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Long Paper

Teachers' Preparedness and Acceptance of Information and Communications Technology (ICT) Integration and Its Effect on their ICT Integration Practices

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Abstract

Information and Communications Technology (ICT) brought a significant change in society, even in education. Most of the schools at present times are now incorporating ICT in the education process. To effectively integrate ICT in education, it is imperative to catechize and extrapolate the teacher's preparedness and acceptance of ICT integration in teaching. Hence, this research tries to look into a way to understand the correlation of teacher's preparedness and acceptance towards ICT integration and their ICT integration practices in private schools in the district of Obando, Bulacan, Philippines. Using a descriptive-correlation survey method, the researcher believes in finding a link between and among variables. The respondents of the study consist of seventy-two (72) private school teachers. Results revealed that teacher's possessed preparedness on ICT integration. Moreover, they accept the tenets and principles of ICT integration in teaching. Further, teachers are well-versed or highly practiced ICT integration in teaching. Results of the correlation substantiated that teacher's preparedness and acceptance in ICT integration correlated significantly with their ICT integration practices. It is recommended that more training and professional development programs should provide by the school for their teachers more prepared and equipped on the ICT integration in education and further unfold their ICT integration practices in teaching.

Keywords – Information and Communications Technology (ICT), Teachers, Preparedness, Acceptance, Integration

INTRODUCTION

The age of globalization and the advancement of Information and Communication Technology (ICT) such as technological devices like cellular phones, smart TVs, computers and laptops and the likes brought a significant change in all aspects or fields in the society. Relative to this, the development of digital technologies or ICT offers another avenue to improve society's quality, even in education. Because of this, a lot of researchers subjected ICT integration in teaching as the main concern of their investigation. Thus, the academic experts recommend infusing ICT into teaching because of its benefits and advantages in the learning process and its fastest growth in society. Many schools consider using ICT as one of the instructional materials and an asset to their school's innovation. The integration of ICT into education can effectively and efficiently see in all educational process dimensions including the necessary infrastructure, curriculum, and teaching-learning environments (Earle, 2002). Thus, ICT maintains its crucial role in improving education quality up to the present times (Summak, Baglibel & Samancioglu, 2010).

Integrating ICT into teaching and learning is a complex process that requires preparedness to make the learning more meaningful and fruitful. As illuminated by Ramirez-Montoya, Mena, and Rodriguez-Arroyo (2017), teachers' preparedness to use ICT in education effectively, together with their digital competence, becomes central and recognized as being a key element for the construction of useful pedagogical knowledge for practice, thus improving students' learning. On the other hand, teachers' acceptance of ICT in teaching also posited a large contribution to ICT integration in education. Wei et al. (2015) showed that Malaysian teachers have a high level of acceptance of ICT integration in teaching. Moreover, teachers' acceptance of technology integration in lessons and the use of innovative techniques to infuse 21st-century skills is vital to ensure the successful implementation of technology integration in the classroom (Pultoo et al., 2020).

Furthermore, the teachers viewed ICT preparedness as a constituent component of digital competence touching upon attitudes or dispositions. Instefjord and Munthe (2017) suggested that teachers' acceptance beliefs influence teachers' acceptance and attitude towards using ICT in education about the topic at stake, including their perceived preparedness. Also, Rokenes and Krumsvik (2016), in their findings, revealed that teacher's preparedness and digital technology integration in the classroom produced a significant correlation. Demirbilek (2009) reiterated that ICT integration would enhance and elevate the student's 21st-century skills, namely critical thinking and problem-solving skills, creativity, collaboration, and communication. Relative to this, Lux et al. (2017) expressed that the introduction of new curricula based on real-world problems brought by technology has provided scaffolding and tools to enhance learning, thus resulting in the unprecedented transformation of schools and classrooms. ICT acts as a catalyst that provides multidimensional ways of facilitating communication and interaction between teachers and students (Pultoo et al., 2020). The integration of ICT in the classroom will

help teachers create lessons that allow students to construct their knowledge and improve problem-solving skills through simulation, manipulation, mind-mapping, guided discovery, and creative expression (Eickelmann & Vennemann, 2017). As an agent of change and a facilitator of learning in the classroom, teachers must be prepared to accept the paradigm shift in learning and teaching because of technology integration (Avidov-Ungar & Shamir-Inbal, 2017). To sum up, to successfully attain ICT integration in education, all parties must cooperate and participate in infusing ICT in the teaching and learning process (Roblin et al., 2018; Hero, 2019).

