

Teachers' Flexibility and ICT-Adeptness in the Now Normal in Education

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Abstract

Study objectives aimed to find out how 311, mostly female and single basic education teachers, within the age group 21-30, coming from big urban public schools, assessed their own flexibility and ICT adeptness in implementing blended and flexible teaching and learning in the now normal landscape of education, almost two years since local public and private schools, colleges and universities went on lockdown in 2020. There is a continuing need to ascertain teachers' level of flexibility and ICT adeptness for blended and flexible learning with most learners continuing to be online.

Findings conclude that **"Teachers are Very Flexible"** in implementing the 5 components of Flexibility: Time, Content, Entry Requirements, Instructional Approach and Resources, and Delivery and Logistics. Likewise, **"Teachers are Always ICT Adept"** in the 4 components of ICT-Adeptness: Teaching Content, Teacher-Student Interaction, Teaching Form and Teaching Environment. Profile-wise, male teachers are more flexible and ICT aware, and single teachers spend longer and earlier times in school. Significant differences are seen in teachers' flexibility based on school location and school type, but not based on school size. It is also concluded that teachers coming from big, urban, public schools are "Always ICT Adept," though significant differences are seen based on their sex and age, but not civil status.

It is recommended that DepEd maximize on these profile variables in the recruitment and placement of teachers; that the basic education curriculum be reviewed further to continually enable blended and flexible learning; and continue implementation of Minimum Education Learning Competencies.

Keywords: Teachers' Flexibility, Teachers' ICT Adeptness, 5 Components of Flexibility, Flexible Learning, Blended Learning

Introduction

Severely hampered by the restrictions brought by the COVID-19 pandemic since early 2020, teachers in educational systems worldwide rallied and adapted accordingly. Locally, the Department of Education (DepEd) reiterated its cry for education to continue for both public and private schools with its Basic Education Learning Continuity Plan (BE-LCP) using Minimum Education Learning Competencies (MELC) through Blended Learning for K-12 education (Briones, 2020). For higher education, the Commission on Higher Education (CHED) mandated Flexible Learning Arrangements (FLA) among local and state colleges and universities (De Vera, 2020).

With the first year of blended learning done and results not up to par, an initial 100 public and 20 private schools in areas with minimal virus threat were allowed to conduct face to face classes though with restrictions such as lesser number of learners and shorter contact time (Briones, 2021). Similarly, CHED said programs such as Nursing and Medicine may reopen based on "the situation at the ground level which includes compliance with health requirements and consultation with local government units" and that "it is possible that face-to-face classes in tertiary institutions in certain virus-adverse areas may be allowed in early 2022," (De Vera, 2021).

Flexible Learning, Teachers' Flexibility & Information and Communication Technology (ICT) Adeptness

Merriam Webster defines Flexibility to mean a person's ready capability to adapt to new, different or changing requirements; likewise, Adeptness means a person's natural or acquired facility in a specific activity. An adept person is a highly skilled or well-trained individual; while a flexible person is able to adapt quickly to whatever situation without difficulty. Both of these words describe the teacher. ICT-adeptness means the teacher's capability of using appropriate ICT tools in the teaching and learning scenarios for learners' benefits. Accordingly, teachers' mind sets must change to "teaching is not effective without the appropriate use of ICT resources to facilitate student learning," (Ertmer & Ottenbreit-Leftwich, 2010).

Flexible Learning impacts student learning since the quality of learning experiences is dependent on how the teacher manages the processes that provide appropriate learning experiences. Flexible Learning also improves learning outcomes by giving the learner greater control over his/her learning process. ICT is a tool the teacher uses in flexible learning, and adeptness in its use allow them to be managers of the process as facilitators of the teaching and learning continuum. With its variety of learning modes and interactions, being a compilation of approaches in terms of time, place, pace, content and mode of learning applied in varying degrees, Flexible Learning provides learners with choices about where, when, and how learning occurs (Shurville, et al, 2008). This is the reason why Flexible Learning is also referred to as "personalized learning," as a set of educational philosophies and systems, concerned with providing learners with increased choice, convenience, and personalisation, said Joan (2013).

