TEACHERS' COMPETENCIES USING VIRTUAL WORKSPACES IN THE NEW NORMAL: A SEQUENTIAL EXPLANATORY STUDY

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ABSTRACT

This research undertaking aimed to determine the competencies and the experiences of elementary teachers using virtual workspaces in the new normal set-up brought about by Covid-19. The study made use of the sequential explanatory research design with the virtual interview and survey as the main instruments for gathering the relevant needed data. It employed the purposive sampling technique in determining the respondents and participants who actively participated in the virtual survey and interview, respectively. These key informants of the study are the elementary teachers in the District of San Luis, Pampanga who have been utilizing the Google workspaces- sixty (60) teacher- respondents and ten (10) teacher-participants. The results of the study revealed that the elementary teachers were knowledgeable, skillful, and capable of using the virtual workspaces but there was a significant difference with regard to their ages and years of teaching experiences. Likewise, the results indicated that the teachers' capabilities are important in utilizing the virtual workspaces in enhancing the teaching-learning process and in adapting to the new environment where technology is a must. To enhance the teachers' competencies in the new normal mode of teaching, these were some of the recommendations offered: teachers who were appropriately screened and whose ages range from 31 and above should be sent to ICT-related seminars and the like, and that they must be continuously provided with full access to Google workspaces even when the face-to-face mode be implemented again.

Keywords: Competencies, Experiences, Virtual Workspaces, Teacher, New Normal

INTRODUCTION

Technology is one factor that makes the world flat and interconnected. It also provides a change into a new environment and a new way to make different things similar. The utilization of technology provides a catalyst for change and has an impact on the lives of everyone (Bilbao et al., 2019).

Productivity and collaboration tools for academic institutions are provided by Google as a collection of integrated software tools for teaching and learning using Google's cloud-based technology (Insani & Farisi, 2020). According to a number of academics, the

Google Workspace for Education is a valuable tool for teaching and learning because of its simplicity of use, its ability to distribute information and materials, its ability to organize and save data, as well as its infinite storage capacity (Florell, 2017). A comprehensive cloud-based software bundle, Google Suite, provides a business with a new

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method to collaborate online (Tania et al., 2017).

As a result of the shift to digital technology, digital advertising, cloud services, software applications, quantum computing, e-commerce, and consumer technology are just some of the many services offered by Google, a global technology business located in the United States (US). Because of its market domination, data collecting, and artificial intelligence technological advantages, it has been dubbed the "world's most powerful business."

Google was founded by Page and Brin on September 4, 1988 when they are still students at Stanford University. At present, they control approximately fourteen percent (14 %) of publicly traded shares and fifty-six percent (56 %) of stockholder voting power via super-voting stock.

Google has been a brand-new search engine, and its capabilities has grown until it became the most popular website on the internet. Google Programs for Work, for Education, and for Business were some of the additional applications and tools that Google eventually added (Chinnery, 2008).

Chinnery introduced GALL (Google-Assisted Language Learning) in 2008. As a result, Google technologies may be used for educational purposes since they are interactive, instructive, efficient, and engaging. Researchers have determined that Google provides a variety of technologies that allow students and teachers to collaborate from anywhere and at any time (Covili, 2012). Examples of these are Google Docs, Google Calendar, Google Drive, Gmail, and other Google tools and apps.

A free online office suite, Google Docs may be used from any computer with a web browser (Zhou et al, 2012). The Google Apps for Education provides a variety of tools for students and teachers to collaborate on documents and presentations and to create and submit forms. These are safe online applications that automatically store data, reducing the risk of data loss (Taprial & Kanwar, 2011). They also supply consumers with free templates that can be used to do complex and powerful tasks (Strasma, 2010). Educational Applications of Google is a bundle of online tools that are always accessible in a search engine without need to acquire or install the program. Users may use any devices that are has internet connectivity to log in with an email account and access a range of tools and services (Educause, 2008).

It has been possible to enhance instructional performance at work and other educational services by using Google Apps. It serves as a platform for sharing instructor-created classes and activities, reducing the teachers' efforts. The Google's most safe and free web-mail service, allows students to write, deliver, and receive a message. Teachers can also construct a list of their students' contacts and assign them to groups (Conner, 2008).

For students and instructors, Google Drive is a cloud-based storage solution that enables them to save, share, and collaborate on papers and other digital assets. Likewise, it saves all of their Google Docs. Furthermore, there is just one method in accessing Google Docs and other Google apps, and that is via the Google Drive service (Lamont, 2015).

Google Slides has similar functionality to Microsoft PowerPoint, allowing teachers to introduce their topics and subjects using a variety of presentations, themes, typefaces, embedded videos, and animations. Teachers may view, share, and collaborate with others on the same presentation online, just like with other apps (Taprial & Kanwar, 2011). Teachers can install add-ons to extend the functionality of Google Docs. They can use the add-ons menu to search the store for the tools they want to install. Wen (2014) discovered nine "adds-on" of Google Docs:

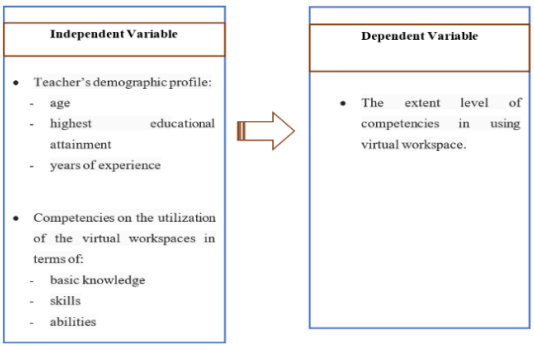
Clipboard, Translate EasyBib, and Track Changes are a few examples.

To keep updated of key dates and times, Google Calendar is a reliable online tool. Reminders are sent to users via email or mobile notifications (Darbyshire & Darbyshire, 2010). Teachers use Google Calendar in monitoring of some important events in their courses.