Even though ICT integration in education shows potential and advantages in the learning process, still teacher's preparedness and acceptance, and also its implementation seems to develop slowly in attaining its goals in the education process. Still, many countries, especially those countries, belong to the third world, facing the same dilemma and problems in ICT in education. Chai et al. (2011) reported that teachers' preparedness and use of ICT infrequently and more for information transmission than the promising benefits mentioned above. ICT integration revealed barriers such as lack of access, resistance to change and its acceptance, lack of time and training, and technical assistance. More so, findings of Rolands (2010) showed that heavy workload, time-consuming, inadequate support, insufficient feedback, poor working conditions, and uncompensated work had decreased teachers' motivation towards integrating technology into the classroom. Accordingly, Turel and Johnson's findings (2012) revealed that technical problems could also become major barriers for teachers. These problems include low connectivity, virus attack, and equipment failure. Although technology can bring advancement especially in education, barriers, and hindrances in the teacher's preparedness and acceptance should be more addressed to attain ICT integration in the teaching-learning process successfully.

While the corona virus disease 2019 (COVID-19) hits more countries worldwide, it brought changes to society, most especially in education. In the Philippines, to continue the learners' education, the Department of Education (DepEd) encourages the teachers to fully maximize the utilization of ICT in teaching to keep the learner's safe from the threat of the virus. Thus, teachers are now at the height of accepting the changes already happening in the country. And since that there were no clear national vision or direction and no related national standards to meet in terms of ICT integration in teaching (Vergel de Dios, 2016), it is the intention of this study to evaluate and describe the teacher's preparedness and acceptance towards ICT integration and their ICT integration practices and to determine the correlation of teachers' preparedness and acceptance to their ICT integration practices. For the further enrichment of this study, the researcher seeks to raise management implications that may improve and enhance the ICT integration practices through their preparedness and acceptance towards it.

LITERATURE REVIEW

Teachers' Preparedness towards ICT Integration

Integrating Information and Communication Technology (ICT) into teaching and learning is a growing area that has attracted many educators' attention in recent years. As Qasem and Viswanathappa (2016) reported, teachers need to be involved in collaborative projects and development of intervention change strategies, including teaching ICT partnership as a tool. The findings show a significant difference in teacher perceptions towards integrating ICT, especially in the trained group through the blended learning approach. For the researchers to recommend that teachers are ready to use ICT, those Yemeni authorities in charge of education integrate ICT into programs for in-service teachers. Alsaleh, Anthony, and Hunter (2019) expressed that these pre-service Saudi teachers felt prepared regarding teaching methods and strategies but felt less prepared about other teaching aspects, such as classroom management, lesson preparation, and technology integration. This study's findings contribute to the current efforts towards improving teacher quality worldwide, including initial teacher education in Saudi Arabia. Summak, Baglibel, and Samancioglu (2010) concurred that teachers' overall technology preparedness level was moderate. More so, a significant difference between technology preparedness and gender; however, the researchers found out that technology preparedness was insignificant to age and subject area. Cheal, Geer, & White (2012) asserted that teachers had varying levels of experience that directly affected their ICT integration in the classroom. For them to suggest that teacher education courses should be more contextualized in an ICT integration approach so that it could be further developed to support their ICT integration in the classroom. Seemingly, Anderson & Maninger (2007) insinuated that the role of teacher education is to provide well-designed programs and proper training that can build a strong foundation and preparation on which teachers can demonstrate effective ICT integration.

