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UTILIZATION OF INFORMATION AND COMMUNICATION TECHNOLOGY IN THE DEVELOPMENT OF KINDERGARTEN LEARNERS UNDER THE NEW NORMAL

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ABSTRACT

The study determined the utilization of Information Communication Technology in the Development of Kindergarten Learning during this new normal. As we are all experiencing this pandemic, it dramatically affects the educational system wherein face-to-face became forbidden and online classes became the alternative way to continue the learning process. There are five utilization of ICT focused in this study: Language arts, Numeracy, Science, Music and arts, and social skills. 1-4 Likert scale questionnaires were used to gather the data needed. A total of 80 respondents, 50 parents and 30 teachers were selected to answer the questionnaire in this descriptive type of research. Weighted mean, frequency count, percentage and Z-Test were among the tools utilized in analyzing the gathered data. The study found that utilization of ICT was very useful ranging 3.25-4.00. Correlational analysis showed that learners can develop their competencies or domain without the utilization of ICT. To improve the utilization of ICT during this pandemic it is important to strengthen the practices of teachers as well as the parents.

KEYWORDS: ***development, information communication technology, kindergarten, learners, new normal, utilization***

INTRODUCTION

Information and communication technology or ICT plays a significant role in the young generation's education. Indeed, ICT has become one of the most dominant tool in the area of education. ICT has become one of the basic building blocks of modern society in such a short time due to the unprecedented onslaught of the pandemic. It has brought many countries in apprehension as educators need to master the necessary skills and concepts of ICT as part of the core of education, alongside reading, writing, and numeracy. Education's function is to preserve and provide for change. It must maintain the values, beliefs, and customs yet must also be ready for a change. ICT contributes to that change, specifically in early childhood education.

Early childhood education is, thus, a critical stage of development because the culmination of learning for one generation is embodied at the beginning of one's lifetime. After all, children are the common basis for all sustainable development dimensions that will occur in the coming decades. Early childhood foundations are laid down as the functioning and brain development subsequently lead to lifelong development in which the child is at the stage of vulnerability and sensitivity to external influence. Early exposure of a child to technology may lead to better experience and will help in the development of learning. As modern society brings more opportunity, technology allows children to quickly adapt to multiple learning styles and provides the flexibility of schedule to meet today'learners' various needs. According to Hatzigianni and Margetts (2012), ICT presents a new space for exploration and discovery to young children, offers challenging activities and responds to children's curiosity. On the other hand, some scholars argued that ICT use leads to a lack of exercise, isolated lives, low concentration, impaired language development. This idea has been debated, but ICT proves its most useful way as this pandemic hits the world wherein ICT is used to its fullest to cope up with the "new normal".

The world was caught in a frenzy as this novel coronavirus spreads and brings fear and apprehension to everyone regardless of any status in life. Everything turns out to be a new experience, and one of the most affected is the educational system. The New Normal is the term that has been used in since the onset of this pandemic. Thesaurus dictionary defined new normal as "the current situation, social custom, etc., which is different from what has been experienced or done before but is expected to become usual or typical". ICT then, has a big role in making the learning process continue despite the challenges of this new normal.

This study aims to find out the development of young children learning by utilizing ICT, and how the processes of learning are realized during this new normal.

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Theoretical Framework

Information and communications technology (ICT) refers to all technology used to handle telecommunications, broadcast media, intelligent building management systems, audiovisual processing, and transmission systems, and network-based control and monitoring functions. Although ICT is often considered an extended synonym for information technology (IT), its scope is broader. Hence, information and communication in education are extending its capacity for the development of children. This study is anchored on the theory of Constructionism which asserts that computers are powerful educational technologies when used as tools for supporting the design, construction, and programming projects. Papert's 'constructionism' sheds light on how people's ideas get formed and transformed when expressed through different media, when actualized in particular contexts, when worked out by individual minds. The emphasis has shifted from general laws of development to individuals' conversation with their own representations, artifacts, or objects-to-think with." (Ackerman, 2004).

