

# Teachers' Level of ICT Skills and Their Perceptions of Integrating Information and Communication Technology (ICT) in Teaching

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*Abstract* — The aim of this study is to examine the level of "Teachers' Level of ICT Skills and Their Perceptions of Integrating Information and Communication Technology (ICT) in Teaching" at Dipolog Pilot Demonstration School. The study addresses the following research questions: (i) What is the level of teachers' ICT skills at DPDS in terms of Microsoft Word Processing, Microsoft Power Point Presentation, Microsoft Excel Spread, Microsoft Publisher Project, Basic Video Editing, Utilizing Online Education Resources, and Using Canva Application? (ii) What are the teachers' perceptions of ICT integration in teaching at Dipolog Pilot Demonstration School? (iii) Is there a significant difference between the teachers' level of ICT skills and their perceptions in ICT integration in teaching at Dipolog Pilot Demonstration School? The quantitative component of the research methodology will use a survey questionnaire to collect data from a sample of teachers. The questionnaire will measure the level of ICT skills, perceptions of the usefulness and importance of ICT in teaching, and current practices of integrating ICT in teaching. Descriptive and inferential statistics, specifically a t-test, will be used to analyze the data gathered from the survey. The t-test will compare the means of the two variables to determine if there is a significant difference between the teachers' level of ICT skills and their perceptions and practices of integrating ICT in teaching. The results of the t-test will be reported with the corresponding p-value and level of significance. The study found a negligible correlation between the two variables with a Pearson correlation coefficient ( $r$ ) of 0.198. The p-value was 0.670, which is greater than the alpha level of 0.05, indicating that the correlation is not statistically significant. Therefore, the null hypothesis ( $H_0$ ) that there is no significant relationship between the teachers' level of ICT skills and their perceptions in ICT integration in teaching is not rejected.

*Keywords* — *Teachers' Ict Skills; Ict Perceptions; Ict Integration; Ict Skills-Perception Relationship*

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## I. Introduction

In this 21st century, the term "technology" is an important issue in many fields including education. This is because technology has become the knowledge transfer highway in most countries. Technology integration nowadays has gone through innovations and transformed our societies that has totally changed the way people think, work and live (Grabe, 2007). As part of this, schools and other educational institutions which are supposed to prepare students to live in "a

knowledge society” need to consider ICT integration in their curriculum (Ghavifekr, Afshari & Amla Salleh, 2012).

With the increasing availability and affordability of information and communication technology (ICT), the integration of ICT in teaching has become an important topic in the field of education. In the Philippines, the Department of Education has recognized the potential of ICT to enhance teaching and learning and has included it as a key component of the K-12 curriculum.

In today's digital age, information and communication technology (ICT) has become an integral part of our daily lives, including in education. The integration of ICT in teaching has been shown to have numerous benefits, such as enhancing student engagement, promoting active learning, and facilitating personalized learning experiences. However, the successful integration of ICT in teaching depends on several factors, including teachers' perceptions of ICT integration.

As Information and Communication Technology (ICT) has become increasingly important in education and is seen as a way to enhance teaching and learning. However, integrating ICT in teaching is a complex process that involves more than just providing technology tools. Teachers' perceptions and play a critical role in the successful integration of ICT in teaching. This study is important because it provides insights into the level of ICT skills and perceptions of teachers in integrating ICT in teaching at Dipolog Pilot Demonstration School.

### **Research Studies**

Information and communication technology (ICT) is becoming the leading channel in transforming education all over the world. It helps the professional development of teachers at higher education levels. Online education is responsible for the dissemination of knowledge and information technologies. With the advent of ICT, teachers, students and institutions are prepared to meet the new challenges in the field of educational technology to produce skillful learners and accelerate learning.

Recognizing the importance of ICT in education, teachers play the role as a medium between the students with technology, as the driving force in creating an ICT literates society As educators in schools, it is necessary for teachers to prepare and update all the facts to be presented in subjects using ICT facilities available in schools.

