex, monthly family income, year level and cultural affiliation.

In terms of sex as displayed in Table 1, females dominate the number of respondents. This is opposed to the common concept that mathematics is a male-dominated course. Increasingly, females have raised interest in mathematics which is the more challenging subject. Just in other areas of pedagogy like engineering, electronics and technology, the number of female students have expanded.

Table 1 Frequency and Percentage Distribution of Respondents in Terms of Sex

Variable	Frequency	Percentage
Male	14	32.56
Female	29	67.44
Total	43	100.00

Observing Table 2, majority of respondents belong to families with monthly income Php10,000 below. This means that most of the respondent's family were farmers, self-employed, and employed but with a minimal salary.

Table 2 Frequency and Percentage Distribution of Respondents in Terms of Monthly Family Income

Variable	Frequency	Percentage
20,001 pesos and above	2	4.65
15,001 to 20,000 pesos	2	4.65
10,001 to 15,000 pesos	7	16.28
5,001 to 10,000 pesos	18	41.86
= or < than 5,000 pesos	14	32.56
Total	43	100.00

Of the 43 selected respondents, most of them belong to the second year class. Most of the fourth year students were not included in the selection since they were already deployed for practice teaching during the second semester of SY 2015-2016. In particular, only 40.00% of the fourth year population were included in this study.

Table 3 Frequency and Percentage Distribution of Respondents in Terms of Year Level

Variable	Frequency	Percentage
Second Year	24	55.81
Third Year	15	34.88
Fourth Year	4	9.30
Total	43	100.00

Nueva Vizcaya State University is an intersection of various cultural groups primarily dominating the southern part of the province. Most of the of the mathematics student respondents are Ilocano and some other students belong to the Igorot, Bisaya, Isinai and Gaddang groups.

Table 4 Frequency and Percentage Distribution of Respondents in Terms of Cultural Affiliation

Variable	Frequency	Percentage
Ifugao	1	2.33
Tagalog	6	13.95
Ilocano	20	46.51
Others (Igorot, Bisaya, Isinai, Gaddang)	16	37.21
Total	43	100.00

It is in the sense that the respondents are diverse in the various socio-cultural constructs selected in this study, the mathematics learning community of the university can be considered or characterized to be a combination of various personalities needing a differentiated approach to optimize learning.

Level of Respondents’ English Language, Critical Thinking and Problem Solving Skills

To describe the respondents’ English language skills, a proficiency test was carried out. In summary, the respondents incurred an overall mean of 31.28/45 which is qualitatively categorized as advanced as indicated in Table 5.

Majority of them or 23 (53.49%), obtained scores between 27.43 – 36.23 while 10 or 23.26% garnered scores between 36.24 – 45.04 or expert in English language. In addition, 7 Or 16.28 % scored between 18-62 – 27.42 or competent and only 3 or 6.98% scored between 9.81 – 18.61 or developing while none of them was classified under beginner.

Table 5 Level of Respondents’ English Language Skills

Mean Scores	Frequency	Percentage	Verbal Description
36.24 – 45.04	10	23.26	Expert
27.43 – 36.23	23	53.49	Advanced
18.62 – 27.42	7	16.28	Competent
9.81 – 18.61	3	6.98	Developing
1.00 – 9.80	0	0.00	Beginner
Total	43	100.00	
Overall Mean		31.28	Advanced

The test measured competencies of the respondents along correct usage, subject-verb agreement, vocabulary and reading comprehension. Observing such language skills, they are more inclined to the grammatical competence of the students. Since the study is delimited to such areas of language learning, the results are not revealing of the communicative competence of the learners.

The notion of communicative competence is one of the theories that underlie the communicative approach to second language teaching. Canale and Swain (1980) defined communicative competence in terms of three components: grammatical competence- words and rules; sociolinguistic competence- appropriateness; strategic competence- appropriate use of communication strategies. Canale (1983) refined the above model, adding discourse competence: cohesion and coherence.