Teachers' Acceptance of ICT Integration

The effective and correct use of technology in the lessons is related to special education professionals' qualifications in ICT supported education and ICT usage frequency in their classes and daily lives. Yeni & Gecu-Parmaksiz (2016) examined pre-service special education teachers' acceptance and usage frequency of technology in their classes and daily lives. This research analyzed the Technology Acceptance Model (TAM) to determine the factors that affect pre-service special education teachers' ICT acceptance and usage decisions. Based on their findings, special education teachers' perceptions of usefulness (PU) of ICT, as well as opinions of people (SN) they care about regarding the use of technology; shape their behavioral intentions (BI) towards ICT. Besides, opinions of people (SN) they care about regarding the use of technology predict their perceptions of usefulness (PU). Seemingly, Venkatesh et al. (2003) developed the Unified Theory of Acceptance and Use of Technology (UTAUT), which combines the findings of all the theories and models. They employed a comprehensive meta-analysis of

existing empirical studies to define a precise framework of independent constructs originating from the theories. The framework aims to explain and predict user behavior or monitor changes in the factors that affect technology use behavior through time. They identified four core constructs and four key moderators that significantly influence technology acceptance and use. Based on the model, performance expectancy, effort expectancy, social influence, and facilitating conditions are the core determinants of behavioral intention or use behavior on accepting the technology. As Graham, Stols, and Kapp (2020) reported using the four constructs of the UTAUT framework, results from structural equation modeling showed that three of the four constructs were statistically significant. This study showed why South African mathematics teachers integrate ICTs into their classrooms. Carlson and Gadio (2003) emphasized teachers' acceptance of technology is essential if technology provided to schools is to be used effectively. Besides, it would be a sheer waste of spending resources equipping schools with computer hardware and software without taking into account whether teachers' are comfortable using computers in schools. Alharbi and Drew (2014) made a study about using the technology acceptance model in understanding academics' behavioral intention to use learning management systems. They found out that there is a significant positive-moderate correlation between perceived ease of use of technology and attitude towards using learning management systems among teachers. The same observation was revealed by Fathema, Shannon, and Ross (2015) in the quantitative study they conducted on expanding the technology acceptance model to examine the faculty use of learning management systems in higher education institutions in the United States of America. Using structural equation modeling, their study proves that there is a strong positive correlation between the faculty's perceived ease of use of technology and their attitude towards technology.

Teacher's ICT Integration Practices

Daher, Baya'a, and Anabousy (2018) investigated the Mathematics teachers' ICT integration as an innovative practice. The research findings indicate that the participating in-service mathematics teachers' attitudes and beliefs regarding the benefits of ICT for mathematics teaching were positive at the beginning of the experiment and its end. Simultaneously, teachers' knowledge and experience of using ICT tools in mathematics teaching improved, which contributed positively to the confirmation of their decision to adopt these tools for their classrooms. The findings of Ahmed et al. (2019) also showed that the faculty members perceived a moderate degree of barriers preventing them from integrating ICT in the classroom. Moreover, no significant differences were found among the variables of gender and the year of experience. The ANOVA test indicated no significant differences among the four academic ranks: lecturer, assistant professor, associate professor, and professor on their beliefs on barriers to ICT integration. This result could be hypothetically attributed to the fact that the university provides learning resources for all faculty members, including software, hardware, internet connectivity, training and administrative, and technical support. A common belief is that the teacher-trainers should be able to effectively use ICT in the educational environment so that the

prospective teachers would also be able to integrate ICT in their educational settings by example (Mandell, Sorge, & Russell, 2002). Hsu (2016) expressed that the majority of the teachers held constructivist pedagogical beliefs about technology integration. Further, teachers who held constructivist pedagogical beliefs about technology use had a high self-efficacy belief about technology integration.

PURPOSE OF THE STUDY

This study examined the preparedness and acceptance level towards ICT integration of some private school teachers in the District of Obando, Bulacan, and by determining their ICT integration practices in teaching. This study thus describes the technological and pedagogical preparedness of private school teachers in technology-enhanced education. The results of this study could serve as a foundation in introducing, enhancing, and assessing school's development programs and training on innovation and instruction.

RESEARCH QUESTIONS

Specifically, the study sought to determine the following:

1. How may the teachers' preparedness towards ICT integration be described in terms of the following sub-constructs:
    - 1.1 ability in ICT;
    - 1.2 social influence;
    - 1.3 the intention of use;
    - 1.4 usefulness and efficiency;
    - 1.5 pedagogical potential;
    - 1.6 assistance awareness; and
    - 1.7 limitation awareness?
2. How may the level of teachers' acceptance of ICT integration in teaching be described in terms of the following indicators:
    - 2.1 performance expectancy;
    - 2.2 effort expectancy;
    - 2.3 social influence;
    - 2.4 facilitating conditions;
    - 2.5 hedonic motivation;
    - 2.6 price value; and
    - 2.7 habit?
3. How may the ICT integration practices of teachers be described in terms of the following domains:
    - 3.1 teaching tool, and
    - 3.2 learning tool?
4. Is there a significant correlation between teachers' preparedness towards ICT integration and their ICT integration practices?