The use of ICT in teaching and learning can make a subject as enjoyable event for all students, even the teacher themselves also gain experience and knowledge while interacting with students. The level of competence and knowledge of ICT skills among teachers is different in view of digital technology that exists is varied and wide scope. Some educators are quick to master the knowledge and technology skills that exist while there are also educators who are still trying to master the most basic technology such as email, students file management system, internet and office productivity software. Therefore, it is important for teachers to try to improve ICT knowledge and skills

A professionally competent teacher will face problems in ICT integration and thus will become the pressure for the teacher. At the same time, when they are capable of overcoming any complexities in ICT integration, it becomes a pleasure for them. This study also focused on teachers' skill at higher education levels according to the needs of qualified teachers who might serve both teaching experience based on ICT applications in the classroom from one side and practical issues inside the online environment from another and managerial purposes.

In line with the Jegede et al. (2007) study, Sa'ari, Wong, and Roslan (2005a) also found that teachers who demonstrated high level of competency in using computers find information systems to be more useful. These teachers approached the information system with greater confidence and displayed a lower level of anxiety and aversion to using it.

The integration of Information and Communication Technology (ICT) in teaching has been a topic of interest for researchers and educators in recent years. According to UNESCO (2013), ICT integration can support student learning, increase motivation and engagement, and provide opportunities for personalized learning experiences.

Several studies have focused on exploring teachers' perceptions and practices of ICT integration in teaching. According to the study by Teo (2011) found that teachers' beliefs and attitudes towards ICT, as well as their perceived barriers to integration, were important factors that influenced their actual use of ICT in teaching.

Another study by Ertmer (2005) emphasized the importance of teachers' ICT competency and their ability to effectively integrate ICT in their teaching practices. Additionally, several studies have highlighted the need for professional development programs to support teachers in integrating ICT in their teaching (Koh & Divaharan, 2011; Wang & Li, 2011).

### **Teachers' Belief on Technology-based Teaching and Learning**

With the development of learning technologies in the late 20th century, education system has changed rapidly. This is due to the capability of technology to provide a proactive, easy access and comprehensive teaching and learning environment. Nowadays, Department of Education in all over the world has provide a lot of facilities and training in order to enhance the use of advanced technologies in the countries' teaching and learning process. A high budget has been placed in order to provide the equipment needed by teachers to improve the education system. Despite all the efforts, most of the countries are facing similar problem whereby the teachers are not maximizing the usage of the technology provided (Albirini, 2006). This has become a serious matter as many previous researches have proven the usage of ICT in teaching and learning process could improve students' achievement (Nakayima, 2011, Jamieson-Proctor et al., 2013).

Many, researchers have taken an effort to analyze the factors that affecting teachers' acceptance of ICT usage in the classrooms (Capan, 2012; Virkus, 2008; Zhang, 2013; Dudeney,

2010). It shows that, the major barrier of the implementation was the teachers' belief as the teachers are the person who implements the change in their teaching and learning process.

Moreover, previous research (Cassim & Obono, 2011) shows that the correlation of teachers' belief and the use of ICT are high. Teachers' role is getting more important especially in usage of ICT in pedagogy which could increase the achievement of the students, their creativity and thinking skills.

Furthermore, a research by Chien, Wu and Hsu (2014) has shown that students in school are having high expectation on ICT integration in classroom as the new generation are born and grown with technologies and could be define as the digital – native phenomenon. The younger the students, the higher their expectation are on ICT integration in classroom. It also proved that the integration of ICT is mostly dependent on the personal factors which define as self-perceptions.

Results of a previous research (Cox & Marshall, 2007) shows that teachers only need a traditional – centered approach when developing ICT skills in the classroom. The teachers are having high confidence and competency in using ICT in classroom even though it does not represents the types of ICT used. This is because they believe that ICT is a tool could help in learning process especially to relate with real life practices. This factor has reform the teaching method to integrate ICT in order to create and construct knowledge for the students.

The research shows that the relationship between competency and confidence could reflect the balances between training and pedagogically focused approaches in ICT professional development. With this, the school management could make sure that there are sufficient supports for the teachers to integrate ICT in the classroom.

In some research, the teachers efficacy belief is depend on the school management and culture. Therefore, if the school has always implant the culture to change and teachers are always sent for training for upgrading themselves, and then the integration of ICT in classroom will be easier to be enhanced in the classroom.