Free educational materials software such as Google Classroom provides for online and blended learning. Using their Gmail accounts or the class code, teachers can quickly create classes and invite students. Teachers can then add assignments, quizzes, and questions, as well as a class Drive folder where students can save their files. Teachers can also use the Stream button to connect with their students, where they can share postings and make and schedule announcements. Google Classroom increases student engagement and learning (Yoo & Heggart, 2018).

Over the recent years, educators worldwide were unexpectedly urged to move to online and distance learning during the pandemic. They attempted to combine face-to-face learning and teaching processes in classrooms with a computer environment while ensuring that this process could be sustained as effectively as possible. Educators and students are faced with an environment where they try to master all technologies and the more web 2.0 tools they know. Web 2.0 allows teachers/students to interact and collaborate with each other online. Examples of Web 2.0 are; Kahoot, Padlet, Moodle, etc. Trying and learning dozens of Web 2.0 tools to design an interactive lesson is exhausting for both educators and students.

The Department of Education (DepEd) provides access to Google Workspace (formerly Google Suite) for teachers to improve their performance tasks. It is composed of the online education package, which include the tools for emails, productivity, and collaboration. The study's goal is to collect and analyze the educational experience and the competencies developed by the teachers in using this Google Workspace.



Statement of the Problem

This study aims to assess the teachers' competencies in the context of their utilization of the virtual workspaces in the new normal environment.

Specifically, the study seeks to answer the following questions:

1. What is the demographic profile of the respondents in terms of:

1.1. age;

1.2. highest educational attainment; and

1.3. years of experiences?

2. To what extent do the respondents assess their competencies on the utilization of the virtual workspaces in terms of:

2.1. basic knowledge;

2.2. skills; and

2.3. abilities?

3. Is there are significant difference on the level of competencies of teachers when they are grouped according to their profiles?

4. How do the teachers describe the utilization of the virtual workspaces during the new normal environment:

4.1. strengths; and

4.2 weaknesses?

5. What framework can be formulated from the results of the study?

Conceptual Framework

Figure 1 depicts the conceptual paradigm of this study. Presented is the Framework for Teachers' Competencies in the Context of Using Virtual Workspaces in the New Normal Environment. The Independent and Dependent Variable Model will be used by the researchers.

The independent variables of this study are: (1) teachers' demographic profile which consists of: age, highest educational attainment and years of experience and (2) teachers' competencies on the utilization of virtual workspaces in terms: basic knowledge, skills, and abilities. The independent variable, which is expected to have a direct influence on the dependent variable. This study's dependent variable is the level of competencies in using virtual workspace, which will be evaluated and assessed in an experiment.

Figure 1

Conceptual Framework of the study

Hypothesis

There is a significant relationship between the levels of competencies of the teachers when classified accordingly as to their profiles.

Significance of the Study

This study will serve as a point of reference for making contributions and raising awareness about how the teachers' abilities and competencies can help in their working environment using the virtual workspace especially to the following:

Department of Education. To provide them with a clearer idea of how to facilitate the instructors' use of Google Workspace in the teaching- learning process and how to undertake interventions to help the teachers to master the use of the workspace.

Teachers. The study's findings will provide them with a better understanding of how to increase their knowledge in using the Google Workspace and how to improve their classroom instruction and work satisfaction.

Students. The study will provide students with precise, reliable, and new information by using google workspace and will enable them to take active participation in the learning process.

Future researchers. The findings of the study can add to the pieces of information, ideas, and understanding of the use of virtual workspaces in the new normal on the process of teaching and learning. This may also be a point of reference for another study on this topic on hand.

Scope and Delimitations

The study focused on the teachers' competencies in using the virtual space in the new normal. A sequential explanatory: mixed-method research design is used. The respondents of the study are elementary teachers who experienced using google workspace in seventeen (17) public schools in Pampanga where sixty (60) teachers serve as the respondents for the quantitative part while ten (10) participants that provide qualitative data for the study.

Definition of Terms

To better understand the study, the following terms are defined conceptually and operationally:

Competencies. Teachers' related abilities and knowledge to meet the requirements to complete specific demands (Nessipbayeva, 2012).

Google. An online search engine that allows users to browse different web pages over the internet (Covili, 2012).

Google Drive. Cloud storage, with the potential to collaborate with millions of people allows the user to sync photos on different devices for as long as it logged in (Gibbons et al., 2017). It allows the user to gather, share

data, and upload a work-related or personal document (Sandeep et al., 2017).

Google Mail. Google's web-based email service, it is a free web-mail that users can use to send, receive, and attach files directly to google drive (Reheem Amin, 2020).

Google Docs. An online word processor which is a part of the free web-based Google Docs Editors suite by Google. Google docs can share, collaborate with others, and can enhance learning engagement by student-teachers (Lin et al., 2016)

Google Sheets. It works similarly to Microsoft Excel sheets and is a web-based spreadsheet software powered by google that use for statistical and analytical related calculations. An online spreadsheet app that enables one to create, layout spreadsheets and work as a team (Reheem Amin, 2020).

Google Slides. One can build presentations right in their web browser. A presentation may be edited, themes can be attached, a variety of fonts and animations can be used, and it can be shared with other users. These functionalities are similar to those found in Microsoft PowerPoint (Reheem Amin, 2020).

Google Forms. Free online software that allows the user to create surveys, and quizzes. Google forms can collate data to increase the classroom environment by collecting survey responses and self- assessment after a lesson (Nguyen et al., 2019).

Google Classroom. A collection of online tools that allows instructors to make assignments, work supplied by students to grade and return tasks, and work submitted by students to set tasks. According to Iftakhar (2016), when it comes to the "workflow" of instructors, Google Classroom has been one of the greatest tools to employ since it provides options to develop an ideal tool for both learners and instructors.

Utilization. A methodical approach in the process and the use of resources to aid in the learning process.

Workspaces. This refers to the teachers use for the work, such as in school. A workstation is an area where work of a particular nature is carried out, such as using a desktop computer.

Work satisfaction. A gratification gained from accomplishing a task requirement. According to Paris (2019), work satisfaction a link between someone's feelings, values, and needs.