As Briones (2020) said, "Flexible Learning is not new." Teaching and learning flexibility can be found in: On-Campus Classroom Learning, Distance Education, Open Learning, Independent Learning, Resource-based Learning, Tele-teaching, Computer-Managed Learning, Computer-Assisted Learning, Online Learning, Mobile Learning, Multimedia Learning, Blended Learning and Virtual Learning, among others. All these allow students the option to take the course either completely modular, completely online, or in a blended fashion with no learning deficit, said Laura (2017). In this paper, all these modes of delivery mean Blended Learning, the term most used by DepEd, and Flexible Learning, the term most used by CHED, to describe the prevailing instructional delivery mode.

Teachers' Flexibility

The Partnership for 21st Century Skills (2009) defines teachers' flexibility as "being able to use a variety of teaching techniques and strategies. This skill is handy in the classroom when the teacher needs to adjust his/her plans for a particular day. A flexible teacher is able to make modifications to the plan under specific circumstances."

A multinational study by Collis and van der Wende (2002), identified 19 dimensions of teacher flexibility and listed them under five key categories related to: time; content; entry requirements; instructional approach and resources; and delivery and logistics. These 19 dimensions are among those used in the current study instrument. As Collis and van der Wende (2002) said, "the key idea here is choice, though not everything can be made flexible at all times for all students."

In complementation, the Deakin University's vision of an integrated approach to flexible education is "an environment which includes, where appropriate, choice for teachers and learners in: the time (including flexible entry and exit points) at which study occurs, the pace at which the learning proceeds, the place (both physical and virtual) in which study is conducted, the content that is studied, the learning style adopted by the learner, the forms of assessment employed, the option to

collaborate with others or to learn independently, how teaching is staffed, plus a mix of all these in any given course or unit.

Teachers' ICT Adeptness

The Partnership for 21st Century Skills (2009) also defined a teacher's being adaptable or being adept at something to imply "working effectively even in new situations, environments, and changing priorities. Even if roles and tasks are ever-changing, the adaptable person will not stop working but will be willing to make changes to achieve set goals." This involves adjustments in cognition of situations, in differing actions to better meet issues and minimizing emotions like anxiety or frustration that may be unhelpful or distracting (Collie, et al, 2018).

Self-efficacy is one's belief in one's ability. ICT self-efficacy or adeptness is the judgment of one's capability to use ICT and the familiar and effective teaching tools of the 21st century classrooms (Arnab et al, 2020).

Numerous studies have proven ICT's impact on education outcomes (Barak, Watted & Haick, 2016), seen in 15 statements in the study instrument that refer to the components of the teacher's ICT-adeptness related to the: teaching form, teaching environment, teaching content, and teacher-student social engagement, thereby greatly facilitating teaching and learning.

Governments have invested large amounts of money into ICT for education to transform traditional teaching. However, teachers' attitude towards ICT is the main factor affecting its effective and efficient use into instruction since the teacher is the direct implementer of ICT, and has an important role in its successful integration into education. If teachers' attitude towards ICT is negative, or if they refuse to use ICT in teaching, its integration in teaching will not happen. Simply introducing ICT does not guarantee its integration into the educational setting; on the other hand, teachers' attitudes towards ICT will, to a considerable extent, influence students' attitudes towards it (Wang & Dostal, 2017).

Rationale of the Study

This study was conceptualized to find out how teachers' assess their own flexibility and ICT adeptness in implementing teaching and learning in the now normal landscape of education, almost two years since local public and private schools, colleges and universities went on lockdown in March 16, 2020. There is a felt need to know teachers' level of flexibility for continuing Blended and Flexible Learning which would necessitate data on just how adept they are in using ICT on a daily basis, with most learners still online. However, exposure to digital tools does not mean its mastery, hence the importance of teachers being able to connect learners' digital knowledge and capabilities to academic content (Considine, Horton & Moorman, 2009), through their own take on diffusion of the innovations brought by Flexible or Blended Learning.