Statement of the Problem

This study, entitled " Utilization of Information and Communication Technology to the Development of Kindergarten Learners Under New Normal," aimed to figure out the use of ICT on child's education during the Covid-19 pandemic.

Specifically, it sought to find answers to the following questions:

1. What devices, internet connections and modalities do pupils use at home for on-line learning, specifically the:
   1.1. Electronic device,
   1.2. Wi-Fi Connection, and
   1.3. Modalities for teaching and learning?
2. How may the use of ICT learning be described in the following areas:
   2.1. Language Arts,
   2.2. Numeracy,
   2.3. Science,
   2.4. Music and Arts, and
   2.5. Social skills
3. How may the development of the children be described using the technology?
4. Is there a significant relationship between the use of gadgets and internet access use at home to the utilization of ICT and to the development of the learners?

Null Hypothesis

The following were the null hypotheses :

1. There are no significant differences between the use of gadgets and internet connections at home to the development of different learning areas among young children.

RESEARCH METHODS

Research Design

This study used the descriptive-correlational research method among parents and teachers of Kindergarten Learners at public schools in Zaragoza, Nueva Ecija. Purposive sampling was employed to get the needed data relevant to the research problem. Creswell (2002) defined correlation as a statistical test to establish patterns in the relationship of the variables under study.

Quantitative research was also used to get the data needed specifically on how technology is being used by children at home. This is defined as a systematic investigation of phenomena by gathering quantifiable data and performing statistical, mathematical, or computational techniques. Quantitative research collects information from existing and potential customers using sampling methods and sending out online surveys, online polls, questionnaires, etc. The results can be depicted in the form of numerical. After careful understanding of these numbers to predict a product or service's future and make changes accordingly.

Research Locale and Sampling Procedure

This study was be conducted in public schools in the municipality of Zaragoza. The respondents were selected teachers and parents of Kindergarten learners composed of fifty (50) parents and thirty (30) public school Kindergarten teachers. The respondents were from different public schools of School Division Office of Zaragoza Annex.

To determine the sample size required by the study, the researcher used the purposive sampling technique. The researcher selected the respondents of this study to determine the use of ICT on child's education amidst new normal.

Research Instrument

The researcher used the following instrument and techniques in gathering data:

1. Documentary analysis. The researchers reviewed different related literature and studies.

2. Questionnaire-Checklist. The questionnaire has four parts, the first part queried on the profile of the respondents such as age, sex, civil status, educational attainment and relationship with the children. The second part is the gadgets and internet access use in online classes and distance learning experiences, the third part is the evaluation of utilization of ICT in different learning areas in Kindergarten and the last part is the open-ended questions.

Best practices can be acquired from utilization of ICT in learning different areas in Kindergarten based on the findings of the study. As to validity of the researcher-made questionnaire, the researcher drafted the questionnaire, and was shown to her research adviser and members of the panel for review. After which it was tested to a different sample or group so that vague questions can be deleted, or revised. Then, the questionnaire was revised again and finalized, with corrections incorporated. Then, upon final approval it was administered to the respondents of the study.

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The questionnaire-checklist was be rated using four point scale where, 4 Very Useful 3 Useful, 2 little of use, and 1 means No use at all.

3. Interview. The researcher also conducted interviews to some parents and teachers to validate the findings of the study .

Data Gathering Procedure

Before the distribution of the questionnaire, the researcher requested permission from the principals of the public schools concerned. Upon approval, the researcher requested the assistance of the respective advisers to distribute the questionnaires to the parent respondents.The advisers virtually or personally guided the parent respondents in answering the questionnaire. The researcher discussed the title and the purpose of the study, and the procedure on how to answer the questionnaire. After gathering all the questionnaire, the researcher tallied the answers for statistical treatment.