A more recent survey of communicative competence by Bachman (1990) divides it into the broad headings of organizational competence, which includes both grammatical and discourse (or textual) competence, and pragmatic competence, which includes both sociolinguistic and illocutionary competence. Strategic competence is associated with the interlocutors' ability in using communication strategies (Lin, 2008).

The respondents obtained a mean score of 8.16/15 in the critical thinking test as divulged in Table 6 which implies that they have competent in this area considered in this study. This value falls critically

between advanced and competent levels, hence, the finding suggests a typical performance of the respondents in critical thinking.

Majority of the respondents or 20 of them (46.51%) garnered mean scores between 9.40-12.19 or advanced.

Table 6 Level of Respondents' Critical Thinking Skills

Mean Scores 12.20 – 15.00	Frequency 0	Percentage 0.00	Verbal Description Expert
9.40 – 12.19	20	46.51	Advanced
6.60 – 9.39	13	30.23	Competent
3.80 – 6.59	9	20.93	Developing
1.00 – 3.79	1	2.33	Beginning
Total	43	100.00	
Overall Mean	8.16		Competent

The student respondents in this case registered a competent in transcending subject matter divisions like clarity, accuracy, precision, consistency, relevance, sound evidence, good reasons, depth, breadth, and fairness which are components of critical thinking (Lugapo, 2011).

Hence this finding is converse with the assertion of Morelock (2005) that problem solving is facilitated by critical thinking which is actually that mode of thinking - about any subject, content, or problem - in which the thinker improves the quality of his or her thinking by skillfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them.

Table 7 Level of Respondents' Problem Solving Skills

Mean Scores	Frequency	Percentage	Verbal Description
19.44 – 24.04	3	6.98	Expert
14.83 – 19.43	17	39.53	Advanced
10.22 – 14.82	18	41.86	Competent
5.61 – 10.21	5	11.63	Developing
1.00 – 5.60	0	0.00	Beginning
Total	43	100.00	
Overall Mean	12.88		Competent

Taking into light the problem solving skills of the respondents, an overall mean of 12.88/24 is computed to classify their skills along this domain under the competent level. The mean though falls critically between advanced and competent levels, thus, the mean suggests typical performance in problem solving.

This overall description is attributed to the distribution of the respondents in the various scales herein considered. Most of the respondents or 18 of them (41.86%) obtained scores between 10.22 – 14.82 or competent level. Nevertheless, 17 or (39.53%) attained scores between 14.83-19.43 qualitatively described as advanced.

Analysis of Correlation of Socio-cultural Constructs Characterizing the Respondents with their English Language, Critical Thinking and Problem Solving Skills

As part of the investigation, the socio-cultural constructs included in this study are subject to analysis whether they are contributory factors in the proficiency of the respondents in English language, critical thinking and problem solving skills.

As seen in table 8, only sex and ethnicity registered significant values at 0.05 level of significance with computed correlation coefficients of 0.312 (p=0.041) and 0.373 (p=0.014) respectively when correlated with English language skills. Therefore, the null hypotheses along this domains are corresponding-

ly rejected which implies that sex and ethnicity are socio-constructs correlated significantly with English language skills.

Table 8 Summary of Correlation of Socio-cultural Constructs with English Language, Critical Thinking and Problem Solving Skills

Variable	Stat	ELS	CTS	PSS
Sex	Pearson r	0.312	0.064	0.075
	p-value	0.041*	0.683	0.631
Monthly Family Income	Pearson r	0.065	0.069	0.234
	p-value	0.678	0.658	0.126
Year Level	Pearson r	0.108	0.065	0.008
	p-value	0.488	0.678	0.960
Ethnicity	Pearson r	0.373	0.101	0.153
	p-value	0.014*	0.519	0.327

Legend: ELS= English Language Skills; PSS= Problem Solving Skills; CTS= Critical Thinking Skills; *Significant at 0.05 level of significance

All other correlational procedures applied to socio-cultural constructs with critical thinking and problem solving skills yielded p-values greater than the level of significance set in this study. This implies that the null hypotheses along these domains are accepted accordingly, hence sex, monthly family income, year level and ethnicity are not correlated significantly with critical thinking and problem solving skills.