Theoretical Framework

Diffusion of Innovations (DOI) Theory, developed by E.M. Rogers in 2003, which in this paper pertains to ICT, explains how, over time, ICT gains momentum, spreading within societies and cultures, from introduction to wider-adoption (Halton, 2021). The theory explains how and why new ideas and practices are adapted, and spread over long periods. Factors that affect DOI include the mix of rural to urban population of a society, its level of education, as well as the extent of industrialization and development. Different societies are likely to have different adaptation rates at which the members of a society accept the new innovation. The end result is that people (or in this study teachers and learners), adapt to the new idea, behavior or technology. This adaptation means that a person does something differently from what was done previously. Of importance in this adaptation is the perception that the idea, behavior or technology is new or innovative. It is through

this belief that diffusion is possible. Adaptation does not happen fast, it is a process whereby people who adapt an innovation early have different characteristics than those who adapt the innovation later. The stages by which the innovation is adapted, and diffusion is done, include awareness of the need for an innovation, decision to adapt (or reject) the innovation, initial use of the innovation to test it, and continued use of the innovation.

This theory is relevant to this paper since what is under review is teachers' flexibility and adeptness in using the required ICT tools for effective Blended and Flexible Learning to continue in the Now Normal of education in the land.

Conceptual Framework

To teach any subject successfully, Seghayer (2017), notes that teachers must first possess two crucial characteristics: flexibility and adaptability, as seen below in the research paradigm of this study.

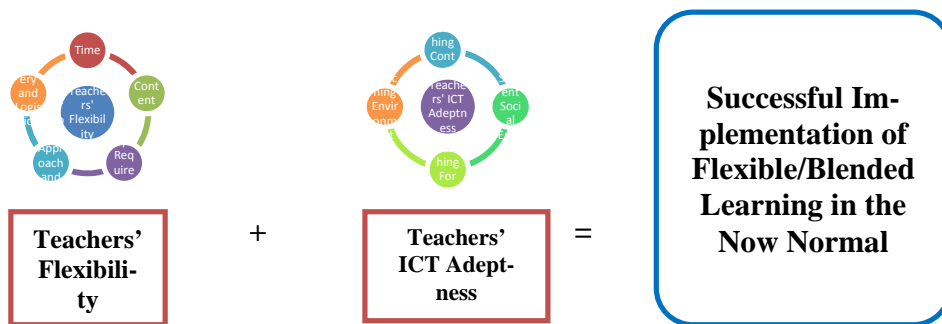


Figure 1. Research Paradigm of the Study

Teachers need to adapt their instruction to their students, who, in turn, adapt to the different modes of instruction they receive. Teachers also need to be flexible, as both teaching and learning are dynamic processes in which numerous factors interplay and are susceptible to change (Shishavan & Sadeghi, 2009), with many factors that motivate and impede faculty to teach and learn online (Wright, 2014). As Vaghjee (2014) noted with regard to the current trend of adapting ICT enhanced education, it is crucial for teachers to understand students and their academic and social practices with regard to technology use. Teachers need not just to adapt ICT but to also innovate the use of technology as teaching supports, just as their students see technology as learning supports. Teachers' flexibility in adapting, innovating and using blended learning coupled with their ICT adeptness in such delivery mode would bring about successful diffusion and wider implementation of Flexible/Blended Learning in the Now Normal.

Statement of the Problem

RQ1. What is the profile of the respondents?

RQ2. What is the respondents' assessment of their flexibility in implementing the Now Normal in Education in terms of: Time, Content, Entry Requirements, Instructional Approach and Resources, and Delivery and Logistics?

RQ3. What is the respondents' assessment of their ICT adeptness in implementing the Now Normal in Education in terms of: Teaching Content, Teacher-Student Interaction or Social Engagement, Teaching Form, and Teaching Environment?

RQ4. When grouped based on profile variables, is there any significant difference on respondents' assessment of their flexibility?

RQ5. When grouped based on profile variables, is there any significant difference on the respondents' assessment of their ICT adeptness?

Research Hypotheses

Two study hypotheses were tested at 0.05% degree of significance:

Ho1. When grouped based on profile variables, there is no significant difference on respondents' assessment of their flexibility.

Ho2. When grouped based on profile variables, there is no significant difference on respondents' assessment of their ICT adeptness.

Methodology

In this descriptive quantitative study, 311 respondents were gathered via the researchers' network of graduate students who filled out the study questionnaire floated via google forms in a simple random manner in a timeline of seven (7) days. Data retrieved was treated with simple frequency and percentages for the profile variables. Mean, Median, Kruskal Wallis and Mann Whitney statistics were used to determine teachers' flexibility and ICT adeptness, and to ascertain any significant differences seen among variables in response to the research questions.