5. Is there a significant correlation between teachers' acceptance of ICT integration and their ICT integration practices?
6. What management implications may be drawn based on the findings of the study?

RESEARCH HYPOTHESES

The following hypotheses were tested at a 0.05 significance level:

i. There is no significant relationship between teachers' preparedness towards ICT integration and their ICT integration practices.
ii. There is no significant relationship between teachers' acceptance of ICT integration and their ICT integration practices.

METHODOLOGY

This study employed descriptive-correlational design to determine the relationship of teachers' preparedness and acceptance towards ICT integration on teachers' ICT integration practices. A standardized questionnaire on teachers' preparedness for ICT integration and teachers' acceptance of ICT integration was adopted as the primary data gathering tools. A validated questionnaire for teachers' ICT integration practices was used for the study.

The respondents were 72 private school teachers in the District of Obando, Bulacan. The respondents of the study were chosen through a simple random sampling procedure since the researcher used a random selection of the given population with the most information on the characteristics of interest. Both the printed survey and Google forms were distributed.

To gather the data needed for this study, a standardized questionnaire was adopted and used. First, the teachers' preparedness in the technology survey scale had been used in the first part of the survey tool. The scale is a 35-item questionnaire that measures the teacher's preparedness in ICT integration. The researcher adopted the teachers' preparedness in technology integration from the study of Viberg et al. (2020). The first part of the questionnaire composed eight questions (The use of digital technology does not require me much effort; I find digital technology to use for purpose) for Ability to Use Digital Learning Technology; three questions (The conduit has, generally, supported me on the use digital technology; The school has supported me on the use ICT in education) for Social Influence and Support; four questions (I can plan to use ICT in the coming year; I believe that the availability of supply if ICT resources support their teaching) Intention of Use; nine questions (I found ICT is useful in my work; I found ICT increases teacher's productivity) for Usefulness and Efficiency; three questions (I am actively looking for digital technology that can be used to facilitate students' learning; I am aware of the possibilities and limitations of ICT in teaching and how may affect the pedagogical design) for Pedagogical Potential; five questions (I can find useful ICT tools that can be easily integrated in teaching; I have an access to the necessary resources to

be able to use) for Assistance Awareness; and three questions (I believe that there are limitations to what the available ICT tools can be used to teach certain areas; I believe that ICT can limit representations of knowledge content) for Limitation Awareness. Each item was rated using a five-point Likert Scale ranging from 1 (strongly disagree) to 5 (strongly agree). It was reliable as evidenced by the Cronbach's alpha for the seven sub-constructs in the scale ranging between 0.71 to 0.89.

The survey scale on Teachers' Level of Acceptance towards ICT integration, on the other hand, was used in the second part of the survey tool. The scale is a 25-item questionnaire that measures the teachers' level of acceptance of ICT integration. There are four indicators (I find ICT resources useful in daily life; Using ICT resources helps me accomplish things more quickly) for performance expectancy; four indicators (Learning how to use ICT resources is easy for me; My interaction with ICT resources is clear and understandable) for effort expectancy; three indicators (people who are important to me thinks that I should use ICT tools in teaching; People who influence my behavior thinks that I should use ICT tools in teaching) for social influence; four indicators (I have other related resources necessary to use; I can get help from others when I have difficulties using ICT tools) for facilitating conditions; three indicators (Using ICT tools and resources in teaching is fun; Using ICT tools in teaching is very entertaining) for hedonic motivation; three indicators (ICT tools and resources are reasonable priced; ICT tools and resources is a good value of money) for price value; and four indicators (The use of ICT tools and other related resources has become a habit for me; I am addicted in using ICT tools and other related resources) for habit.