Acronyms

DC – Digital Competence

DepEd – Department of Education

GALL - Google-Assisted Language Learning

IoT – Internet of Things

SPSS - Statistical Package for the Social Sciences

RESEARCH METHODOLOGY

This chapter presents the research design used, key informants of the study, instrumentation, the data collection, ethical consideration, the statistical tool, and the data analysis.

Research Design

This research used a sequential explanatory mixed- method design. The study's design was used to collect, analyze, and interpret both quantitative and qualitative data. Within a single study, this research approach incorporates quantitative as well as qualitative

data (Classen et al., 2007). Whereas one data source may not be sufficient to answer the research question, a second way is required to improve the primary method and initial findings ought to be fully described, it is necessary to gathered, analyzed, and combined both data sets.

The sequential explanatory mixed methods design was intended to give thorough examination of the study topic by first

evaluating statistical results and then interpreting the qualitative data that supports this analysis. Figure 2 depicts a schematic representation of sequential explanatory mixed methods.

Key Informants

The respondents of this study were the public elementary school teachers in the District of San Luis, Pampanga who experienced the use of Google workspaces. The researchers aim to know how skilled the respondents are in utilizing the google workspaces with regards to their age, skills, knowledge, and experiences in facilitating their lessons before and after the onset of the pandemic. The respondents for the survey questions were the sixty (60) public teachers. On the other hand, ten (10) public teachers comprise the qualitative participants of the study.

Table 1

The Frequency Distribution and Percentage of the Teacher Respondents

Schools	Teachers' Distribution	
	Frequency	%
School A	3	5.00
School B	3	5.00
School C	3	5.00
School D	3	5.00
School E	3	5.00
School F	3	5.00
School G	3	5.00
School H	3	5.00
School I	4	6.67
School J	4	6.67
School K	4	6.67
School L	4	6.67
School M	4	6.67
School N	4	6.67
School O	4	6.67
School P	4	6.67
School Q	4	6.67
Total	**60**	**100.00**

Instruments

The researchers designed a questionnaire which is considered as the major source of gathering data to realize the study. The designed questionnaire was a product of reviews from reading literatures and studies. The first draft was presented to the adviser for critique and recommendations. After the recommendations were integrated in the instrument, a final draft that is completed and subjected for content validation to expert in the field. After the retrieval of the validated instrument, all the suggestions and recommendations of the validators were incorporated.

Another instrument is designed for the qualitative part of the study. An interview guide was developed and likewise be subjected to the process of validation. Once validated, the instrument is finalized for use in gathering the data needed to realize the purpose of this study. The quantitative research instrument was also tested for its reliability. Table 2 shows the result of a trial survey consisting of 10 teachers.

Table 2.

Reliability Index Results

	Cronbach's Alpha
Basic Knowledge	0.93
Skills	0.96
Abilities	0.97

Data Collection

The researchers administered an online survey and an interview. They drafted the request letter and requested their research adviser to checked the content, grammatical structure, signatories, and the like. After all the necessary signatures had been obtained and

the agreement has been signed, the survey is disseminated to the parties concerned.

Upon gaining permission, the researchers approached the district head for consent and guidance in collecting teacher's profile for the respondents and participants to the study. The researchers handed the survey questionnaires to the District ICT Coordinator and disseminate to respective respondents through Google Forms for the quantitative. A particular section provides the details about the Data Privacy Act of 2012. Statistical reports and analysis were interpreted upon the collection of results.

The virtual interview conducted after prior instruction, stating the nature, purpose, and procedures via a series of emails and chats. The informants' availability of time is prioritized. All the data gathered were analyzed and transcribed for analysis.

Ethical Consideration

The proper procedures and guidelines were strictly observed by the researchers. The respondents were asked permission first before administering the online survey questionnaire and interview. To provide the respondents with a better understanding of the study, a written description of the purpose and objectives of the study were included in the first page of the survey questionnaire. In addition, all collected information in the study would only be used for the academic purpose and handled with strict confidentiality.

Statistical Treatment of Data

After the data were gathered, it was subjected to the computation of descriptive statistics, specifically the weighted mean.

The quantitative responses were processed using the SPSS software version 23 to compute the means of each parameter of the study reflected under the statement of the problem.

The researchers asked the help of a qualified statistician to compute the data.

Table 3

Likert Scale Description

Scale	Ordinal	Adjectival Rating
4.21-5.00	5	Strongly Agree
3.41-4.20	4	Agree
2.61-3.40	3	Neutral
1.81-2.60	2	Disagree
1.00-1.80	1	Strongly Disagree

Data analysis

The researchers, on the other hand, were responsible for the transcription and codification of the participants' responses to the interview guide questions. Every transcript was given an analysis code based on the essential points that were derived.

The identification of the teachers was coded from T1 to T10.

CHAPTER 3: RESULTS, FINDINGS, AND DISCUSSION

In this section, the results of the evaluation were discussed, evaluated, and interpreted. During the conduct of this research, a mixed method design was used. The quantitative and qualitative data were given first, and then the results of the two analyses were combined.

1. Respondents` Demographic profile

1.1. Respondents` Age

The age of the respondents has shown in table 4. Based on the results, only 1 out of 60 or 1.67% is under the age of 20 years below, 29 or 48.33% are 21 - 30 years old, 12 out of 60 or 20.00% fall under the ages of 31 - 40

years old, there were 11 respondents or 18.33% on the ages 41 - 50 years old, and lastly for the 11.67% fall under the 50 years old and above. These results implied that most of the teachers who are teaching in this district fall under 21 - 30 years old.

Table 4

Descriptive Analysis of Respondents` Age

Age	Frequency	Percent
20 years below	1	1.67
21 - 30 years old	29	48.33
31 - 40 years old	12	20.00
41 - 50 years old	11	18.33
50 years old and above	7	11.67
Total	**60**	**100**

1.2. Respondents` Highest Educational Attainment

Table 5 shows the respondent's highest educational attainment. The data revealed that 48 out of 60 or 80.00% are graduates of a Bachelor's Degree, and 12 out of 60 or 20.00% are graduates of a Master's Degree.