The significant finding along this research question is supported by Richards & Renandya (2003) who averred that the language classroom involves an encounter of identities and cultures, and it needs to be recognized that language learning requires the active participation of the whole learner.

In addition, the integration of new knowledge into the learner’s existing language system occurs with certainty only when the language is used spontaneously in a communicative/purposeful situation to express the learner’s own meaning. Such real communication however implies the engagement of genuine interest and will depend, in part at least, on the presence of a positive group dynamic in the classroom. The input from the materials provides linguistic and cultural preparation before, or in parallel with, the learner-generated language which is the ultimate goal of the learning process.

Analysis of Correlation of Respondents’ English Language and Critical Thinking Skills with their Problem Solving Skills

The main goal of this study is to ascertain correlation of English language and critical thinking skills with problem solving skills. To realize such, correlational procedures were performed and it was disclosed that significance in correlation exists between English language skills and problem solving skills with the computed Pearson-r value of 0.359 corresponding to 0.039 p-value which is less than the 0.05 level of significance as seen in Table 9. In this case, the null hypothesis is not accepted, hence there is a significant correlation between the two constructs.

Table 9 Summary of Correlation of English Language and Critical Thinking Skills with Problem Solving Skills

Variables	Correlation Coefficient	p-value	Remarks
ELS and PSS	0.359	0.039*	Significant
CTS and PSS	0.044	0.779	Not Significant

Legend: EP= English Language Skills; PSS= Problem Solving Skills; CTS= Critical Thinking Skills; *Significant at 0.05 level of significance

The result of this study runs parallel with the exposition of Lee-Chua (2000) that sometimes the problem concerns the relation of mathematics and language skills. Some learners have great difficulty in understanding the meaning of certain mathematical terms especially those with different definitions in everyday life; such as foot, difference, form.

On the contrary, the computed correlation coefficient in the analysis of relationship between critical thinking skills and problem solving skills is 0.044 with p-value of 0.779 which is greater than the 0.05 level of significance. This signifies that the null hypothesis under this domain is accepted. Hence there is no significant correlation between the said constructs.

The finding on the analysis of correlation between critical thinking and problem solving skills is opposed to the standpoint of Reisman (2002) who identified some genetic factors, cognitive, physical, social and emotional which have some impact on the students' learning subject. The learners' acquisition of mathematics ideas is affected by his ability to engage in abstract thinking, to use symbols and solve problems, which is basically one of the descriptors of critical thinking.

CONCLUSIONS

The results discussed in the foregoing section could be summarized through the following conclusions to specifically address the research questions:

As to the socio-cultural constructs, the respondents are females in majority; belonging mostly to families with monthly income between Php5,001-10,000; mostly in the second year college level; and affiliated with diverse cultural groups with Ilocano as the most dominant.

The respondents' level of English language skills is qualitatively categorized as high proficiency; critical thinking skills as low proficiency; and problem solving skills as high proficiency.

Sex and ethnicity are socio-cultural constructs correlated significantly with English language skills while monthly family income and year level are otherwise. Further, sex, monthly family income, year level and ethnicity are not correlated significantly with critical thinking and problem solving skills.

Finally, the level of the respondents' English language skills is significantly correlated with their problem solving skills while the level of respondents' critical thinking skills is otherwise.

RECOMMENDATIONS

In the light of the significant findings of this study, the following are recommended to advantage mathematics and language learners as well as other stakeholders of the educational institution:

Diagnosis. With the nature of the learner as center of the learning process, the language and math teacher deems right to design a learning procedure that best suits the complex personality factors that make up the total being of the students and that greatly define their learning scheme. After extracting the factors that comprise the totality of the learner's being, interactive and communicative approaches to learning can appropriately upgrade and hasten learning competencies.

Pedagogy. The learners may be thoroughly taught in the language subjects which eventually give them the mechanism to understand better other subjects like mathematics whose greatest challenge is reasoning and solving problems. Better facility of the English language capacitates the learners to analyze problems and eventually come up with an acceptable solution through which both language skills and problem solving skills are honed.