### **The Impact of ICT Use on Teaching**

ICT within educations is increasing with the demands because of the political, social and economic conditions of a society. Therefore, ICT becomes an integrated system globally to speed up the knowledge and abilities of students. Teachers progressively increase information when the classroom environments are ready for ICT integration. (Law,2000). The classroom infrastructure, technical advancements, equipment and human resources such as teachers, technical administrators and end-users are the components of this system. Presentation in online teaching could be managed to get up-to-date knowledge and information that will refer to both teachers and students and could improve school management system instead of traditional teaching methods.

### **What Does Microsoft Office Mean?**

Microsoft Office is a suite of desktop productivity applications that is designed specifically by Microsoft for business use. It is a proprietary product of Microsoft Corporation and was first released in 1990. For decades, MS Office has been a dominant model in delivering modern office-related document-handling software environments.

The core components of Microsoft Office are the six items present in the original package, notwithstanding the later addition of services like One Drive and SharePoint and a web design tool called FrontPage.

The six core programs in Microsoft Office are:

- Word
- Excel
- PowerPoint
- Access
- Publisher
- OneNote

The Word, Excel and PowerPoint applications in Microsoft Office are familiar household names, even to people who are not familiar with the details of the Office suite's evolution. They are often used by a diverse user base, for example, college students, interns, or front line workers in IT. By contrast, someone may use Word, Excel and PowerPoint frequently, and rarely or never use Access, Publisher or OneNote.

### **What Education Do You Need to be a Video Editor?**

As with all digital arts, you technically don't need a formal education to get started. However, any successful artist has put in countless hours of practice to reach their potential. The time you need to spend training depends entirely on the quality of the information you

If you desire more efficient training, then attending a formal education program is a good place to start. A dedicated digital arts curriculum provides focused learning that can result in graduating in less than two years, and much less than the traditional four-year timeframe.

### **What is Canva used for?**

Canva is a powerful design tool that can be used in education to create projects that not only look great but also help teach students the basics of digital design. This is a free tool that

allows students and teachers to work with photo editing, design layout, and more, all within an easy-to-use platform.

Canva for Education is perfect for a teacher or educator who is switching to remote working or online classes, as well as those who want to strengthen classroom creativity. The main benefit is that educators —and all their students—can access this platform for free, with no limits on offerings or time. As a tool for teaching, it's also great at encouraging creativity, enhancing collaboration and streamlining work.

### **What is LRMS?**

The Learning Resources Management and Development System (LRMS) is designed to support increased distribution and access to learning, teaching and professional development resources at the Region, Division and School/Cluster levels of DepED. It is an online library of downloadable and free teaching and learning materials that are tied with the national curriculum to ensure relevance and appropriateness to the Filipino experience.

### **Action Research Questions**

This research aims investigate the Teachers' Level of ICT Skills and Their Perceptions of Integrating Information and Communication Technology (ICT) in Teaching." The study seeks to address the following three key questions:

1. What is the teachers' level of ICT skills in DPDS of in terms of:
  - 1.1 Basic of Microsoft Word Processing
  - 1.2 Basic of Microsoft Power point Presentation
  - 1.3 Basic of Microsoft Excel Spread
  - 1.4 Basic of Microsoft Publisher Project
  - 1.5 Basic Video Editing
  - 1.6 Utilizing Online Education Resources
  - 1.7 Using CANVA Application
2. What are the teacher's perceptions in ICT integration in teaching of Dipolog Pilot Demonstration School?
3. Is there a significant difference between the teachers' level of ICT skills and the teachers' perceptions in ICT integration in teaching of Dipolog Pilot Demonstration School?

## II. Methodology

The research methodology for the quantitative component of "Teachers' Level of ICT Skills and Their Perceptions of Integrating Information and Communication Technology (ICT) in Teaching" utilized a survey questionnaire to gather data from a sample of teachers. The survey questionnaire was used to measure the level of ICT skills, perceptions of the usefulness of ICT in teaching, and current practices of integrating ICT in teaching.

The data gathered from the survey were analyzed using descriptive statistics and inferential statistics, specifically a t-test, to identify if there was a significant difference between teachers' level of ICT skills and their perceptions and practices of integrating ICT in teaching. The t-test was used to compare the means of the two variables to determine if they were significantly different. The results of the t-test were reported with the corresponding p-value and level of significance.