Table 5

Descriptive Analysis of Respondents` Highest Educational Attainment

Educational Attainment	Frequency	Percent
Bachelor's Degree	48	80.00
Master's Degree	12	20.00
Doctorate Degree	0	0
Total	**60**	**100**

1.3. Respondents` Years of Experience

Table 6 displays the frequency and percent distribution of respondents` years of experience. There were 30 out of 60 or 50.00% of respondents have 1 - 5 years of teaching, 2 or 3.33% have been in the service for 6 - 10 years, 12 out of 60 or 20.00% have 11 - 15 years of experience, 5 out of 60 or 8.33% have 16 - 20 years, and 11 out of 60 or 18.33% are on service fall on 21 years and above. In conclusion, the majority of the respondents have 1-5 years of experience in teaching.

Table 6

Descriptive Analysis of Respondents` Years of Experience.

Teaching Experience	Frequency	Percent
1 - 5 years	30	50.00
6 - 10 years	2	3.33
11 - 15 years	12	20.00
16 - 20 years	5	8.33
21 years and above	11	18.33
Total	**60**	**100**

2. Respondents` Assessment of their Competencies in Using Virtual Workspaces

2.1. Respondents` Assessment of their Competencies in Using Virtual Workspaces in terms of their Basic Knowledge

The basic knowledge of teachers' Competencies in Using Virtual Workspaces is presented in table 7. Indicators presented that teacher have enough knowledge in using workspace (M=3.92, SD=0.56) to being flexible in using anytime, anywhere, and on any device (M=3.98 SD=0.79). It can be seen that when it comes to teaching and learning google workspaces is helpful (M=4.22, SD=0.69). The grand mean of 3.88 indicated that in terms of using google workspace they are knowledgeable.

Table 7

Descriptive Analysis Respondents` Assessment of their Competencies in Using Virtual Workspaces in terms of their Basic Knowledge

INDICATORS	**M**	**SD**	**Verbal Description**
I have enough knowledge of using google workspace.	3.92	0.56	Knowledgeable
I know how to use the different Google applications.	3.88	0.80	Knowledgeable
It's easy for me to access the application of google workspaces.	3.90	0.68	Knowledgeable
Google workspace is safe to use in all aspects.	3.83	0.78	Knowledgeable
I am familiar with all the applications included with Google Workspace.	3.62	0.74	Knowledgeable
I am aware that it was formerly known as "Google Suite" before it was renamed as "Google Workspace."	3.47	0.89	Knowledgeable
Google workspace is flexible to use at anytime, anywhere, and on any device.	3.98	0.79	Knowledgeable
Google workspace is helpful to use it, especially	4.22	0.69	Highly Knowledgeable

in teaching and learning.			
Using google workspace, makes my work easy and fast.	4.08	0.70	Knowledgeable
Everything I need is in google workspace.	3.85	0.66	Knowledgeable
Grand Mean	**3.88**	**0.73**	**Knowledgeable**

Legend: 4.21-5.00 Highly Knowledgeable; 3.41-4.20 Knowledgeable; 2.61-3.40 Moderate; 1.81-2.60 Slightly Knowledgeable; 1.00-1.80 Unknowledgeable

2.2. Respondents` Assessment of their Competencies in Using Virtual Workspaces in terms of their Skills

Table 8 shows the respondents` assessment of their competencies in using virtual Workspaces in terms of their skills. The result shows that the respondents are skilled in almost all of the indicators under the assessment in terms of their skills. It demonstrates that teachers can adapt easily to using the workspace (M=4.05 SD=0.76). allowing them to collaborate with others (M=4.20, SD=0.63), and being highly skilled in terms of using google workspace on digital devices (e.g. Desktop, PC, Laptop, Tablet, and Smartphone) (M=4.35, SD=0.76). In general, some of the respondents are highly skilled and most of them are skilled in terms of assessing their skills in using workspaces, with a computed grand mean of 4.05 and standard deviation of 0.69.

Table 8

Descriptive Analysis Respondents` Assessment of their Competencies in Using Virtual Workspaces in terms of their Skills

INDICATORS	**M**	**SD**	**Verbal Description**
I am able to use a digital device which may be one of many types (e.g. Desktop, PC, Laptop, Tablet, and Smartphone) in using Google workspace.	4.35	0.76	Highly Skilled
I can easily adapt in using workspaces.	4.05	0.72	Skilled
I use of Google Workspace for personal productivity (e.g. word processors, spreadsheets, docs, google classroom).	3.93	0.78	Skilled
I think that Google Workspace allows me to learn	4.18	0.65	Skilled

more in the time I have for studies.			
I use Google Workspace to communicate with my students.	3.95	0.67	Skilled
Google workspaces allow me to collaborate with my other co-teachers.	4.20	0.63	Skilled
I can use virtual workspaces in my class.	3.95	0.65	Skilled
There is value in using Google Workspace for teaching and learning purposes.	4.07	0.66	Skilled
I can log in to Google Workspace anytime anywhere.	3.83	0.69	Skilled
I can assess when it is important to use Google Workspace as an information source.	3.98	0.70	Skilled
Grand Mean	**4.05**	**0.69**	**Skilled**

Legend: 4.21-5.00 Highly Skilled; 3.41-4.20 Skilled; 2.61-3.40 Moderately Skilled;
1.81-2.60 Slightly Skilled; 1.00-1.80 Unskilled

2.3. Respondents` Assessment of their Competencies in Using Virtual Workspaces in terms of their Abilities

The respondents` competencies in using virtual workspaces in terms of their abilities are presented in table 9. The result shows that the respondents are highly capable of uploading file on google drive (M=4.40, SD=0.85), opening the google workspaces (Gmail, Google Slides, Google Docs, Google Forms, Google Spreadsheets, etc.) without the help of others (M=4.30, SD=0.76). It shows that the teachers are capable of making quizzes using google forms (M=3.95, SD=1.11). Based on the results shown above teachers are capable of using google workspaces with a grand mean of 4.09 and a standard deviation of 0.96.