Results and Discussion

Respondents' Profile

Table 1. Profile of Respondents

Age			Sex			Civil Status		
Group	F	%	Sex	F	%	Status	F	%
21-30	154	49.5	Male	59	19	Single	161	51.8
31-40	113	36.3	Female	252	81	Married	149	47.9
41-50	38	12.2				Separated	1	0.3
51-60	5	1.6						
61-up	1	0.3						
Total	311	100	Total	311	100	Total	311	100
Type of School			Location of School			Size of School		
Type	F	%	Location	F	%	Size	F	%
Public	270	86.8	Rural	137	44.1	Small	83	26.6
Private	15	4.8	Urban	162	52.1	Medium	95	30.6
Other	26	8.4	Others	12	3.9	Big	112	36.1
						Others	20	6.5
Total	311	100	Total	311	100	Total	311	100

Table 1 shows that most of the 311 respondents (154 or 49.5%), are in the age group 21-30; female (252 or 81%), single (161= 51.8%), mostly coming from big (112 or 36.1%) public schools (270 or 86.8%), from urban areas (162 or 52.1%).

A study done by Vitanova, et al (2015), found that ICT competencies decrease as age increases for teachers. Likewise, men have been found to be more likely to have higher ICT compe-

tencies than women. They also found that the type of school, its location and size are not significantly associated with teachers' ICT competencies. Strongest factors related to ICT competencies were found to be the teachers' professional use of ICT, having their own personal computer or gadget, their attitude and motivation, and the school's ICT capacity (Vitanova, et al (2015). Conversely, in their study, Marcial and Dela Rama (2015) found that teachers' profile variables of sex and civil status are not significant, while age is significant when it comes to teachers' ICT adeptness. Shishavan and Sadeghi (2009), found that successful teachers reflect on their personal experiences and adjust their methods based on emerging situations.

Study findings show that however varied are their profile variables, teachers' flexibility and adaptability are significant traits in successful teaching.

Respondents' assessment of their Flexibility in implementing the Now Normal in Education in terms of: Time, Content, Entry Requirements, Instructional Approach and Resources, and Delivery and Logistics

Table 2. Respondents' Flexibility

In terms of Time I am		
Statements	Mean	V.I.
1. I am flexible in the time period I assign my students for starting and finishing a course.	4	Very Flexible
I am flexible in the times I set for submitting assignments.	4	
3. I am flexible in the number of times I set for graded student interaction in the classroom.	3	Often Flexible
4. I set a flexible tempo and pace of study in my classroom for my students.	3	
5. I am flexible in scheduling moments of assessment.	4	Very Flexible
Overall Mean	3.6	Very Flexible
In terms of Content I am		
Statements	Mean	V.I.
6. I am flexible in planning the topics for the courses I am teaching.	4	Very Flexible
7. I am flexible in sequencing the different parts of the courses I am teaching.	4	
8. I am flexible in my manner of providing theoretical orientation for the course.	3	Often Flexible
9. I am flexible in choosing the key learning materials for a course I am handling.	4	Very Flexible
10. I am flexible when it comes to the assessment standards and completion requirements for the course I am teaching.	4	
Overall Mean	3.8	Very Flexible
In terms of Entry Requirements, I am		
Statements	Mean	V.I.
11. I am flexible when it comes to required stu-	4	Very Flexible

dent participation.		
12. I am flexible with regards to attendance to my class.	4	
13. I am flexible with regard to the needs of differently-abled students.	4	
14. I am flexible with regard to cultural and religious diversity of my students.	4	
Overall Mean	4	Very Flexible
In terms of Instructional Approach and Resources, I am		
Statements	Mean	V.I.
15. I am flexible with regard to cultural and religious diversity of my students.	4	Very Flexible
16. I am flexible in the social organization of learning for my students.	4	
17. I am flexible in choosing the best learning resources for my class.	4	
18. I am flexible with regard to the language to be used in the course am teaching.	4	
Overall Mean	4	Very Flexible
In terms of Delivery and Logistics, I am		
Statements	Mean	V.I.
19. I am flexible with regards to the methods and technology to support my teaching.	4	Very Flexible
20. I am flexible with regards to contact time between myself and my students	4	
21. I am flexible in delivery channels I use for course information, content and communication.	4	
22. I am flexible with regards to the types of help I provide my students.	4	
Overall Mean	4	Very Flexible
Grand Mean = 3.88 or Teachers are Very Flexible		