### Sampling

In the study, the researcher used Raosoft sample size calculator to determine the possible number of respondents from a population of 105 teachers. As a result, approximately 87 teachers were selected to participate in the survey on "Teachers' Level of ICT Skills and Their Perceptions of Integrating Information and Communication Technology (ICT) in Teaching" at Dipolog Pilot Demonstration School.

The purpose of the study was to investigate the perceptions of integrating Information and Communication Technology (ICT) in teaching, as well as the level of ICT skills among teachers in the Pilot Demonstration School in Dipolog. 8

### Data Collection

The data collection for "Teachers' Level of ICT Skills and Their Perceptions of Integrating Information and Communication Technology (ICT) in Teaching" involved administering a survey questionnaire to a sample of teachers. The survey questionnaire was designed to measure teachers' level of ICT skills, their perceptions of the usefulness of ICT in teaching, and their current appreciation of integrating ICT in teaching.

The survey questionnaire was distributed to the selected teachers/respondents, and the data collected from the survey was stored securely and analyzed using appropriate statistical techniques. The results of the analysis were reported in a comprehensive manner to provide insights into the relationship between teachers' level of ICT skills and their perceptions and practices of integrating ICT in teaching.

## **Ethical Issues**

There are several ethical issues to consider when conducting research on "Teachers' Level of ICT Skills and Their Perceptions of Integrating Information and Communication Technology (ICT) in Teaching" in quantitative research ant to identify the significant difference between Teachers' Level of ICT Skills and Their Perceptions of Integrating Information and Communication Technology (ICT) in Teaching.

One major ethical issue is the need to obtain informed consent from the participants. The researchers must ensure that the participants are fully informed about the purpose of the study, the procedures involved, and their right to withdraw from the study at any time.

Another ethical issue is the need to protect the privacy and confidentiality of the participants. The researchers must ensure that the data collected from the participants is kept confidential and that it is not shared with anyone else without the participants' permission. The participants' anonymity must also be protected, and their names or any other identifying information should not be used in the reporting of the study.

It is also important to ensure that the research is conducted in an unbiased and fair manner, and that there is no discrimination against any group of participants. The researchers should avoid any potential harm to the participants, both physical and psychological, and ensure that their dignity and rights are respected throughout the research process.

Finally, the researchers must adhere to the relevant ethical guidelines and regulations governing research involving human subjects, such as obtaining ethical approval from an institutional review board or ethics committee. Failure to do so can have serious consequences for both the participants and the researchers.

## **Data Analysis**

The data collected for "Teachers' Level of ICT Skills and Their Perceptions of Integrating Information and Communication Technology (ICT) in Teaching" were analyzed using statistical tools to identify any significant difference between the two variables. Descriptive statistics such as means, standard deviations, and frequencies were used to summarize the data. The independent sample t-test was used to determine if there was a significant difference between the means of the two groups (teachers with high and low ICT skills) in terms of their perceptions of integrating ICT in teaching. Additionally, a correlation analysis was conducted to examine the relationship between the level of ICT skills and the perceptions of integrating ICT in teaching.



### III. Results and Discussion

This pertains to how the findings of the research are presented and discussed, based on the research problem. In this section, the researcher provides a detailed analysis of the data that was gathered during the study. The presentation of the data is arranged in a logical order that is aligned with the research questions, with the aim of answering them in a clear and concise manner.

**Table 1 Teachers' level of ICT skills in DPDS**

| ICT SKILLS                                     | Mean | Standard Deviation | Verbal Description |
|--|------|--------------------|--------------------|
| 1. Basic of Microsoft Word Processing          | 3.17 | 0.979              | Competent          |
| 2. Basic of Microsoft Power point Presentation | 2.83 | 1.056              | Competent          |
| 3. Basic of Microsoft Excel Spread             | 2.82 | 1.08               | Competent          |
| Basic of Microsoft Publisher Project           | 2.82 | 1.19               | Competent          |
| 5. Basic Video Editing                         | 2.83 | 1.31               | Competent          |
| 6. Utilizing Online Education Resources        | 2.83 | 1.26               | Competent          |
| 7. Using CANVA Application                     | 2.87 | 1.23               | Competent          |

**Legend:**

- 1.0 – 1.49 – Beginner
- 1.50 – 2.49 – Developing
- 2. 50 – 3.49 – Competent
- 3. 50 – 4.49 – Advance
- 4. 50 – 5. 0 – Expert

The table shows the level of ICT skills of teachers in DPDS, based on their mean scores and standard deviation for seven different skills. The verbal descriptions in the table indicate the level of proficiency for each skill.