Data Analysis

The data gathered were analyzed using the following:

1. Frequency and percentage distribution and rank to present and analyze the profile of the respondents.

2. Weighted Mean was utilized to analyze and assess the progress of the respondents in playing the string instruments. The formula used was:

The scales below were used to verbally interpret the degree of the responses to evaluate the modalities used by the respondents.

Range	Verbal Interpretation
3.25-4.00	Always
2.50-3.24	Often
1.75-2.49	Seldom
1.00-1.74	Never

The scales below were used to verbally interpret the degree of the responses to evaluate the utilization of ICT in different learning areas in Kindergarten.

Range	Verbal Interpretation
3.25-4.00	Very Useful
2.50-3.24	Useful
1.75-2.49	Little of Use
1.00-1.74	No use at all

Z -Test will be employed to compare the assessment of the parents and teachers and to yest the significant differences.

A narrative analysis was also done to the open-ended answers of the respondents.

RESULTS AND DISCUSSION

I.A Gadgets/Devices and Internet Connection Pupils Used at Home for On-Line Learning

Gadgets/Devices used at home

Table below presents the gadgets being used by learners at home. where 46 or 57.50 percent used smart phone while 1 or 1.25 percent used desktop as a gadget used at home. It shows that smartphone plays a big role in the education of young children to reach out also with their teachers and to their lessons. Graddol as cited insalmah 2016 commented that "technology lies at the heart of the globalization process, affecting work, education and culture". With the wide spread presence of phones, computers and mobile devices now affordable in our pockets, it becomes very easy to connect to a variety of information sources and communicate with any one in any place everywhere we go. Today, we are dealing with a new generation of technology.

Wi-Fi Connection being used

As can be seen from the table, 35 or 43.75 percent used Wireless connection and 22 or 27.50 percent used data as Wi-Fi Connection. Internet or Wi-Fi connection is the greatest gift of technology which has made life easier. It is not the only fastest mode of providing information but today it is serving us in various ways. One of the biggest benefits that internet users enjoy is communication; people living in different parts of the world can communicate with each other through the internet. Equipped with most modern interactive tools like emails, chats, SMS, voice SMS, internet provides fastest and most hassle-free communication (Nkum,2011). In the open-ended question, the parents and teachers were asked about the challenges they have met using on-line classes:

The most common challenges that the respondents met using online class are the stability of the internet. Some of them experienced poor/slow internet connectivity or having trouble with the signal which leads them to miscommunication. Children also quickly get distracted, and they say that online class sometimes consume most of their time.

With this, the learners at home need a good WIFI connection in order to learn and communicate with the teachers and other kids. When some of them use data which has a very limited capacity to be useful and to connect, then limitations and problems on connectivity are being experienced by the learners.

Kind of bandwidth/speed

The table shows the kind of bandwidth/speed reveals that majority of the respondents with 50 or 62.50 percent who

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used 10mbps while 14 or 17.50 percent used 30 to 50 mbps. According to Rainie (2010) today's online education has noticeably improved. With faster connection speeds, more classes can be offered online by postsecondary institutions, and more students can participate in online learning.

Internet/Wifi Connection being Used at Home

Table below shows that 45 or 56.25% of the total population used Limited internet/Wi-Fi connection while 35 or 43.75% used unlimited internet/Wi-Fi connection at home.

Online Platform being Used

The proceeding data shows the most common online platform used were 34 or 42.50% of the total population used Google Meet while 17 or 21.25% used Zoom Meting as online platform. According to Rosen and Beck-Hill (2012) reported on a study programme that incorporated an interactive core curriculum and a digital teaching platform. The online platform contained teaching and learning tools.

Most common way to communication

Data on above table indicates that majority of the respondents with 74 or 92.50% used Messenger as common way to communication while 1 or 1.25% used Text Messaging. Technological advancements in education have easily and quickly connect with their family and friends inside and outside the country. This quick and easy way of communication has accelerated the demand for the latest mobile gadgets multiple purposes uses like voice calls, texting, chatting, web browsing, multimedia, emails and more platform that can beuse in communication. Peter (as cited in Nashwa 2015) stated that the mobility of these devices enables learning both in formal and non-formal settings as we do not need fixed locations for study, and consequently our way of learning becomes different.