In Table 2 the respondents assessed just how flexible they are in implementing Blended and Flexible Learning in terms of: Time, Content, Entry Requirements, Instructional Approach and Resources, and Delivery and Logistics. As seen, Teachers' assessment in **Overall Means of 3.85** from these 22 statements are verbally interpreted as "**Very Flexible**" in all components: Time (3.6); Content (3.8); Entry Requirements (4.0); Instructional Approach and Resources (4.0); and (3.88) Delivery and Logistics. However, in three statements with means of 3.0, teachers say that they are "Often Flexible:"

Respondents' assessment of their ICT adeptness in implementing the Now Normal in Education in terms of: Teaching Content, Teacher-Student Interaction or Social Engagement, Teaching Form, and Teaching Environment?

Seen in Table 3, the teachers also assessed through 15 statements their **ICT Adeptness** in ended Learning. Findings show they are "**Always ICT Adept**" in **nine statements**, and "Often ICT

Adept” in six statements, with **Overall Means** of 3.57 verbally interpreted as “**Always ICT Adept.**”

Table 3. Respondents’ ICT Adeptness

Statements	Median	Verbal Interpretation
1. I use internet search engines for find information	4	Always ICT Adept
2. I use email for communication.		
3. I use messenger or viber for communication.		
4. I use youtube and others to learn new skills.		
5. I use social media to find information.		
6. I use software that is specific to my field of teaching.		
7. I use social networking sites for group work activities as part of my teaching strategies.		
8. I use mobile phone to access study related information on the internet.		
14. I use a tablet computer as part of my teaching.	3	Often ICT Adept
9. I use web conferencing or video chat to communicate with my students on assignments, projects and other course requirements.		
10. I use online library online resources (e-journals/electronic databases) to find information.		
11. I create podcasts for my lessons.		
12. I suggest course related podcasts to my students.		
13. I read and comment on blogs created by other teachers.		
15. I create audio/video materials and share them with my students as part of their studies.		
Overall Mean = 3.60 or “Teachers are Always ICT Adept”		

Significant Differences seen in their Flexibility when Respondents are grouped based on their Profile

The respondents gave their median ratings to the following 22 statements relative to their level of Flexibility in its 5 components.

Table 4. The 5 Components of Flexibility

1. Flexibility Related to Time
1. In the time period assigned to my students for starting and finishing a course.
2. In the times I set for submitting assignments.
3. In the number of times I set for graded student interaction in the classroom.
4. In setting flexible tempo and pace of study in my classroom for my students.
5. In scheduling moments of assessment.
2. Level of Flexibility Related to Content
6. In my manner of providing theoretical orientation for the course.
7. In planning the topics for the courses I am teaching.
8. In sequencing the different parts of the courses I am teaching.

9. In choosing key learning materials for a course I am handling.
10. In the assessment standards and completion requirements for the course I am teaching.
3. Level of Flexibility Related to Entry Requirements
11. When it comes to required student participation
12. With regards to attendance to my class.
13. With regard to the needs of differently-abled students.
14. With regard to cultural and religious diversity of my students.
4. Level of Flexibility Related to Instructional Approach
15. When it comes to pedagogy and resources in teaching my students.
16. In the social organization of learning for my students.
17. In choosing the best learning resources for my class.
18. With regard to the language to be used in the course am teaching.
5. Level of Flexibility Related to Delivery and Logistics
19. With regards to the methods and technology to support my teaching.
20. With regards to contact time between myself and my students
21. In delivery channels I use for course information, content and communication
22. In types of help I provide my students.