According to the table, the teachers are competent in all the skills assessed, as all mean scores fall within the range of 2.50 to 3.49. The highest mean score is for "Basic of Microsoft Word Processing" (3.17), while the lowest mean score is for "Basic of Microsoft Power Point Presentation" (2.83).

The standard deviations for all skills are quite high, ranging from 0.979 to 1.31, indicating a wide range of scores among the teachers. This suggests that while the overall level of competence is good, there may be some variation in skill levels among individual teachers.

The table also suggested that the teachers in DPDS have a good level of ICT skills, which is an essential requirement for effective teaching in the digital age.

**Table 2 Teacher's perceptions in ICT integration in teaching**

| Indicators | Mean | Standard Deviation | Verbal Description |
|------------|------|--------------------|--------------------|
|------------|------|--------------------|--------------------|

|   |      |       |              |
|---|------|-------|--------------|
| 1. I feel confident learning new computer skills.                                     | 3.93 | 1.03  | Frequently   |
| 2. I find it easier to teach by using ICT   | 3.84 | 1.01  | Frequently   |
| 3. I am aware of the great opportunities that ICT offers for effective teaching.      | 3.78 | 0.985 | Frequently   |
| 4. I think that ICT supported teaching makes learning more effective.                 | 3.87 | 0.925 | Frequently   |
| 5. The use of ICT helps teachers to improve teaching with more updated materials.     | 3.99 | 1.14  | Frequently   |
| 6. I think the use of ICT improves the quality of teaching.                           | 3.99 | 1.03  | Frequently   |
| 7. I think the use of ICT helps to prepare teaching resources and materials.          | 3.83 | 1.03  | Frequently   |
| 8. The use of ICT enables the students' to be more active and engaging in the lesson. | 4.25 | 0.766 | Frequently   |
| 9. I have more time to cater to students' need if ICT is used in teaching.            | 3.26 | 0.952 | Occasionally |
| 10. I can still have an effective teaching without the use of ICT.                    | 3.61 | 0.932 | Frequently   |
| 11. I think the use of ICT in teaching is a waste of time.                            | 3.26 | 0.970 | Occasionally |
| 12. I am confident that my students' learn best without the help of ICT.              | 3.36 | 0.952 | Occasionally |
| 13. The classroom management is out of control if ICT is used in teaching.            | 4.41 | 0.724 | Frequently   |
| 14. Students' pay less attention when ICT is used in teaching.                        | 4.25 | 0.824 | Frequently   |
| 15. Students' makes no effort for their lesson if ICT is used in teaching.            | 4.20 | 0.662 | Frequently   |

**Legend:**

- 1.0 – 1.49 – Never
- 1.50 – 2.49 – Rarely
- 2.50 – 3.49 – Occasionally
- 3.50 – 4.49 – Frequently
- 4.50 – 5.0 – Always

The table presents the results of a survey on teachers' perceptions of ICT integration in teaching. The majority of the teachers surveyed felt confident about learning new computer skills (mean=3.93) and believed that the use of ICT in teaching improves the quality of teaching (mean=3.99). They also felt that the use of ICT can make teaching more effective (mean=3.87) and provide opportunities for more updated teaching materials (mean=3.99). Moreover, the use of ICT was perceived to be helpful in preparing teaching resources and materials (mean=3.83) and enabling students to be more active and engaged in the lesson (mean=4.25).

On the other hand, a minority of the teachers occasionally believed that they have more time to cater to students' needs without the use of ICT (mean=3.26) and thought that the use of

ICT in teaching is a waste of time (mean=3.26). They also occasionally felt confident that their students learn best without the help of ICT (mean=3.36).

Concerns related to classroom management and students' behavior were raised by some teachers, as they occasionally felt that classroom management becomes out of control if ICT is used in teaching (mean=4.41), students pay less attention when ICT is used in teaching (mean=4.25), and students make no effort for their lesson if ICT is used in teaching (mean=4.20).