Table 2-A Gadgets and Internet Access Use

Gadgets	f	%
Smart Phone	46	57.50
Tablet	30	37.50
Laptop	3	3.75
Desktop	1	1.25
Total	**80**	**100%**

Table 7 Wi-Fi Connection being used

Wi-Fi Connection	f	%
Wireless	35	43.75
Fiber optics	23	28.75
Data	22	27.50
Total	**80**	**100**

Kind of bandwidth/speed

Bandwidth/speed	f	%
10 mbps	50	62.50
20 mbps	16	20.00
30 to 50 mbps	14	17.50
Total	**80**	**100.00**

Internet/Wifi Connection being Used at Home

Internet/Wifi Connection	f	%
Unlimited	35	43.75
Limited	45	56.25
Total	**80**	**100.00**

Online Platform being used

Online Platform	f	%
Zoom Meeting	17	21.25
Google Meet	34	42.50
Video Call	29	36.25
Total	**80**	**100.00**

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Most common way to communication

Common way to communication	f	%
Messenger	74	92.50
Text Messaging	1	1.25
E-mails	5	6.25
Total	**80**	**100**

I-B. Common Modalities Used in Teaching-Learning

Modalities scale as shown on Table 3 reveals that the statement *"Use of printed modules"* reflected the highest mean of 3.81 with a verbal description of Always. While the statement *"On-line meeting"* accumulated the lowest mean of 2.85 which had a verbal description of Often. The use of a module presents a more flexible learning environment for both instructors and learners, Cheng and Abu Bakar (2017). This means that the teachers during this New Normal were printing the modules coming from the DepEd, having been distributed to be answered by the children through the help of their parents, and their parents have to submit the modules to the teachers for evaluation. One thing more, the teachers and parents were taking and uploading pictures as evidences of learning using their smartphones and can be easily uploaded through messenger. Aside from the modules and pictures, it also revealed that teachers were preparing pre-recorded lessons that can be watched by the pupils with their parents, they also used educational applications that are appropriate for kindergarten children and do on-line meeting as well to have interaction with the kids while they are at home.

Table 2-B Modalities Used

	Statement	Mean	*VD*
1	Watch pre-recorded lessons in YouTube	3.09	Often
2	Use of printed modules	3.81	Always
3	Use educational apps in learning	3.14	Often
4	On- line meeting	2.85	Often
5	Taking and uploading pictures	3.44	Always
6	Recording videos for tasks making	3.16	Often
	Weighted Mean	3.25	Always

Legend: 3.25-4.00 – Always 2.50- 3.24- Often 1.75-2.49- Seldom 1.00-1.74- Never

II. Utilization of ICT in Teaching and Learning Language Arts, Numeracy, Science, Music and Arts and Social Skills

Table presents how ICT was being utilized in teaching learning the following:

Utilization of ICT in Language

The utilization of ICT in Language Arts as presented on the table 4 shows that the respondents reflected on the utilization of ICT in Language in this new normal with an overall weighted mean of 3.77 (Very Useful). As indicated on the table, the statement ***"recognizing letter names and sounds (ABC)"*** reflected the highest mean of 3.96 (Very Useful) which means that the respondents have seen ICT as very useful in this statement. However, the statement ***"developing fluency in English communication"*** got the lowest weighted mean of 3.59 (Very Useful). Using ICT to study English or Language gains a deep understanding of the way the learners experience and perceive ICT use may help "shed light on how best to determine their educational uses" (Fujimoto, 2012, p.165). The Pinterest is an educational application in the internet that provides numerous ideas how to teach reading to young kids. There are free printable instructional materials for reading A-Z which are very colorful and creative. It also provides different learning activities that the children can do both in school and at home. Burnett concentrated on literacy and technology in the infant to eight-year-old age range. Burnett's (2010) method for locating research articles was well explained, and it resulted in 36 peer-reviewed articles. These articles were divided into three categories: technology as a literacy delivery system, technology as a site for text-based interactions, and technology as a medium for meaning-making. For the first category, she reported that technology as a literacy delivery system had either a positive or no impact on various language skills, motivation, and engagement. Only a few studies were found in the second category, technology for interaction. These few studies suggested that when children collaborate on digital texts or literacy software, they interact positively with one another. Regarding the third category, she concluded that technology can be successfully used for meaning making with this age group, particularly when it is used to connect with the real world.