Table 9

Descriptive Analysis Respondents` Assessment of their Competencies in Using Virtual Workspaces in terms of their Abilities

INDICATORS	**M**	**SD**	**Verbal Description**
I can open google workspaces (Gmail, Google Slides, Google Docs, Google	4.30	0.77	Highly Capable

Forms, Google Spreadsheets, etc.) without the help of others.			
I know how to insert table in google documents.	4.28	0.85	Highly Capable
I know how to upload a file on google drive.	4.40	0.85	Highly Capable
I know how to make quizzes on google forms.	3.95	1.11	Capable
I can easily insert formulas on google spreadsheets.	3.60	1.11	Capable
I know how to schedule a meeting using google meet.	4.17	1.03	Capable
I can schedule important details using google calendar.	3.85	1.07	Capable
I think the use of Google Workspace increases my productivity.	4.28	0.88	Highly Capable
I can use google workspace in teaching.	4.20	0.86	Capable
I can make use of a google spreadsheet in formulating students' grades.	3.88	1.04	Capable
Grand Mean	**4.09**	**0.96**	**Capable**

Legend: 4.21-5.00 Highly Capable; 3.41-4.20 Capable; 2.61-3.40 Neutral; 1.81-2.60 Slightly Capable; 1.00-1.80 Uncapable

3. Significant Differences in Respondents` Assessment of their Competencies in Using Virtual Workspace when grouped according to their profile

3.1. Significant Differences in Respondents` Assessment of their Competencies in Using Virtual Workspace when grouped according to their Age

Table 10 shows the significant difference between the respondents when grouped according to their age. The results show that 21 – 30 years old have a higher mean (M=4.2391) as compared to others. The difference is said to be significant having a computed p-value of 0.002 which is less than 0.05 level of significance. Therefore, there is a significant difference when groups according to their age in using the virtual workspace.

Table 10

Analysis of Differences in the Respondents` Assessment of their Competencies in Using Virtual Workspace when grouped according to their Age

	Mean	**SD**	**F-Value**	**p-value**	**Decision**
20 years below	3.8667	-	4.832	.002	Reject Ho
21 - 30 years old	4.2391	.39991			

31 - 40 years old	4.0750	.45486			
41 - 50 years old	3.4515	.84595			
50 years old and above	3.8095	.44419			

3.2. Significant Differences in Respondents` Assessment of their Competencies in Using Virtual Workspace when grouped according to their Highest Educational Attainment

The significant difference between the respondents when grouped according to their highest educational attainment is presented in table 11. It shows that teachers with a bachelor's degree has a mean of 4.0361 as compared to 3.8833 for those that have a master's degree. This difference is said to be not significant having a computed p-value of a .425 which is not less than a 0.05 level of significance. This only shows that regardless of the highest educational attainment of the respondents they have the same competencies in using the virtual workspace.

Table 11

Analysis of Differences in the Respondents` Assessment of their Competencies in Using Virtual Workspace when grouped according to their Highest Educational Attainment

Group	**Mean**	**SD**	**t-Value**	**p-value**	**Decision**
Bachelors	4.0361	.55304	0.803	.425	Do not Reject Ho
Masters	3.8833	.72607			

3.3. Significant Differences in Respondents` Assessment of their Competencies in Using Virtual Workspace when grouped according to their Years of Experience

Table 12 shows the respondent's differences when grouped according to their years of experience in teaching. The results show that the 1 – 5 years of experience in teaching have a higher mean score of 4.2267 than 6-10 years with a computed mean of 4.1833, 11-15 years (M=4.0361), 16-20 years (M= 3.1667), and 21 years and above (M=3.7181). The difference is said to be significant having the computed p-value of a .001 which is less than 0.05. This only shows that there are significant differences in the years of experience of the teachers somehow affect their competencies.

Table 12

Analysis of Differences in the Respondents` Assessment of their Competencies in Using Virtual Workspace when grouped according to their Years of Experience

Group	**Mean**	**SD**	**F-Value**	**p-value**	**Decision**
1-5 years	4.2267	.39879	5.687	.001	Reject Ho
6-10 years	4.1833	.58926			
11-15 years	4.0361	.42769			
16-20 years	3.1667	1.02659			
21 years and above	3.7182	.56948			

4. Teachers' description of their strengths and weaknesses in using virtual workspaces.

4.1. Strengths of teachers in utilizing workspace in the new normal environment

This sub-section of teachers' description regarding their strengths in utilizing virtual workspaces produced 4 themes: ease of use, enabling technology, provision for technological logistics, and capacity training for technology usage.

Ease of use

Regardless of the difficulties that some people may have, the apps that can be found on Google aid both students and instructors (Elis, 2008). In the successful implementation of blended learning, it is contingent on educators being able to make effective use of the materials and resources they already possess. It is possible that Google can assist both teachers and students in their school work (Fenton, 2017). According to the research conducted by Mohd Yusoff, A., et al. (2021), ever since the pandemic schools have been placed on lockdown, there has been a change in the teaching that takes place in schools. This change has been brought about by switching the teaching strategy and the integration of several applications in G Suite. Application of google for education is useful in terms of availability for teachers who have experience using applications from Google Drive, such as Google Docs and other Google Apps (Brown et al., 2015)

The statements coming from the teachers with regards to their experience in using google workspace:

"In using google workspace we can easily send reports, we can access data easily, we can organize and improve our work" – T1

"The work is so much easier, especially during pandemic. Easy to communicate with students and my co-teachers" – T6

"The use of the google workspace environment serves as a go-to application for us like on submittals on a google sheet or surveys using google form and it was easy to use." –T3

"As a teacher, it is the quickest and most convenient method to connect with my co-teachers." – T4

"When we use Google Workspace, our documents and data are safe, and it's easy to get back to the documents we make" – T8

"It makes teaching easier if you know what apps are on google, it also helps us with our paper works, even though we don't see each other especially now that it's a pandemic." – T9

"Easy to use and easy to learn" – T9

Enabling Technology

In the midst of COVID-19 issues, the move toward online courses had become a pedagogical transition from old methods to current approaches of teaching-learning (Lokanath et al., 2020). This shift occurred from usual set up to virtual, and from seminars to webinars (Lederman, 2020). Because of the current pandemic situation, educators and students alike are being compelled to acknowledge online education's digital component as the end purpose. Before discussing these issues, this article delineates the author's perspective on educational improvement, necessary for understanding the assumptions underlying this two-part article (Chris Dede, 2014). Learning communities have been much easier to establish because to the proliferation of the internet and other technologies that have made it possible to connect with people on a global scale, break down barriers that prevented people from interacting with one another, and eliminate isolation.