The table also suggests that most of the surveyed teachers have a positive perception of the use of ICT in teaching, and they believe that it can enhance the quality of teaching and learning. However, some concerns related to classroom management and students' behavior need to be addressed to ensure effective ICT integration in teaching.

**Table 3 The Relationship Between Teachers' Level Of ICT Skills And Teachers' Perceptions In ICT Integration In Teaching**

| X Variable                    | Y variable  | r -value | Verbal Description     | P -value | Decision on HO |
|-------------------------------|---|----------|------------------------|----------|----------------|
| Teachers' level of ICT skills | Teachers' perceptions in ICT integration in teaching. | 0.198    | Negligible Correlation | 0.670    | Accept         |

\*Significant at 0.05 level of Significance

Table 3 shows the relationship between the teachers' level of ICT skills and teachers' perceptions in ICT integration in teaching. The Pearson correlation coefficient (r) between the two variables is 0.198, which indicates a negligible correlation between the variables. The p-value is 0.670, which is greater than the alpha level of 0.05, indicating that the correlation is not statistically significant. Therefore, we fail to reject the null hypothesis (HO) that there is no significant relationship between the teachers' level of ICT skills and their perceptions in ICT integration in teaching.

#### IV. Conclusion

The results suggest that there is no significant difference between teachers' ICT skills and their perceptions of ICT integration in teaching.

Overall, the study is important because it provides insights into the level of ICT skills and perceptions of teachers in integrating ICT in teaching at Dipolog Pilot Demonstration School. The findings suggest that while teachers may have varying levels of ICT skills, these skills do not necessarily translate to their perceptions of integrating ICT in teaching. The study highlights the need for further research and professional development opportunities to enhance teachers' ICT skills and promote effective integration of ICT in teaching.

## Action Plan

The dissemination and advocacy plan for "Teachers' Level of ICT Skills and Their Perceptions of Integrating Information and Communication Technology (ICT) in Teaching" will involve reaching out to various stakeholders in the education sector, including teachers, administrators, and researchers. The findings of the study will be presented during Learning Action Cell, and School – based INSET.

Advocacy efforts will focus on advocating for policies that support ICT integration in teaching and providing professional development opportunities for teachers to enhance their ICT skills.

Dissemination and advocacy plan will aim to promote the use of technology in education and improve the quality of teaching and learning.

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### **Financial Report**

The table manifested the cost estimates.

| <b>Relevant Expenses</b> | <b>Amount</b>      |
|--------------------------|--------------------|
| Internet Fees            | Php 1000.00        |
| Bond paper               | Php 600.00         |
| Printer Ink              | Php 1300.00        |
| Folders                  | Php 175.00         |
| Transportation           | Php 1500.00        |
| <b>TOTAL</b>             | <b>Php 4575.00</b> |

### Appendix A

SURVEY QUESTIONNAIRE ON "Teachers' Level of ICT Skills and Their Perceptions of Integrating Information and Communication Technology (ICT) in Teaching"

Name: (Optional) \_\_\_\_\_

#### PART I. ICT SKILLS

Read the statements carefully. Check the column that corresponds to your response

| ICT SKILLS                                     | 1<br>Beginner | 2<br>Developing | 3<br>Competent | 4<br>Advance | 5<br>Expert |
|--|---------------|-----------------|----------------|--------------|-------------|
| 1. Basic of Microsoft Word Processing          |               |                 |                |              |             |
| 2. Basic of Microsoft Power point Presentation |               |                 |                |              |             |
| 3. Basic of Microsoft Excel Spread             |               |                 |                |              |             |
| 4. Basic of Microsoft Publisher Project        |               |                 |                |              |             |
| 5. Basic Video Editing                         |               |                 |                |              |             |
| 6. Utilizing Online Education Resources        |               |                 |                |              |             |
| 7. Using CANVA Application                     |               |                 |                |              |             |

#### Part II. Teacher's perception of ICT integration in teaching

Please read each statement and check the appropriate box, indicating what you think is true for you.