Integration. Topics taught by a teacher in a subject may not be exclusive. The mathematics as well as language classroom teachers may consider inclusion of other concepts taught in other subjects to better understand them through interplay with other disciplines hence learners may appreciate the realities of these concepts as they are used in various fields.

Differentiated Learning. While this study embarked on diverse learners of the Nueva Vizcaya State University, it is purposely designed to address differentiated learning. Various curricula dealt on homogeneity as solution to address the gap between the fast and slow learners or anyhow the learners may be categorized homogeneously, it is still recommended that heterogeneity may be considered as technique in teaching mathematics and language subjects. This may be employed in collaborative learning which may be a setting for slow learners to be influenced or inspired by fast learners.

Research. Language skills in this study covered correct usage, vocabulary and reading comprehension. Other language factors on communicative effectiveness such as speaking, spelling, linguistic and sociolinguistic competence, illocutionary skills, language learning strategies, discursal competence, writing, listening, speaking, presentation and viewing skills could be considered as independent variables to problem solving skills in future researches. These language factors may also be put into investigation if they are requisites to critical thinking skills.

ACKNOWLEDGMENT

The researchers are indebted wholeheartedly and earnestly to the administration of the Nueva Vizcaya State University led by the university president, Dr. Andres Z. Taguiam; vice presidents, Dr. Wilfredo A. Dumale, Jr. (research, extension and training) Dr. Jocelyn P. Cabrera (academic affairs), and Dr. Araceli V. Domagas (administration and finance). Equal gratefulness is expressed for the inspiration given by Dr. Carlo F. Vadil, campus administrator of NVSU-Bambang campus, Dr. Elma P. Apostol, dean of the College of Teacher Education, and to all who directly and indirectly handed their great contributions for the success of this research undertaking.

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PSYCHOSOCIAL CONSTRUCTS AFFECTING PROFICIENCY IN MATHEMATICS AMONG GRADE 12 STUDENTS OF SECONDARY SCHOOLS OF DUPAX DEL NORTE

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ABSTRACT

This study determined the level of help-seeking behavior, motivational behavior, attitudes toward mathematics, mathematics anxiety of the grade 12 students of six secondary schools of Dupax del Norte, Nueva Vizcaya, and how these constructs may be correlated with their Mathematics proficiency. This research study, which made use of descriptive method of research utilizing the techniques of questionnaire-checklist, was conducted at Dupax del Norte, Nueva Vizcaya. The research involved in particular 120 respondents who were randomly drawn from the six secondary schools in Dupax del Norte. Results showed that the respondents' perceived their psycho-social constructs were qualitatively describe as average or moderate, and respondents' level of proficiency in mathematics is fairly satisfactory. The psycho-social constructs of the respondents are very significantly correlated with each other. The respondents' psycho-social constructs are very significantly correlate with their proficiency in mathematics.

Keywords: proficiency in mathematics, psychosocial constructs, secondary schools

INTRODUCTION

In the educational system, to many people, school mathematics is virtually a phenomenon of nature. It seems timeless, set in stone art to change and perhaps not needing to change. But the school mathematics education of yesterday, which had a practical basis, is no longer viable. Rote learning of arithmetic procedures no longer has the clear value it once had. The widespread availability of technological tools for computation means that people are less dependent on their own powers of computation. At the same time, people are much more exposed to numbers and quantitative ideas and so need to deal with mathematics on a higher level than they did just 20 years ago.

The teaching and learning of mathematics in Philippine schools is in urgent need of improvement. The nation needs a mathematically literate citizenry. Improving proficiency in mathematics and eliminating the gaps in proficiency among social groups is and has been the goal of many public and private efforts over the past decade and a half. States and national professional organizations have developed standards for mathematics proficiency and assessments intended to measure the degree to which students attain such proficiency (National Center for Education Statistics, 2001).

Proficiency in teaching is related to effectiveness consistently helping students learn worthwhile mathematical content. Proficiency also entails versatility, being able to work effectively with a wide variety of students in different environments and across a range of mathematical content (Kilpatrick, & Swafford, 2001).