The statements coming from the teachers with regards to their experiences on the aspect of using virtual workspaces:

"Using Google Workspace has been a wonderful experience, since it is a blessing in disguise. The use of the google workspace environment serves as a go-to application." – T3

"In terms of reports, grades, and other paper works we use google workspace." – T4

"And because pandemic, our principal would be able to receive our urgent reports automatically: there's a link already for the google form, encoding in spreadsheet, and an urgent report can be forwarded immediately." – T5

"Same thing with the documents or reports, you can just encode into the worksheets and then pass it afterwards." –T6

"When we don't see you, we make google sheets, docs, or forms when we need to answer something."- T9

Provision for Technological Logistics

The goal of information technology is to improve the usefulness and effectiveness of data transmission in a wide range of strategic, tactical, and operational settings by means of the conception, development, and implementation of technologically based systems and procedures. This is best accomplished by paying close attention to human information needs in problem-solving tasks and by providing technological aids such as electronic communication and computer-based systems of hardware, software, and associated processes by emphasizing the basis for information technology complements (Capgemini, 2008). In performing the functions associated with the field of technology, the modern field will use computers, servers, database management systems and cryptography (Kenneth &Laudon, 2007). Accessibility is one of the variables that might slow down progress because of restrictions on internet use (Dube. 2020; Tanveer et al., 2020; Dhawan, 2020; Sarvestani et al., 2019). The lack of technical equipment and the expensive cost of internet data as cited by Dube (2020) is seen as a hindrance to internet access. According to the findings of Rapanta et al., 2020, accessibility of the internet, software, and devices were determined as main factors in the construction of an online environment.

These are some of the assertions that participants made in their responses:

"When there is a Parent/Teacher Orientation, we use a Google Meet, worksheet, or google docs for our reports." – T1

"They gave us SIM card without knowing that it should be together with some gadgets and some of the seasonal teachers are still using a keypad not a modern smart phone.

Miscommunication by the department in providing assistance to teachers." – T6

"We can quickly get the data and the files that they use and what they can use on the platforms we send." – T8

Capacity training for technology usage

Due to the societal changes and the resulting shifts in student learning requirements, it has always been necessary to redefine teacher competencies. In light of this, institutions require educators who are capable of creating more engaging and cutting-edge learning environments for their students, ones that permit them to discover through the application of technology (Blair, 2012). According to Spiteri & Chang Rundgren (2020), pre-service teachers are expected to implement their knowledge and skills in teaching and learning processes, as well as to be role models in terms of their use of digital competence (Lund & Erikson, 2016). Furthermore, teacher education programs are expected to inform pre-service teachers about how to use digital technologies and which strategies to employ to meet the various needs, in addition to making digital technology easily accessible to them (Spiteri & Chang Rundgren, 2020). Bui Van Hong (2018) asserts the application of IoT (internet of things) technology to develop the digital teaching model, technology and education is suitable for creating a variety of training, teaching and evaluation forms, thereby meeting the diverse learning needs of students and teachers. On top of that, he analyzed the diversity of learning needs of learners and

teachers under the influence of technology, thus suggesting the integration of technology knowledge and practical skills in the training programs (Bui Van Hong, 2017). Having teachers trained or attending webinars to better understand how to use technology in their work or teaching is a big help in making their work easier.

The statements coming from the teachers with regards to their experiences on the aspect of pertaining about the trainings and webinars are enumerated below:

"In terms of conducting webinars for professional development or slac" -T1

"Randomly selecting and attending some webinars/seminars, sometimes they based on what grade level are you." – T2

"Free applications, open for all, all should attend instructions, sometimes randomly selecting participants based on grade level when conducting a series of webinars about google workspace." – T3

"Series of webinars to understand applications that are related to google workspaces. I know when selecting attendees anyone can be a participant." – T4

"Through sessions or training because personally I'm not expert in terms of using those applications" – T5

"Seminars and webinars are also conducted." – T7

"Like the webinars that we attended, so that we can better understand the apps in the google workspace." – T9

"Through virtual insets managed by DepEd. Virtual meetings and webinars are extremely beneficial in teaching us how to use Google Workspace" – T10

4.2. Weaknesses of teachers in utilizing workspace in the new normal environment

This sub-section of teachers' description regarding their weaknesses in utilizing virtual workspaces produced 4 themes: poor connectivity, lack of technological equipment, self-reliance, and seeking assistance and help.

Poor connectivity

Poor internet connectivity remained to be the most encountered problem among developing countries when online learning is implemented (Almanthari et al., 2020). In the throes of a worldwide pandemic, online education is being challenged by critical issues and concerns, particularly creative integration of innovation and literacy, information, media, and technology skills across all educational environments and topographies. Moreover, the online education in this time of pandemic is never daunted as technology is revolutionizing the era of the digital world that transforms the learning and knowledge sharing approaches (Arkorful & Abaidoo, 2015; Soomroo et al, 2018). However, some schools lack the resources necessary to provide students with learning opportunities, and not every student has the access to internet at home (Hani, 2020). This scenario was faced by the Philippine education system, where online learning was imposed, but not all students, teachers and schools could provide gadgets and internet access for learning to continue and improve. In the study conducted by Mahyoob (2020), it was found out that teachers and students have the most difficult situation have face were support to technical issues that not all of them have the access to the internet, some struggle with network issues, and a lack of high-quality learning equipment. In underdeveloped countries, poor internet connectivity is a major problem caused by bandwidth limitations brought on by a lack of sufficient infrastructure for delivering quality mobile services (Shrestha et al., 2010). Austin and Bradley (2005) indicated that accessing and utilizing ICT is technically much easier when one has internet connectivity.