Table 1 shows the distribution of indicators of teacher's acceptance towards ICT integration together with its number of questions, sources, and internal reliability. After the tool's validation, some indicators were modified as per recommendation by the field experts, who are district ICT coordinator in a public school, Master Teacher in TLE/ICT Department, and a school head. The respondents rated the survey-questionnaire using a five-point Likert Scale ranging from 1 (not accepted) to 5 (very highly accepted).

To determine the ICT integration practices of the teachers, the researcher devised a survey-questionnaire for ICT integration practices. The survey tool was patterned on Nueva's (2019) study and from the technology integration matrix of Florida's Center for Instructional Technology. Some indicators were modified as per recommendation by the field experts, who are district ICT coordinator in a public school, Master Teacher in TLE/ICT Department, and a school head, after its validation. The ICT integration practices questionnaire comprises of nine questions, five of which are for a teaching tool, and the remaining four are for learning tool.

Table 1. Distribution of Teachers' Acceptance of ICT Integration Indicators

Teachers; Acceptance towards Information and Communication Technology (ICT) Indicators	Sources	Internal reliability
1. Performance Expectancy	Venkatesh et al. (2003)	0.83
2. Effort Expectancy	Venkatesh et al. (2003)	0.82
3. Social Influence	Venkatesh et al. (2003)	0.86
4. Facilitating Conditions	Venkatesh et al. (2003)	0.79
5. Hedonic Motivation	Kim et al. (2005)	0.87
6. Price Value	Dodds et al. (1991)	0.77
7. Habit	Limayem and Hirt (2003)	0.87

The researcher tabulated and analyzed the data collected from the survey-questionnaire using both descriptive and inferential statistics. To analyze and interpret the data, the researcher used Statistical Packages for Social Sciences (SPSS) software version 23. The teachers' preparedness and acceptance towards ICT integration, as the study's independent variables, and teachers' ICT integration practices, as the study's dependent variable, were quantified using descriptive statistics such as weighted mean procedures. On the other hand, to determine the correlation between teachers' preparedness and acceptance towards ICT integration and their ICT integration practices, Pearson Product Moment Correlation (Pearson r) was utilized. Table 2 shows the scale for teachers' preparedness, acceptance towards ICT integration, and ICT Integration Practices.

Table 2. Likert Scale for Teachers' Preparedness, Acceptance towards ICT Integration and ICT Integration Practices

Rating Scale	Range	Interpretation		
		Teachers' Preparedness	Teachers' Acceptance	ICT Integration Practices
5	4.50-5.00	Strongly Agree	Fully Accepted	Very Highly Practiced
4	3.50-4.49	Agree	Accepted	Highly Practiced
3	2.50-3.49	Moderately Agree	Moderately Accepted	Moderately Practiced
2	1.50-2.49	Disagree	Least Accepted	Least Practiced
1	1.00-1.49	Strongly Disagree	None at all	Not Practiced

RESULTS

The use of ICT in teaching helps the teacher to make the learning process more meaningful and fruitful. Hence the following results show the teachers' preparedness, acceptance, and their ICT practices and the link between and among variables.

Table 3. Teachers' Preparedness towards Information and Communications Technology (ICT)

Teachers' Preparedness towards Information and Communication Technology (ICT)	Average	Interpretation	Rank
1. Intention of Use	3.78	Agree	1st
2. Assistance Awareness	3.74	Agree	2nd
3. Ability to use ICT	3.71	Agree	3rd
4. Pedagogical Potential	3.65	Agree	4th
5. Usefulness and Efficiency	3.63	Agree	5th
6. Limitation Awareness	3.60	Agree	6th
7. Social Influence and Support	3.52	Agree	7th
General Average	**3.66**	**Agree**	

Table 3 illuminates teacher's preparedness with regards to Information and Communications Technology (ICT) integration in teaching. In general, teachers describe their ICT preparedness in teaching as agree as evidenced by the general weighted mean value of 3.66. As to the seven sub-constructs of ICT preparedness, teachers agree on the ability to use ICT, social influence and support, the intention of use, usefulness, and efficiency, pedagogical potential, assistance awareness, and limitation awareness as shown by the weighted mean values of 3.78, 3.74, 3.71, 3.65, 3.63, 3.60, and 3.52 respectively.