Many factors could possibly affect the mathematical proficiency of secondary students. These include the psycho-social constructs which are comprised of the help-seeking behavior of the students, motivational behavior, attitudes toward mathematics and mathematics anxiety which are included in this study.

This study therefore represents an initial effort in identifying the psycho-social constructs affecting the proficiency in Mathematics among grade 12 students in the secondary schools in Dupax del Norte. The researcher hopes that new insights particularly to the research environment may provide direction towards contributing to the enhancement of the psycho-social construct that affect the proficiency of the respondents in mathematics.

STATEMENT OF THE PROBLEM

This study aimed at determining the level of help-seeking behavior, motivational behavior, attitudes toward mathematics, mathematics anxiety of the grade 12 students of six secondary schools of Dupax del Norte, Nueva Vizcaya, and how these constructs may be correlated with their Mathematics proficiency.

Specifically, the study sought answers to the following research problems:

1. How do the grade 12 student-respondents in secondary schools in Dupax del Norte perceive their psycho-social constructs in terms of help-seeking behavior, motivational behavior, attitudes toward mathematics, and mathematics anxiety?
2. What is the respondents' level of proficiency in mathematics?
3. Do the psycho-social constructs of the respondents correlate significantly with each other?
4. Do the respondents' psycho-social constructs correlate significantly with their level of proficiency in mathematics?

METHODOLOGY

This research study, which made use of descriptive method of research utilizing the techniques of questionnaire-checklist, was conducted at Dupax del Norte, Nueva Vizcaya. The research involved in particular 120 respondents who were randomly drawn from the six secondary schools in Dupax del Norte. The respondents represented 58% of the total population. In order to gather the data needed in this study, validated questionnaires were prepared to obtain the perception of the respondents on their psycho-social constructs affecting proficiency in mathematics. To determine the level of proficiency in mathematics of the respondents, the achievement test in Mathematics 10 was used.

After retrieval of the research instruments, the proponent scored and tallied the gathered data, put them into matrix, and subjected these for statistical analysis and interpretation using frequency, percentage distribution, weighted mean, and Pearson Product-Moment correlation coefficient (r) using 0.05 level of significance.

FINDINGS

The following are the salient findings of the study.

Problem 1. How do the grade 12 student-respondents in secondary schools in Dupax del Norte perceive their psycho-social constructs in terms of help-seeking behavior, motivational behavior, attitudes toward mathematics, and mathematics anxiety?

Table 1 Summary of Respondents' Overall Mean Perceptions of their Psycho-social Constructs

Psycho-social Constructs	Overall Mean	Qualitative Description
Help-Seeking Behavior	2.77	Average
Motivational Behavior	3.12	Average
Attitudes toward Mathematics	3.23	Moderately Positive
Mathematics Anxiety	3.19	Average
Grand Mean	3.08	Average

In general, table 1 evaluated psycho-social constructs of the respondents showed the grand mean rate of 3.08 benchmarking the qualitative description of “average or moderate”. Hence, all indicators are being qualified the mid-rates, which can be further interpreted that the secondary student respondents of Dupax del Norte, Nueva Vizcaya are generally on a mediocre level when asked any of the said components of their psycho-social behaviors and attitudes, specifically along how they would regard Mathematics as a specialized body of knowledge.

With the spread of respondents’ rates in each of the said components, it can be seen that the most sporadic rates is observed along their motivational behavior and the most closely rates is set for their attitudes toward Mathematics.

Problem 2. What is the respondents’ level of proficiency in Mathematics?

As to the respondents’ level of proficiency in mathematics based on an administered 60-item achievement test in Mathematics among the target respondents, table 2 shows that the average performance of the respondents is at “fairly satisfactory” with the numerical equivalent of 75.12%. Thus, it can be interpreted that the proficiency in mathematics of the respondents is at exactly passing rate based on the revised 2015 K to 12 rubrics for qualifying performance among the learners.