Below are the significant statements of the teachers regarding their experience in internet connectivity:

"The main challenge is the internet connectivity" – T1

"Poor connection" – T4

"Maybe the internet connection especially when we need to go to the class and sometimes my students will say that they don't have money for the load, but of course you should consider that but those challenges will motivate you more, what else, the internet connectivity." – T5

"Providing SIM cards to teachers, they said it has internet load daily, call, and text. Then it only lasted for about 3 months." – T6

"In the teaching learning process, the challenges we encountered, sometimes the signal" - T7

"Internet connection may be poor at times, when everyone is using the internet simultaneously, and we are entirely disconnected." – T7

"Internet connectivity is sometimes weak, when all of the teachers use the internet at the same time, and we are completely disconnected; these are the challenges with internet connectivity." – T9

Lack of Technological Equipment

The term "distance education" refers to a method of teaching and learning that is prearranged, takes place in a location that is distinct from the typical educational environment, and necessitates communication and a unique corporate structure through technological means. (Moore & Kearsley, 2012). Online learning, blended learning, social media, and open learning are essential advancements for efficient education in the current digital era (Bates, 2018). In a nutshell, Hew et al.(2007) cited the most observed impediments are the lack of availability to technology, an insufficient time, and a lack of pedagogical understanding that is supplemented by advanced technologies. According to Brush et al. (2009), issues influencing the efficacy of in-school modelling were identified as a lack of resources, a lack of qualified tutors, and a lack of opportunity for teachers in pre-service training to utilize technology into work placements.

To provide evidence in support of these arguments, the following is a selection of responses from participants:

"Some challenges are outdated devices like different working needs and software." – T2

"The main challenges are the availability of materials for children, they provide trainings to teachers but on the other end how can we interact (children) if they do not have means, teachers are equipped on how to use the apps but the kids are not." – T3

"Those students who lack basic necessities, such as mobile phones, will be unable to take advantage of online learning opportunities." – T6

"Even if I wanted to use Google Classroom with my pupils, I couldn't. I tried it, but some of them don't have any devices to use." – T10

"Your coworkers aren't very computer savvy, so they still need help. Maybe that's another challenge" – T9

Self-reliance

Teachers should be able to adjust their methods and stay current in order to meet the challenges posed by the demands of the current generation as well as the rapid progress of new technology (Khairani et al., 2020). According to Al-Khafaji et al. (2014), the existing education system requires more self-learning activities in order to get the needed information. With the assistance of advanced technologies, education is moving in the direction of becoming more self-guided and flexible, a number of internet services have fostered informal learning by enabling users to study on demand and exactly when

required (Song, 2016). Online learning tools provide possibilities for learners to strengthen their self-directed learning abilities and metacognitive awareness (Dunlap & Lowenthal, 2011). This involvement involves learners' behavior to seek learning resources to fulfill a curiosity (Dabbagh & Kitsantas, 2012). This implies that instructors who use the workspaces are still engaging in self-learning with the assistance of various alternative sources.

The following are the responses given by participants with regard to the matter:

"Watching YouTube tutorials, when we don't understand anything" – T3

" Watching YouTube tutorials is a big help because anything can now be found on youtube" – T6

"What else we do searching, of course, even if we are familiar with the fundamentals, we still need to do research at least sometimes" – T8

"Sometimes I will look for youtube tutorials to learn more about an application" – T9

"There are tutorials on youtube so that you can better understand the features of the google workspace because what it is, it is also a big help" – T10

Seeking assistance and help

When the pandemic began, teachers had to switch to a fresh approach to teaching. They have a greater propensity to put in the effort and tenacity required to develop their skills when they have the belief that they can do so, and they are also more likely to seek help when they are struggling (Bai et al., 2019; Dweck, 2006). Learning may be increased by asking for help, to put it another way (Liu, 2017). According to Smith et al. (2016), the learning and teaching experience will be improved if both teachers – students are able to make effective use of mobile devices, as well as if instructors are prepared to adopt innovative methods of teaching, Bai et al. (2019) found out that teachers' willingness to use technology rose when they sought assistance from other individuals. Therefore, instructors may transcend the limits of time and distance and seek aid to address difficulties by connecting online with other colleagues and online communities (Liu, 2017).

The statements below are participants response to support the statements:

"If I don't know anything, I'll ask the school's ICT coordinator for the answer or the I'll ask the one who is more knowledgeable about it" – T1

"Teaching assistance - asking others when I do not understand the used google forms, google docs, or everything related to google apps." – T4

"Asking ICT -related experts if I really need" – T3

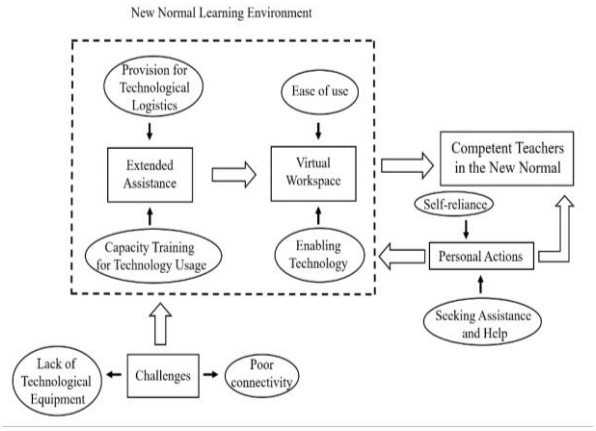
"Asking for help from our fellow colleagues who are more knowledgeable about workspace" – T5

5. Framework of New Normal Learning Environment

Figure 3 provides a framework to increase the competence of teachers of the new normal learning environment. Using technology to make their jobs easier has become the new standard for educators. Teachers' abilities to use technology are being bolstered via the provision of additional support in the form of technical logistics and capacity training. Lack of technology resources and limited internet connectivity creates a challenge for teachers. As part of the support, teachers are given virtual workplaces as well as capacity training and technology logistics. Self-reliance and asking for support are two ways in which we might improve as instructors.