As can be gleaned from the summary of the teacher's preparedness towards ICT integration in Table 3, it appears that intention of use recorded the highest weighted mean of 3.78, interpreted as agree. On the other hand, Social influence and support recorded the lowest weighted mean value of 3.52, but still interpreted as agree. It shows that teachers at present times are prepared to integrate ICT into their lesson planning, as well as, they can infuse it into their instruction, most especially at this academic year since, online distance learning is introduced as one of the modes of learning delivery this school year. The strong intention of teachers towards ICT integration in teaching proved that they are much prepared and ready to face the next face of the teaching profession with the touch of ICT integration. Seemingly, teachers find themselves prepared in ICT integration it's because their colleagues influenced them to integrate ICT into teaching. More so, the school supported the teachers to integrate ICT in teaching to make the learning process more meaningful and fruitful to the lives of the learners.

Table 4. Teachers' Acceptance of Information and Communications Technology (ICT)

Teachers' Acceptance of Information and Communication Technology (ICT)	Average	Interpretation	Rank
1. Price Value	3.81	Accepted	1st
2. Habit	3.62	Accepted	2nd
3. Facilitating Conditions	3.60	Accepted	3rd
4. Performance Expectancy	3.58	Accepted	4th
5. Effort Expectancy	3.56	Accepted	5th
6. Hedonic Motivation	3.54	Accepted	6th
7. Social Influence	3.53	Accepted	7th
General Average	**3.61**	**Accepted**	

Table 4 reiterates the level of acceptance of teachers with regards to Information and Communications Technology (ICT) integration in teaching. In general, teachers describe their acceptance of ICT integration in teaching as accepted as evidenced by the general weighted mean values of 3.61. Teachers exhibit an acceptance of ICT integration in teaching in terms of performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value, and habit as evidenced by general weighted mean values of 3.81, 3.62, 3.60, 3.58, 3.56, 3.54, and 3.53respectively.

As can be gleaned from the summary of the teacher's level of acceptance towards ICT integration average mean in Table 4, it appears that price value recorded the highest weighted mean of 3.81, interpreted as accepted among the seven indicators of the level of acceptance towards ICT integration. While, social influence recorded the lowest weighted mean value of 3.53, but still interpreted as accepted among the seven indicators. Since the ICT tools in teaching are affordable and reasonable prices, teachers easily accept the use of it in their teaching practices. Also, teachers find that ICT tools are a good investment as instructional tools since society is leading to Industrial Revolution 4.0 as ICT integration in many fields is highly recommended. Moreover, it sounds to be a good investment at the present times, since the new normal education has online distance learning as one of the modes of learning delivery during a pandemic. In the same context, since the majority of the people are now using ICT in a different field, this a factor to consider why the teachers in the present century need to infuse ICT in teaching, thinking that the current society that teachers belong is in a technological revolution and they should be updated especially on the current trends and changes in pedagogy and instruction.

Table 5 shows the Information and Communications Technology (ICT) integration practices of teachers. Teachers describe their ICT practices as highly practiced in teaching as evidenced by the general weighted mean value of 3.99. Teachers' ICT integration practice domains are described as highly practiced in terms of teaching tool and learning tool as shown by the weighted mean values of 4.02 and 3.97.

Table 5. Teachers' Information and Communications Technology (ICT) Practices

Teachers' Information and Communication Technology (ICT) Practices	Average	Interpretation	Rank
1. Teaching Tool	4.02	Highly Practiced	1st
2. Learning Tool	3.97	Highly Practiced	2nd
General Average	**3.99**	**Highly Practiced**	

As can be observed from the summary of the teacher's ICT integration practices average mean in Table 5, it appears that teaching tools recorded the highest general average mean of 4.02, interpreted as highly practiced on the two domains of ICT integration practices. This reflects that teachers are highly practiced or well-versed in presenting the software discussion to support the delivery of a lecture and directing the students to work alone on tasks involving technology. Moreover, using ICT, teachers easily disperse information, as well as, in assigning a work based activities from the predetermined curriculum unrelated to the students or issues beyond the instructional setting. It also gives the teachers on how he will thoroughly monitor his students' progress on every activity. The teachers set goals and standards in achieving the needed requirements and to attain the completion of the activities.