Table 2 Respondents’ Level of Proficiency in Mathematics

Score	Frequency	Percentage	Level
90 – 100	9	5.29	Outstanding
85 – 89	16	9.41	Very Satisfactory
80 – 84	28	16.47	Satisfactory
75 – 79	41	24.12	Fairly Satisfactory
Below 75	76	44.71	Did not meet Expectations
Total	170	100.00	
Overall Mean	75.12		Fairly Satisfactory

Detailing the results of their proficiency in Mathematics, most of the student respondents have scored the lowest score range at below 75% (did not meet expectations) with the frequency of 76 or a percentage share of 44.17%; some scored at 75 – 79 (fairly satisfactory) with the total of 41 or 24.12% of the respondents; there are 28 or 16.47% of the respondents that scored at 80 – 84 (satisfactory); a total of 16 or 9.41 showing the score ranges from 85 to 89 (very satisfactory); and there are 9 or 5.29% who scored at the highest score range at 90 – 100 (outstanding).

The data would justify that there are only about 32% of the Grade 12 student respondents of Dupax del Norte, Nueva Vizcaya who have shown satisfactory or above in their Mathematics proficiency, which can be attributed to the identified psycho-social constructs being evaluated among these students.

Problem 3. Do the psycho-social constructs of the respondents correlate significantly with each other?

After running regression statistics for the data on the respondents’ level of psycho-social constructs along with the identified components on their help-seeking behavior, motivational behavior, attitudes toward mathematics, and mathematics anxiety, table 3 justifies that all areas of evaluation are very significantly correlated showing the p-value lower that the significance level of 0.05. Thus, the null hypothesis is rejected.

Table 3 Summary of the Interrelationship of the Respondents’ Psycho-social Constructs

Variables Interrelated	Correlation Coefficient	p-value	Remarks
Help-seeking Behavior versus Motivational Behavior	0.6767	0.0000	Very Significant
Help-seeking Behavior versus Attitudes toward Mathematics	0.5700	0.0000	Very Significant
Help-seeking Behavior versus Mathematics Anxiety	0.6372	0.0000	Very Significant
Motivational Behavior versus Attitudes toward Mathematics	0.7894	0.0000	Very Significant
Motivational Behavior versus Mathematics Anxiety	0.8374	0.0000	Very Significant
Attitudes toward Mathematics versus Mathematics Anxiety	0.9310	0.0000	Very Significant

In terms of their help-seeking behavior, this is being very significantly related on the other components of the respondents' psycho-social constructs with the following r -values: 0.6767 along motivational behavior; 0.5700 when correlated with their attitudes toward mathematics; and 0.6372 between the respondents' component on mathematics anxiety. Thus, this means that their help-seeking behavior can be greatly associated in any of the other indicators of the psycho-social constructs and vice versa. Still, this denotes that a higher or a lower level of help-seeking behavior would also determine if their motivational behavior, attitudes toward mathematics and mathematics anxiety are high or low correspondingly.

According to Puustinen et al. (2007) suggested that there are many elements such as the nature of help seeking, peers help, attitudes toward classroom environment, learning style and interaction between students and teachers that can affect students' help seeking." As academic help seeking behavior seems to be an important variable in classroom, the study of help seeking behaviors can lead to good suggestions for students' effective learning.

Also, their motivational behavior is also vitally linked with their attitudes toward Mathematics and Mathematics anxiety showing the computed r -value of 0.7984 with attitudes toward Mathematics; and 0.8374 with their Mathematics anxiety. Thus, this also justifies that their motivational behavior is a great indicator of their attitudes toward mathematics and mathematics anxiety or the other way around, which still further suggests that a higher or lower level of students' motivational behavior is directly equal to a high or low level of attitudes toward mathematics and mathematics anxiety toward the said subject.

Lastly, the respondents' attitudes toward mathematics showed a very strongly correlation with the mathematics anxiety with the computed r -value of 0.9310. This means that any of these psycho-social constructs may strongly indicate how student respondents would show their attitudes toward mathematics and/or how apprehended they are in this subject.

Problem 4. Do the respondents' psycho-social constructs correlate significantly with their level proficiency in Mathematics?