Table 4.1 Significant Differences Seen in Respondents' Level of Flexibility Based on Sex

Statements	Mann Wit-ney U	P value	Decision
Flexibility Related to Time			
In the number of times I set for graded student interaction in the classroom	6261.5	0.035	Reject Ho Significant
In setting flexible tempo and pace of study in my classroom for my student	5897.5	0.005	
In scheduling moments of assessment	6043	0.026	
Flexibility Related to Content			
In planning the topics for the courses I am teaching.	6108	0.015	Reject Ho Significant
In sequencing the different parts of the courses I am teaching.	6023.5	0.011	
In choosing key learning materials for a course I am handling.	6182.5	0.026	
In the assessment standards and completion requirements for the course I am teaching.	6113	0.016	
Flexibility Related to Entry Requirements			
When it comes to required student participation	5368.5	>0.000	Reject Ho Significant
With regards to attendance to my class.	5974	0.006	
With regard to the needs of differently-abled students.	5567	0.001	
With regard to cultural and religious diversity of my students.	5975	0.007	
Flexibility Related to Instructional Approach and Resources			

When it comes to pedagogy and resources in teaching my students.	5540	0.001	Reject Ho Significant
In the social organization of learning for my students.	5775.5	0.003	
In choosing the best learning resources for my class.	5868.5	0.005	
With regard to the language to be used in the course am teaching.	6159	0.02	
Flexibility Related to Delivery and Logistics			
With regards to the methods and technology to support my teaching.	5166	>0.000	Reject Ho Significant
With regards to contact time between myself and my students	5736	0.002	
In delivery channels I use for course information, content and communication	5064	>0.000	
In types of help I provide my students.	5666	0.001	

P = 0.05 degree of significance

When respondents are grouped based on their profile variable of **Sex**, differences are seen in Teachers' Flexibility related to all 5 components of Flexibility: Time, Content, Entry Requirements, Instructional Approach and Resources, and Delivery and Logistics. With p-values less than the 0.05 degree of significance in all these five fields, the decision rule is to reject the hypothesis.

Seen in Table 4.2 as to respondents' **Flexibility related to Age** "No Significance" is seen and the decision is Failed to Reject Hypothesis.

Table 4. 2. Differences in Respondents' Flexibility Based on their Age

Components of Flexibility	Decision Rule
1. Flexibility Related to Time 2. Flexibility Related to Content 3. Flexibility Related to Entry Requirements 4. Flexibility Related to Instructional Approaches and Resources 5. Flexibility Related to Delivery and Logistics	Failed to Reject Ho No Significant Differences Seen

P = 0.05 degree of significance

Table 4.3. Differences in Respondents' Flexibility Based on their Civil Status

Statements	Chi-Square	P value	Decision
1. Flexibility Related to Time			
In the time period assigned to my students for starting and finishing a course.	5.621	0.06	Reject Ho Significant Differences seen
2. Flexibility Related to Content			Failed to Reject Ho No Significant Differences seen
3. Flexibility Related to Entry Requirements			
4. Flexibility Related to Instructional Approach and Resources			
5. Flexibility Related to Delivery and Logistics			

P = 0.05 degree of significance

Table 4.3 looked at teachers' flexibility based on their Civil Status. Only in Flexibility Related to Time, in the statement "In the time period assigned to my students for starting and finishing a course" which has a p-value of 0.06 which is more than the agreed upon degree of significance leading to the decision of Reject the Ho, Significant Differences are seen.

All other Flexibility components of Content, Entry Requirements, Instructional Approach and Delivery and Logistics have computed p-values more than the 0.05 degree of significance leading to Failed to Reject the Hypothesis, and "**No Significant Differences**" are seen. the Hypothesis since there is a "**Significance**" seen in this field.

These findings show that based on their status, teachers tend to have differences in assigning time periods for students to start and/or finish a course. Since there are more single teachers (161 or 51.8%) in the sample, it is possible that single teachers tend to come to school earlier than married teachers. Since the married teachers (149 or 47.9%) may need more time for their families.

As part of their profile variables seen in Table 1, teachers' flexibility was also assessed based on school location, school type, and school size.