On the other hand, learning tools recorded a general weighted mean of 3.97, interpreted as highly practiced in ICT integration practices. The findings reveal that teacher are also highly practiced or well-versed when it comes to engaging students in educational activities where technology tool used to generate and accomplish the objectives and learning, encourage the students to use technology tools to collaborate with others, engage students to use technology to understand the content and add meaning to the learning and immerse students on the use of technology tools to solve real problems meaningful to them such as digital citizenship.

Table 6. Test of Significant Correlation between Teachers' Preparedness towards ICT and their ICT Integration Practices

Computed R-value	t-value	Critical t-value	Decision	Interpretation
0.77	6.61	0.2287	Reject the Null Hypothesis	Significant

$\alpha = 0.05$ d.f. = 70

Teachers' preparedness towards ICT integration and their ICT integration practices are the significant variables of the study. This study aimed to determine whether teacher's preparedness towards ICT integration correlated significantly to their ICT integration practices. The data collected were subjected to the Pearson Product Moment Correlation to determine the link between and among variables.

The result of Pearson's r analysis in Table 6 reveals that teachers' preparedness toward ICT integration is correlated to their ICT integration practices to a varying extent, as shown by the non-zero r- value. The nature of correlation is positive as can be gleaned from the r-value, which means that the better that the teacher is prepared in ICT integration in teaching, the better ICT integration practices may be perceived. Conversely, the lesser preparedness in ICT integration of teachers, it is expected that their ICT integration preparedness will also be lessened. The degree of magnitude of the correlation is high as can be gleaned from the r-value of 0.77. This means a high correlation between teacher's preparedness in ICT integration and their ICT integration practices.

The result of the analysis of the t-test for the significance of r reveals a computed t-value is equals to 6.61 at 0.05 alpha where d.f. is equals to 70; the critical t-value was registered at 0.2287. A comparison of the computed value and critical value reveals that the computed value exceeded the critical value, giving the researcher reasons to reject the null hypothesis. It may be safely concluded that there is a significant correlation between teachers' preparedness in ICT integration and their ICT integration practices.

Table 7. Test of Significant Correlation between Teachers' Acceptance towards ICT and their ICT Integration Practices

Computed R-value	**t-value**	**Critical t-value**	**Decision**	**Interpretation**
0.84	12.95	0.2287	Reject the Null Hypothesis	Significant
$\alpha = 0.05$	d.f. = 70			

Teacher's acceptance of ICT integration and their ICT integration practices are the major variables of the study. This study aimed to determine whether the teacher's acceptance of ICT integration correlated significantly to their ICT integration practices. The data collected were subjected to the Pearson Product Moment Correlation to determine the link between and among variables.

The result of Pearson's r analysis in Table 7 reveals that teachers' acceptance of ICT integration is correlated to their ICT integration practices to a varying extent, as shown by the non-zero r- value. The nature of correlation is positive as can be gleaned from the r-value, which means that the better the teacher accepts ICT integration in teaching, the better ICT integration practices may be perceived. Conversely, the lesser acceptance of ICT integration of teachers, it is expected that acceptance in ICT integration will also be lessened. The degree of magnitude of the correlation is high, as can be gleaned from the r-value of 0.84. This means a high correlation between the teacher's acceptance of ICT integration and their ICT integration practices.

The result of the analysis of the t-test for the significance of r reveals a computed t-value is equals to 12.95 at 0.05 alpha where d.f. is equals to 70; the critical t-value was registered at 0.2287. A comparison of the computed value and critical value reveals that the computed value exceeded the critical value, giving the researcher reasons to reject the null hypothesis. It may be safely concluded that there is a significant correlation between teachers' acceptance in ICT integration and their ICT integration practices.

DISCUSSION

In general, findings reflect that teachers are well-prepared regarding ICT integration for this academic year and the succeeding year. This is evidenced by their plans and positive responses and expressions in incorporating ICT into teaching and their desire to be more productive and innovative, especially at this moment where we, teachers, are experiencing challenges in teaching the learners in an online distance learning. Teachers openly accept the tenets and principles of ICT integration into teaching and because of its price value and habit, it becomes an avenue for them to accept and incorporate ICT into their daily teaching activities. ICT integration can give many benefits if teachers accept it with no doubt and hesitations. It is evidenced by their intention and proficiency in ICT integration. Furthermore, ICT integration practices provide a wide range of ideas on how teachers will become more innovative and updated in the current trends in pedagogy and instructions. Also, teachers show versatility and flexibility on how they will fully integrate ICT in their teaching practices and strategies. The findings truly reflect that teachers in 21st-century education are well-versed in how they will jive and cope with the changes in the educational paradigm. Thus, teachers can be considered as technologically savvy, as evidenced by how they practice and apply ICT in teaching.

