CROSS SECTIONAL ANALYSIS OF INFORMATION AND COMMUNICATIONS TECHNOLOGY TOWARDS ACHIEVING HOLISTIC STUDENT ACADEMIC PERFORMANCE

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ABSTRACT
From 2002 Basic Education Curriculum more than 2 decades ago, we are now in the last phase of the implementation of K to 12 program signed by Former President Benigno Aquino on May 15, 2013. The K to 12 program is designed to provide sufficient time for mastery of concepts and skills, develop lifelong learners and prepare graduates for tertiary education, middle level skills development, employment and entrepreneurship.

On this curriculum, the Department of Education strengthen the contextualization and enhancement in all subjects acquiring in-depth knowledge, skills, values and attitudes through continuity and consistency across all levels. (Deped, 2013). Grade 1 to 10 is a preparatory phase where learners are groomed to more advance level which is the Senior High School. Senior high school is two years of specialized upper secondary education which have different tracks and one of that is Technical Vocational Education.

It is a dilemma for the TLE teachers to prepared the students to senior phase with deficient of resources and facilities. Teachers do everything to provide the students with updated and substantial knowledge and skills for their readiness in the more advanced level in the fast pacing world of education. It is necessary to analyze the ICT skills of Grade 8 students of LPNHS Almanza so that the teachers can make strategic intervention to improve their academic performance.

KEYWORDS: K to 12, Academic Performance, Cross Sectional Analysis.

INTRODUCTION
Nowadays, Information and Communication plays a big role in our society but not only in our society but also in our education. It will be a great advantage to the ICT teacher since we are now living in tremendous technology. To add, as a part of K to 12 curriculum, students are required to enhanced their computer skills.

In this study, grade 8 students will undergo cross sectional analysis of their ICT skills which makes an impact to their academic performance. The researcher wanted to develop a strategic intervention to make students more competitive learners in terms of their craft.
PROBLEM RATIONALE
The following questions are asked to cross analyze the ICT skills of Grade 8 students of Las Piñas National High School Almanza:

1. What is level of ICT skills of grade 8 students in Las Piñas National High School Almanza?
2. Is there significant relationship between academic performance and the level of ICT skills of Grade 8 students in LPNHS Almanza?
3. What strategic intervention can be used to improved and enhanced the skills of Grade 8 students of LPNHS Almanza?

SIGNIFICANCE AND CONCEPT OF THE STUDY
The outcome of this will be beneficial to the following:

1. Students. The result of this study will let the students know how to manage and improve their ICT skills. This can also help them apply what they learn in their daily basis.
2. Teachers. This study will let the teachers to be aware of the most effective teaching strategies and give activities that are fitted in every learner.
3. Parents. As one of the stakeholders of education, it is necessary for them to be informed of the status of the ICT skills of their child so that they can give all the support, morally, physically, emotionally and financially.
4. Future Researchers. This study may serve as a guide while conducting studies.

RESEARCH METHODOLOGY
Locale and Respondents of the Study
This study is conducted inside the campus of Las Piñas National High School Almanza in Las Piñas City, Metro Manila, Philippines in the academic year 2019 – 2020. The respondents of this study are the 50 grade 8 students of the said school.

Research Design
In this study, the description method was used. This method is a fact – finding study with adequate and accurate interpretation of the findings. It describes with emphasis what actually exist such as prevailing conditions, practices, situations or phenomena (Dr. Rivas, 2016).

This research designed was deemed appropriate by the researcher, since the study was concerned to the Cross-Sectional Analysis of TLE ICT of LPNHS Almanza in relation to the academic performance. The questionnaire and written survey were used as research technique in gathering data.

Data Gathering Procedure
The researcher asked consent from the principal of the institution through a letter of request. The researcher conduct survey using survey questionnaires to the students of Grade 8 Bougainvillea of Las Piñas National High School Almanza. He also explained the purpose and beneficial of the research. The researcher made it clear how to answer the questionnaire. He administers and retrieve the questionnaire. Finally, the researcher tabulated the data for statistical and analysis of data.