| INDICATORS  | 5<br>Always | 4<br>Frequently | 3<br>Occasionally | 2<br>Rarely | 1<br>Never |
|---|-------------|-----------------|-------------------|-------------|------------|
| I feel confident learning new computer skills.                                    |             |                 |                   |             |            |
| 2. I find it easier to teach by using ICT   |             |                 |                   |             |            |
| 3. I am aware of the great opportunities that ICT offers for effective teaching.  |             |                 |                   |             |            |
| 4. I think that ICT supported teaching makes learning more effective.             |             |                 |                   |             |            |
| 5. The use of ICT helps teachers to improve teaching with more updated materials. |             |                 |                   |             |            |

|   |  |  |  |  |  |
|---|--|--|--|--|--|
| 6. I think the use of ICT improves the quality of teaching.                           |  |  |  |  |  |
| 7. I think the use of ICT helps to prepare teaching resources and materials.          |  |  |  |  |  |
| 8. The use of ICT enables the students' to be more active and engaging in the lesson. |  |  |  |  |  |
| 9. I have more time to cater to students' need if ICT is used in teaching.            |  |  |  |  |  |
| 10. I can still have an effective teaching without the use of ICT.                    |  |  |  |  |  |
| 11. I think the use of ICT in teaching is a waste of time.                            |  |  |  |  |  |
| 12. I am confident that my students' learn best without the help of ICT.              |  |  |  |  |  |
| 13. The classroom management is out of control if ICT is used in teaching.            |  |  |  |  |  |
| 14. Students' pay less attention when ICT is used in teaching.                        |  |  |  |  |  |
| 15. Students' makes no effort for their lesson if ICT is used in teaching.            |  |  |  |  |  |

*Adopted from:*  
*Teaching and Learning with Technology:*  
*Effectiveness of ICT Integration in Schools*  
*Simin Ghavifekr, Wan Athirah Wan Rosdy*  
*Faculty of Education drsimin@um.edu.m*

**Appendix B**
**Research Proposal Application Form and Endorsement of Immediate Supervisor**
**RESEARCH INFORMATION**

|   |  |
|---|--|
| <b>RESEARCH TITLE:</b><br>"Teachers' Level of ICT Skills and Their Perceptions of Integrating Information and Communication Technology (ICT) in Teaching"                             |  |
| <b>SHORT DESCRIPTION OF THE RESEARCH:</b><br>This study aimed to find out the teachers' level of ICT skills .   |  |
| <b>RESEARCH CATEGORY (check <u>only one</u>)</b><br>National<br>Region<br>Schools Division<br>District<br>School<br><br>(check <u>only one</u> )<br>Action Research<br>Basic Research | <b>RESEARCH AGENDA CATEGORY</b><br>(check only one main research theme)<br>Teaching and Learning<br>Child Protection<br>Human Resource Development<br>Governance<br>(check up to one cross-cutting theme, if applicable)<br>DRRM<br>Gender and Development<br>Inclusive Education<br>Others (please specify) |
| <b>FUND SOURCE (e.g. BERF, SEF, others)</b>   | <b>AMOUNT</b>  |
| Personal Funds  | P 4 575.00   |
| <b>TOTAL AMOUNT</b>   | <b>P4 575.00</b>   |

*\*indicate also if proponent will use personal funds*

**B. PROPONENT INFORMATION**
**LEAD PROPONENT/ INDIVIDUAL PROPONENT**

|  |   |   |
|--|---|---|
| <b>LAST NAME:</b><br>REGANON   | <b>FIRST NAME:</b><br>AILEEN            | <b>MIDDLE NAME:</b><br>BANAS                            |
| <b>BIRTHDATE</b><br>(MM/DD/YYYY):<br>09/17/1972  | <b>SEX:</b><br>FEMALE                   | <b>POSITION/DESIGNATION:</b><br>TEACHER III             |
| <b>REGION/DIVISION/SCHOOL (whichever is applicable)</b><br>DIPOLOG PILOT DEMONSTRATION SCHOOL, DIPOLOG CITY, REGION IX |   |   |
| <b>CONTACT NUMBER 1:</b><br>09469880899  | <b>CONTACT NUMBER 2:</b><br>09669259038 | <b>EMAIL ADDRESS:</b><br>aileen.reganon001@deped.gov.ph |