The null hypothesis stated that there is no significant relationship between teacher's preparedness and acceptance towards ICT integration and their ICT integration practices that have been rejected. This implies that the teachers' readiness and preparedness show competence in how they fully integrate and infuse ICT in their teaching practices. Their preparedness truly signifies that teachers in the 21st century are flexible and versatile in new challenges and changes in the educational paradigm. On the other hand, it is easy for the school to attain high performance because teachers are performing very well and ready to use ICT anytime. Similarly, teachers accept the use of ICT in teaching, it may bring more positive results to their teaching practices. In the same manner, it is easy to integrate ICT into their teaching practices because they have an open mind and heart of accepting it in their everyday teaching. Truly, the result of the findings of the regression analysis strengthens the claims that teachers in the 21st century in which in return, accept things that may bring positivity and a fruitful outcome, especially in their teaching career. Relative to this, as Eickelmann and Vennemann (2017) pointed-out, integrating ICT in the classroom will help teachers create lessons that provide opportunities for students to construct their knowledge and improve problem-solving skills through simulation, manipulation, mind-mapping, guided discovery, and creative expression.

CONCLUSIONS AND RECOMMENDATIONS

This study concluded that teachers agree that they are prepared in integrating ICT into their teaching practices. Acceptance of ICT use in teaching shows that teachers in the 21st-century educatory are not afraid of innovations and trends in instructions. Seemingly, teachers highly practiced ICT integration in their daily teaching. The null hypothesis that there is no significant relationship between teacher's preparedness toward ICT integration and their ICT integration practices has been rejected. The null hypothesis that there is no significant relationship between teacher's acceptance towards ICT integration and their ICT integration practices has been rejected. The findings drew several implications that may help the teachers to be more prepared and accept ICT in their teaching career. Thus, the realization of programs, seminar-workshops, faculty development, and even coaching and mentoring on ICT integration may be an essential avenue for the teachers to be more prepared and ready up to the highest level of ICT integration in teaching.

It is recommended that teachers should be more prepared and aware of the social aspect and environment of ICT integration. To make this happen, the school should include this matter of interest in the in-service training program and faculty development programs especially in this academic year since blended learning and distance education was introduced. The school, for their benefits, should provide a timely series of webinars or training related to online distance learning education for the teacher to be more equipped about the application and integration of ICT in teaching. This study highly suggests that monthly sessions like school learning action cells should be conducted to assure the progress and development of teachers on ICT integration. A follow-up study should be conducted to determine further the development of teachers in ICT integration in teaching. Future researchers, who may be interested in the same parameter of the study, may undertake similar study utilizing other variables that are not included in the study like teaching styles and preferences, job satisfaction, level of commitment and abstraction, social awareness, and other related variables.

IMPLICATIONS

The followings were the management implications drawn based on the study's findings: the knowledge and preparedness of teachers with regards to ICT integration in teaching accounted to be an innovation in the education paradigm. Thus, the school, through its management, can assure that its faculty prepared to face the new normal setting of education. The acceptance of teachers toward ICT integration provides a good indication for the school to fully commence the use of online learning as an alternative mode of learning delivery especially in this academic year for them to survive the crisis that private schools are now dealing with. Thus, providing technological devices and mobile internet is one way for the teachers to embrace and utilize ICT in their teaching practices. The broad understanding of teachers regards to ICT integration helps the

institution to fully address the weakness of teaching during the teaching period. This study strongly suggests that preparedness and acceptance towards ICT integration can be supported by a faculty development plan that features: self-assessment on their ability to use ICT in teaching; the potentials of ICT in pedagogy; awareness on the assistance and limitation of ICT integration; and the contribution of the social environment in ICT integration and it may give an impact on the school's performance.

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