**Research Instrument**
The researcher used an adapted questionnaire to analyze the ICT skills of Grade 8 students. He also consulted Dr. Rivas to examine the contents of the questionnaire for validity and reliability. The questionnaire determines the level of ICT skills of the respondents. The researcher will also get the 3rd Grading grade of the respondents to determine the significant relationship between their skills and academic grade.

**Data Analysis**
All the data gathered are tabulated and presented in a table. It used weighted mean and coefficient of correlation in the analysis and interpretation of data.

**RESULTS AND DISCUSSION**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Weighted Mean</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>1. Can you properly turn on and shut down a computer?</td>
<td>2.62</td>
<td>Moderately Skilled</td>
</tr>
<tr>
<td>2. Can you start and exit a computer program?</td>
<td>2.02</td>
<td>Fairly Skilled</td>
</tr>
<tr>
<td>3. Can you perform file management including deleting and renaming files, etc.?</td>
<td>2.32</td>
<td>Fairly Skilled</td>
</tr>
<tr>
<td>4. Can you resize a photograph?</td>
<td>1.32</td>
<td>Least Skilled</td>
</tr>
<tr>
<td>5. Can you create a basic Word document?</td>
<td>2.02</td>
<td>Fairly Skilled</td>
</tr>
<tr>
<td>6. Can you copy, cut and paste text in a document?</td>
<td>2.36</td>
<td>Fairly Skilled</td>
</tr>
<tr>
<td>7. Can you change font style and size in a document?</td>
<td>2.28</td>
<td>Fairly Skilled</td>
</tr>
<tr>
<td>8. Can you create a basic Excel spreadsheet?</td>
<td>1.24</td>
<td>Least Skilled</td>
</tr>
<tr>
<td>9. Can you create a simple presentation using PowerPoint?</td>
<td>1.26</td>
<td>Least Skilled</td>
</tr>
<tr>
<td>10. Can you create a simple Web page?</td>
<td>1.32</td>
<td>Least Skilled</td>
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</table>

Most of respondents got fairly and least skilled in their ICT skills. They got a least skilled in desktop
publishing programs like Office management.

<table>
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<tr>
<th>Regression Line</th>
<th>Coefficient of Correlation (R_p)</th>
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<tr>
<td>y = 17.36 + 2.86x (ICT Skills)</td>
<td>R = 0.36</td>
</tr>
</tbody>
</table>

As shown in the table above, the regression line, \( y = 17.36 + 2.86x \) (ICT Skills), we can predict that in every one unit in \( x \) (Applying skills), there is a corresponding 2.86 academic grade. Also, \( y \) intercept = 17.36 slopes = 2.86, this means if the ICT skills is 0 the academic grade is 17.36.

The Coefficient of Correlation (\( R_p \)) which is 0.36 denotes a very low relationship between \( x \) and \( y \). Therefore, the ICT skills do not influence the academic grade.

**INTERVENTIONS / RECOMMENDATIONS**

Based on the aforementioned findings and conclusion, the following are the recommendations hereby taken into consideration:

**Teachers**

Teachers’ activities should be based on real life situations. There must be an integration of their activities with what they possibly do for living. For example, if the lesson is about formula in excel, the application activity will be creating an automatic inventory worksheet. It also suggested to contextualized the ICT course outline.

**Administrator**

School administrators must see to it that there is enough seminars and workshops in ICT for teachers. It will be a great help especially for seasoned teachers that are struggling in using computers. They should assured the all teachers are up – to – date because we are already in the 21st century where Information and communication technology influences learning.

**Parents**

Parents and guardian should guide their children the proper usage of computers. It is a fact that computers can make our work easier and comfortable but we should not forget the addiction it may bring upon abusive usage of it.

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