Table 4 gives information on the relationships of the respondents' proficiency in Mathematics and their evaluated psycho-social constructs. Based on the said table, all components of their psycho-social constructs are significantly correlated with their level of proficiency in Mathematics showing p -values in each areas of evaluation as 0.0000, which is very much lower than the significance level of 0.05. Thus, the null hypothesis is rejected.

Table 4 Summary of the Relationship of the Respondents' Psycho-social Constructs and Proficiency in Mathematics

Variables Related to Proficiency in Mathematics	Correlation Coefficient	p -value	Remarks
Help-Seeking Behavior	0.8033	0.0000	Very Significant
Motivational Behavior	0.7600	0.0000	Very Significant
Attitudes toward Mathematics	0.8093	0.0000	Very Significant
Mathematics Anxiety	0.8153	0.0000	Very Significant

Along with their help-seeking behavior, motivational behavior, attitudes toward mathematics, and mathematics anxiety the computed showed a very significant relationship as evidenced by the p -values of 0.0000 which is much lesser than 0.05 level of significance.

The findings in table 4 suggest that all components of their psycho-social constructs are vital indicators in determining their level of proficiency in mathematics. Thus, how they deal with such psycho-social constructs in studying their subjects in Mathematics would indicate how the students would gain score in a given Mathematics examination and/or problem solving task.

CONCLUSIONS

With the significant findings of the study, the researcher came up with the following conclusions:

1. The respondents' perceived their psycho-social constructs in terms of help-seeking behavior to be average; motivational behavior, average; attitudes toward mathematics, moderately positive; and mathematics anxiety, average.
2. The respondents' level of proficiency in mathematics is fairly satisfactory.
3. The psycho-social constructs of the respondents along help-seeking behavior, motivational behavior, attitudes toward mathematics and mathematics anxiety are very significantly correlated with each other.
4. The respondents' psycho-social constructs along help-seeking behavior, motivational behavior, attitudes toward mathematics and mathematics anxiety very significantly correlate with their proficiency in mathematics.

RECOMMENDATIONS

Embarking on the identified results of the study, the researcher finally recommends the following:

1. Through the findings of this research, teachers may include in their priorities the use of several strategies in teaching that involve the use of tasks which may address the learners' help-seeking behavior, motivational behavior, attitudes toward mathematics, and mathematics anxiety. They may include task-based drills in the class which may involve real life situations by localizing and contextualizing math concepts based on the students' learning environment. In this way, they may have greater participation among the students and consequently develop the students' proficiency in mathematics.
2. The study may also give valuable technique in identification of the learners' strengths and weaknesses in order to determine their skills and thus, improve the identified components of their psycho-social constructs and mathematics proficiency. Hence, this may increase the likeability of joining and actively participating in several edifying activities like games that shall develop confidence and interest in learning Mathematics.
3. The study also suggests the involvement of parents in the holistic development of their children by means of providing them with the materials tantamount in improving the pupils' selected psycho-social constructs and mathematical performance; and by constantly engaging to feedback processes embracing the learning endeavor of their children.
4. Secondary school administrators and supervisors may also promote teaching methodologies that may meet the fundamental learning needs of the students such as knowledge, values, and attitudes which are necessary in addressing their learning practices, motivation, attitude and interest in learning Mathematics, and their proficiency in mathematics.
5. Learners may also take their responsibility in their education. They may consider assessing their strengths and weaknesses in order for them to know what needs to be learned. This would help them improve their overall psycho-social constructs and will eventually lead to academic success.
6. Future researchers may include other components or indicators to substantiate the concepts of this study. They may also venture on the significant relationships of the selected research variables with the overall proficiency level of the students. Still, they may also consider a wider scope and different research setting as to validate and/or negate the findings herewith.

ACKNOWLEDGMENT

The researchers are indebted wholeheartedly and earnestly to the administration of the Nueva Vizcaya State University led by the university president, Dr. Andres Z. Taguiam; vice presidents, Dr. Wilfredo A. Dumale, Jr. (research, extension and training) Dr. Jocelyn P. Cabrera (academic affairs), and Dr. Araceli V. Domagas (administration and finance). Equal gratefulness is expressed for the inspiration

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