Utilization of ICT in Numeracy

The table presents the respondents utilization of ICT in Numeracy. The result shows that the item ***"counting numbers"*** reflected the highest weighted mean of 3.85 (Very Useful). The item ***"telling time"*** got the lowest mean of 3.55 (Very Useful).

Result also shows an overall weighted of 3.69 (Very Useful) means that the respondents see ICT as very useful in this time of pandemic. According to Higgins et.al (2012). There is a large body of research which has examined the impact of digital equipment, tools and resources on children's numeracy skills and

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mathematical competencies throughout schooling. They found from their meta-analysis that effect sizes of tested gains in knowledge and understanding tend to be greater in mathematics and science than in literacy. ICT can play an essential role in achieving the objectives of the kindergarten curriculum if supported by appropriate software applications embedded in appropriate educational scenarios (Dwyer 2007; Lee 2009; Fisher et al. 2012). Educational applications in Mathematics provide children different games and learning activities that can be downloaded where they can learn to recognize numbers and count objects as well. A Pinterest is free educational link that offer teachers and parents vast creative ideas on how children will learn to count, write numbers, add and subtract numbers. Technology offers different stories, rhymes and songs that integrates teaching and learning numbers.

Utilization of ICT in Science

The table shows the respondents utilization of ICT in Science. The data reveals an overall weighted mean of 3.79 (Very Useful) considering that ICT utilization is very useful in teaching science. The results reveal that the item *"**community helpers**"* got the highest weighted mean of 3.89 (Very Useful) while the item *"**land forms and water forms**"* got the lowest weighted mean of 3.66 (Very Useful).

Trundle and Hobson (2011) investigated young children's understanding of science, and they found that inquirybased science instruction which facilitated technology leads students to develop science process skills such as observing, recording, sharing, predicting, and concluding among learners enrolled in ICT-enabled science classes. Classrooms benefit from both immediate feedback from experiments and from the opportunity for more self-directed and independent learning. Experiments have shown that computer simulations can be just as effective as real-life activities in teaching science concepts and improving scientific understanding across a wide range of topics.

Table 3-A Utilization of ICT

	Statement	Mean	*VD*
1	naming objects, pictures, places, people, colors, shapes etc.	**3.91**	***Very Useful***
2	watching and re-telling good children's stories, songs, poems and rhymes	**3.73**	***Very Useful***
3	recognizing letter names and sounds (ABC)	**3.96**	***Very Useful***
4	building vocabularies through initial sounds	**3.81**	***Very Useful***
5	developing fluency in English communication	**3.59**	***Very Useful***
6	beginning reading three-letter words	**3.64**	***Very Useful***
7	enjoying early reading through games and creative learning activities	**3.74**	***Very Useful***
	Weighted Mean	***3.77***	***Very Useful***

Utilization of ICT in Numeracy

	Statement	Mean	*VD*
1	enjoying games to distinguish similarities, differences and patterns	**3.75**	***Very Useful***
2	counting numbers	**3.85**	***Very Useful***
3	identifying greater and lesser numbers/sets	**3.76**	***Very Useful***
4	adding and subtracting numbers	**3.65**	***Very Useful***
5	telling time	**3.55**	***Very Useful***
6	developing problem solving skills	**3.59**	***Very Useful***
7	love math with fun through music and movement, stories and creative ideas provided in different learning apps	**3.66**	***Very Useful***
	Weighted Mean	***3.69***	***Very Useful***