Figure 3

Framework for New Normal Learning Environment



RESEARCH FINDINGS AND DISCUSSIONS

Summary of Findings

Analysis and interpretation of the acquired data yielded the following key findings:

Descriptive Analysis of Respondents` Age, Highest Educational Background, and Years of Experience.

According to the findings, the majority of respondents were in the age range of 21 to 30 years old, and the majority of them have a Bachelor's degree as their highest level of education attained. In addition, the majority of them have had between 1 and 5 years of classroom experience.

Respondents` Assessment of their Competencies in Using Virtual Workspaces in terms of their Basic Knowledge, Skills, and Abilities.

The response of "Google workspace is helpful to use it, especially in teaching and learning" which got in a mean score of 4.22, demonstrated a high level of expertise among respondents. Because almost all teachers are able to incorporate Google Workspace into their lesson plans and student instruction, it is clear that it is beneficial for educators to be familiar with workspace. On the other hand, the findings indicate that the vast majority of respondents are informed in terms of the extent to which their skills and their fundamental knowledge correspond, with an overall mean score of 3.88.

The data shows that the respondents' competencies in using virtual workspaces in terms of their skills, as per the results, the highly skilled respondents stated, "I am able to use a digital device which may be one of many types (for example, Desktop, PC, Laptop, Tablet, and Smartphone) in using Google workspace", this resulted in a mean score of 4.35. In addition, the findings of the survey show that the great majority of respondents had skills with a grand mean of 4.05.

According to the results of an assessment of their skills in using virtual workspaces, some of the teachers are highly capable, as indicated by statements such as "I know how to upload a file on Google Drive," which obtained a mean score of 4.40, while others are capable, as indicated by statements such as "I know how to make quizzes on Google Forms," which earned a mean score of 3.95. In addition, the findings, which have a grand mean of 4.09, demonstrate that all instructors are able to make effective use of workspace.

Significant Differences in Respondents` Assessment of their Competencies in Using Virtual Workspace when grouped according to their profile: Age, Highest Educational Attainment, and Years of Experience.

The results shows that when the teachers were divided into groups based on their ages, those who are between the ages of 21 to 30 have a significantly greater mean (M=4.2391) than those who are older or younger. As an outcome, there is a clear differentiation in the ways in which age groups use the digital workplace.

The data reveals that the significant differences that emerge when the respondents are broken down according to the highest level of education they have achieved, that the mean score for teachers with a bachelor's degree is 4.0361, while the mean score for teachers with a master's degree is 3.8833. The p-value for

this difference is .425, which is more than the level of significance of 0.05, one may say that this difference does not represent a statistically significant difference. This only demonstrates that teachers have the same level of proficiency in using the virtual workspace regardless of the respondent's highest level of educational attainment.

The findings indicate that those with 1 to 5 years of teaching experience have a mean score that is closer to 4.2267 than those with 6 to 10 years of experience, 11 to 15 years, 16 to 20 years, and 21 years and above. Having a p-value of .001, in this case we may state that the difference is significant since the p-value was found to be less than 0.05. This shows that there are significant differences in the number of years of experience that teachers have, which in some way influences their abilities.

Teachers' description of their strengths and weaknesses in using virtual workspaces.

The teacher-participants recognized description of their strengths and weaknesses in using virtual workspaces. Two (2) themes were identified under each proving question. Proving Question 1: (1) Ease of use and (2) Enabling technology; Proving Question 2: (1) Provision for technological logistics and (2) Capacity training for technology usage; Proving Question 3: (1) Poor connectivity and (2) Lack of technological equipment; and Proving Question 4: (1) Self-reliance and (2) seeking assistance and help.

Framework of New Normal Learning Environment

A framework to increase the competent teachers in the new normal learning environment was developed in this study. The use of technology to make their jobs easier has become the new standard for educators. Teachers' abilities to use technology are being bolstered via the provision of additional support in the form of technical logistics and capacity training. A lack of technology resources and limited internet connectivity creates a challenge for teachers. As part of the support, teachers are given virtual workplaces as well as capacity training and technology logistics. Self-reliance and asking for support are two ways in which we might improve as instructors.

CONCLUSION

The following conclusions have been derived from the study's findings:

1. Teachers may have varying proficiency when it comes in utilizing a virtual workspace when grouped according to their age.
2. When it comes to making use of a virtual workspaces, the highest degree of education that a teacher has achieved is not a concern.
3. It has been revealed that the use of virtual workspaces may have a substantial effect on teachers' capabilities in terms of their varying years of teaching experience.
4. In other instances, teachers who answered to a survey had a comprehensive understanding of the virtual workplace and were able to use it efficiently.
5. Some teachers could find virtual workplaces advantageous in terms of both instruction and student learning.
6. The use of virtual workspaces by certain educators results in an increase in overall productivity.
7. Participating in webinars is an increased chance of educators grasping on how Google Workspaces works.
8. Some teachers claim themselves as technically challenged in using workspace.
9. Even with having webinars, teachers are still getting used to using Google Workspaces, asking for assistance, and even exploring for alternate resources to satisfy their interest about the platform.
10. Lack of connection and accessibility to technical tools for educators are two examples of the barriers that exist.

RECOMMENDATION

The following suggestions, which are grounded on the findings, are put up for consideration:

1. Intensify the teacher assignment distribution for those teachers who have at least one year of experience or who are above the age of 21 on EPP with ICT related subject as it was found out in this paper that they are competent in dealing with technology.
2. Teachers attending ICT related seminars should undergo series of screening. Profiling of all teachers should be properly reflected for easy identification.
3. Instead of selecting seminar attendees at random, those with ages ranging from 31 and above should be encouraged to participate more in seminars concerning virtual workspaces.
4. Broaden external linkages by tapping the stakeholders for cash load assistance for teachers and pupil's internet connectivity.
5. Continuously provide teachers with full access on google workspace even during face to face.
6. Intensify the computerization program of the Department of Education in order to provide needed equipment for both teachers and pupils.

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