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Utilization of ICT in Science

	Statement	Mean	*VD*
1	body parts, their functions and taking care of oneself	**3.86**	***Very Useful***
2	members and family values	**3.88**	***Very Useful***
3	community helpers	**3.89**	***Very Useful***
4	land, water and air transportation	**3.73**	***Very Useful***
5	parts, kinds and ways to take care of plants	**3.79**	***Very Useful***
6	kinds, habitat, sounds, movement and young animals	**3.76**	***Very Useful***
7	land forms and water forms	**3.66**	***Very Useful***
8	kinds of weather and season	**3.71**	***Very Useful***
9	taking care of the environment	**3.80**	***Very Useful***
	Weighted Mean	***3.79***	***Very Useful***

Utilization of ICT in Music and Arts

Table 3-B reveals that statement *"**dance with the music"*** with weighted mean of 3.88 and an overall weighted mean of 3.77 which shows that utilization of ICT in music and arts are Very Useful. While the statement *"**reciting rhymes, poems and finger plays**"* reflected the lowest mean of 3.64 (Very Useful). ICT (Information and Communication Technology) is used either as a tool by children or as an apparatus by researchers to evaluate and measure the music perception, cognition and aesthetics response to music (Paul, 2011). Volioti and Williamon (2017) investigated the use of audio recordings among instrumental learners and discovered that students used them more than professionals, particularly for elements such as goal setting and developing an interpretive style.

"Respondents encountered that reciting rhymes and most specifically poems and finger plays are the most common activity that learners are having hard time with, they are more active in interactive activity such as singing dancing".

This means that the respondents were using available educational applications in teaching young children rhymes, songs and musical movement. In fact teachers would download available music that they can play during the circle time, and use for different school activities. There are also numerous arts ideas that teachers and parent can do both at home and at the school.

Table 3-B Utilization of ICT in Music and Arts

	Statement	Mean	*VD*
1	pre-drawing exercises and coloring	**3.73**	***Very Useful***
2	providing children's crafts to do at home and at school	**3.71**	***Very Useful***
3	taking pictures and videos	**3.81**	***Very Useful***
4	singing songs	**3.86**	***Very Useful***
5	reciting rhymes, poems and finger plays	**3.64**	***Very Useful***
6	imitating body movements	**3.79**	***Very Useful***
7	dance with the music	**3.88**	***Very Useful***
	Weighted Mean	***3.77***	***Very Useful***

Utilization of ICT in Social Skills

Table 3-C reveals that statement '*watching stories and sharing values learned"* reflected the highest weighted mean of 3.86 (Very Useful) while statement "*making friends through social media"*got the lowest weighted mean of 3.55(Ver Useful). Result shows that the overall weighted mean is 3.74 with verbal description of Very Useful. This table shows that all of the statements were very useful in the utilization ICT in developing the social skills of the learner. Collaborative learning and social-emotional skills can be enhanced with well designed digital technology. Existing studies note, that young children who share computers, work in an equitable and cooperative manner showing a preference for working with peers cooperatively. Moreover, according to O'Hara, when young children use ICT are encouraged to discuss the stories, share their ideas and move characters around using the touch sensitive screen accompanied by much advice from their peers, Drigas A. & Kokkalia G. (2014).According to McDonald and Howell (2012) discovered that students' social skills improved, specifically their ability to interact socially with their peers in the form of turn-taking, sharing ideas, and comfort level working in groups assemblages. These findings were based on qualitative observations, teacher and student surveys, and there was no control group.

This means that the available internet resources such as stories for children that they can watch that tell about kindness, respect, obedience, love and humility to mankind and to the environment can help develop their value system. When teachers and parents talked about them by asking questions about the stories they have watched and give the children opportunity to retell the story, the children will be able to develop self-expression, even critical thinking and communication skills. Social media also provide different platforms to connect with

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friends and classmates and love ones. These are good opportunities for children to develop their social skills even at this time of pandemic.

Table 3-C Utilization of ICT in Social Skills

	Statement	Mean	*VD*
1	watching stories and sharing values learned	**3.86**	***Very Useful***
2	developing self-expression and feelings	**3.80**	***Very Useful***
3	becoming independent learner	**3.78**	***Very Useful***
4	making friends through social media	**3.55**	***Very Useful***
5	connecting with families and love ones	**3.81**	***Very Useful***
6	encouraging play-based activities at home and school	**3.69**	***Very Useful***
7	providing interactions within members of the family	**3.66**	***Very Useful***
	Weighted Mean	***3.74***	***Very Useful***

III. Development of Kindergarten Learners with the Utilization of ICT

Table 4 reveals the development of kindergarten learners score from 69-130. It revelas that the highest score got was 80-119 with a percentage of 66.67% with a verbal interpretation of *Average Development* while the lowest score got 120-129 and 130 above both got 16.67% with the verbal interpretation of *Slightly and Highly Advance.* Result shows the over-all mean that reflects the learners' development during this new normal. Table shows that the overall mean of learners score was 113 interpreted as Average Development. The result indicates that even without the utilization of ICT children continuously developed their skills. According to McManis & Gunnewig et al., (2012), Literature has established a link between educational technology however, it has also stated that technology must be improved. Include tools that assist teachers in implementing technology that are developmentally appropriate. Which should be incorporated into the classroom and curriculum.

When asked what are the observed disadvantages of using ICT, The respondents observed the following disadvantages such as:

a. It can limit children's imagination because everything is just one click away. Children may feel overwhelmed and used to virtual learning and feel less excited to study.
b. They spend more time using gadgets.
c. Learners tend to open apps not related to the class during online classes which may distract their interest and attention
d. they are easily distracted on their environment

These observations validate the average development among young children during this time of pandemic. Nothing can replace a face to face interaction with the teachers and other pupils. Concrete materials and supplies that are manipulative are necessary blended with technology if we want to have a highly advanced development among children. Moreover, if parents are not properly oriented on the effects of gadgets and would not set discipline on its use, children would be addicted and without proper supervision they can open other applications that are not appropriate to young children.

Table 4 Development of Kindergarten Learners

Score	f	%	Interpretation
130 and Above	5	16.67	***Highly Advance***
120 - 129	5	16.67	***Slightly Advance***
80 - 119	20	66.67	***Average Development***
70 - 79	0	0.00	***Slightly Delay***
69 and Below	0	0.00	***Delay***
Total	**30**	**100.00**	
Mean	**113**		***Average Development***

IV. Relationship of Internet Gadget Use at home to Utilization of ICT and to the Development of Learners

Table 7 indicates the data on the significant relationship of internet gadgets used at home to the utilization of ICT and to the development of the learners. Above table shows that language have significant relationship with gadget and kind of bandwidth with r – value= 0.265 (p- value= 0.017) and r – value= 0.287 (p – value= 0.01). Also it revealed that there is a negligible negative relationship with language and internet/wifi being used at home and online platform with r- value= -0.235 (p – value= 0.036) and r – value= -0.298 (p – value= 0.007) respectively. In terms of numeracy result shows the significant relationship with gadget

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with r – value= 0.226 (p – value= 0.044) while it numeracy and online platform has a negligible negative relationship with r – value= 0.279 (p – value = 0.012). A significant relationship was noted with science and gadget with r – value = 0.227 (p – value= 0.043) while science and online platform are negatively correlated with r – value= -0.310 (p – value= 0.005). A significant relationship was found between social sk gadget with r – value=0.234 and p – value= 0.037. More sophisticated mobile phones, also known as smartphones, can be used to help students access information from the web, transform it, transfer it, collaborate with other students, and create a more media-rich approach to instruction (Ferry, 2019).

Table 7-A. Relationship of Internet gadgets used at home to the utilization of ICT and to the Development of Learners.

Profile of Parents		Utilization of ICT					Development of Learners
		Language	Numeracy	Science	Music	Social Skills	
gadget	r	**.265***	**.226***	**.227***	0.162	**.234***	0.338
	p-value	**0.017**	**0.044**	**0.043**	0.15	**0.037**	0.068
Internet/wifi being use at home	r	**-.235***	-0.131	0.043	0.026	-0.089	0.026
	p-value	**0.036**	0.248	0.708	0.817	0.433	0.893
Kind of bandwidth	r	**.287****	0.07	0.149	0	0.098	-0.039
	p-value	**0.01**	0.536	0.188	0.998	0.389	0.839
Wifi connection being used at home	r	0.168	0.021	-0.023	-0.118	0.089	-0.096
	p-value	0.137	0.852	0.838	0.299	0.43	0.614
Online platform use	r	**-.298****	**-.279***	**-.310****	-0.124	-0.063	0.02
	p-value	0.007	0.012	0.005	0.275	0.582	0.917
Most common way to communication	r	0.022	0.216	0.122	0.166	0.135	0.237
	p-value	0.844	0.055	0.281	0.14	0.231	0.207
Modalities	r	0.04	0.121	-0.046	0.071	0.13	-0.118
	p-value	0.723	0.287	0.684	0.533	0.25	0.536

**Correlation is significant at the 0.01 level (2-tailed)
*Correlation is significant at the 0.05 level (2-tailed)

Relationship Between the Utilization of ICT and Development of Kindergarten Learners

Table 8 shows significant relationship between the utilization of ICT and the development of Kindergarten learners. The data indicates that there is no significant relationship between the utilization of ICT and the development of Kindergarten. This implies that learners can still develop their competencies or domain without using information and communication technology but it can be utilized at different areas and can be used as communication tool for both parents and teachers as well as the learners.

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Table 7-B. Relationship between the utilization of ICT and development of Kindergarten Learners

Uses of ICT		Development of Kindergarten Learners
Language	r	0.159
	p-value	0.4
Numeracy	r	0.033
	p-value	0.863
Science	r	0.047
	p-value	0.805
Music	r	0.141
	p-value	0.459
Social Skills	r	0.182
	p-value	0.335

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Conclusions

Based on the results of the study, the following conclusions were drawn:

1. Teachers and parents are aware of the development of the children during new normal. This means that any platform can be useful as long as both parents and teachers guide and support the needs of young learners.
2. Children/learners developed their skills and achieved learning from different domains using proper modalities that help teachers and parents supply the emerging needs of the learners to develop their skills even in this time of pandemic.
3. In time of pandemic where there are phases of setup of learning, teachers still do their best to cope up with the different challenges and difficulties. Their development is not affected by the technological problems which is brought by the changes in education. However, alternatives such as printed modules still help pupils to feel that education is still in the first line.

Recommendations

1. The result of the study may be disseminated to the kindergarten teachers to serve as a guide and to know the most motivational teaching strategies that may be used to successfully utilize ict in the learners' engagement in different domains/competencies.
2. Online platform can be very useful, although there are no significant relationship with the development of the children. These online platforms can be used as learning modalities to young children most specifically during this new normal.
3. Choosing an appropriate tool with the integration and utilization of Information and communication technology will help teachers and parents modify the lessons and develop the young children's skills.
4. The school should conduct more seminars about ICT to help teachers develop their knowledge and use it to be creative and be proactive in using technology based lessons or activity in teaching kindergarten.
5. Lessons should be pre-recorded video so that those who don't have unlimited wifi, or poor internet connection they can still watch the lesson. Parents and teachers should also encourage the learner to take online class to learning even in this time of pandemic. Teachers should also provide more learning materials that age-appropriate and accessible for them to use and understand so that they can follow the lessons.

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