Type of School			Location of School			Size of School		
Type	<i>f</i>	%	Locale	<i>f</i>	%	Size	<i>f</i>	%
Public	270	86.8	Rural	137	44.1	Small	83	26.6
Private	15	4.8	Urban	162	52.1	Medium	95	30.6
Other	26	8.4	Others	12	3.9	Big	112	36.1
						Others	20	6.5
Total	311	100	Total	311	100	Total	311	100

Table 4.4. Differences in Respondents' Flexibility Based on School Type

Components of Flexibility	Decision Rule
1. Flexibility Related to Time	Failed to Reject Ho No Significant Differences Seen
2. Flexibility Related to Content	
3. Flexibility Related to Entry Requirements	
4. Flexibility Related to Instructional Approaches and Resources	
5. Flexibility Related to Delivery and Logistics	

P = 0.05 degree of significance

Findings show no significant differences seen in responses from the teachers with regards to their Flexibility based on school type.

Conclusion arrived at is that whatever is the school type, there is no significant differences seen in how flexible teachers are in implementing Blended and Flexible Learning.

Table 4.5 shows that when it comes to School Location, there are "**Significant Differences**" seen in teachers' responses as to their Flexibility.

With more respondents (N=162 or 52.1%) coming from urban schools, it is concluded that teachers' flexibility is also based on school location since urban schools are notably more technology capable, with students more technology aware and adept.

Table 4.6 shows that when it comes to School Size, there are "**Significant Differences**" seen in teachers' responses as to their Flexibility.

With most respondents (N=112 or 36.1%) coming from big schools, it is concluded that teachers' flexibility is also based on school size since big schools are where the district offices of

the Department of Education are situated providing these schools with more technology capability, internet access, and LGU donations of gadgets and internet load for teachers and students.

Table 4.5. Differences in Respondents' Flexibility Based on School Location

Statements	Chi-Square	P value	Decision
1. Flexibility Related to Time			
In the time period assigned to my students for starting and finishing a course.	9.304	0.01	Reject Ho Significant Differences seen
In the times I set for submitting assignments.	13.097	0.001	
In the number of times I set for graded student interaction in the classroom	7.43	0.024	
2. Flexibility Related to Content			
In planning the topics for the courses I am teaching.	11.343	0.003	Reject Ho Significant Differences seen
In choosing key learning materials for a course I am handling.	6.613	0.037	
In the assessment standards and completion requirements for the course I am teaching.	6.9	0.032	
3. Flexibility Related to Entry Requirements			
With regards to attendance in my class.	7.858	0.02	Reject Ho Significant Differences seen
With regards to the needs of differently-abled students.	7.632	0.025	
With regards to cultural and religious diversity of my students	7.157	0.025	
4. Flexibility Related to Instructional Approach and Resources			
When it comes to pedagogy and resources in teaching my students.	7.661	0.022	Reject Ho Significant Differences seen
5. Flexibility Related to Delivery and Logistics			
With regards to the methods and technology to support my teaching.	6.33	0.042	Reject Ho Significant Differences seen

P = 0.05 degree of significance

Table 4. 6 Differences in Respondents' Flexibility Based on School Size

Statements	Chi-Square	P value	Decision
1. Flexibility Related to Time			
In the number of times I set for graded student interaction in the classroom.	12.084	0.005	Reject Ho Significant Differences seen
4. In setting flexible tempo and pace of study in my classroom for my students.	8.293	0.04	
2. Flexibility Related to Content			
In my manner of providing theoretical orienta-	8.745	0.033	Reject Ho Signif-

tion for the course.			ificant Differences seen
In the assessment standards and completion requirements for the course I am teaching.	10.165	0.17	
3. Flexibility Related to Entry Requirements			
When it comes to required student participation.	15.09	0.002	Reject Ho Significant Differences seen
With regards to attendance in my class.	11.206	0.011	
With regards to the needs of differently-abled students.	10.478	0.015	
4. With regards to cultural and religious diversity of my students.	10.4	0.015	
4. Flexibility Related to Instructional Approach and Resources			
When it comes to pedagogy and resources in teaching my students.	8.819	0.032	Reject Ho Significant Differences seen
In choosing the best learning resources for my class.	10.15	0.015	
5. Flexibility Related to Delivery and Logistics			
In types of help I provide my students.	13.581	0.048	Reject Ho Significant Differences seen

P = 0.05 degree of significance

When grouped based on profile variables, is there any significant difference on respondents' assessment of their ICT adeptness?

Table 5. Differences in Respondents' ICT Adeptness Based on Sex

Statements	Mann Whitney U	P value	Decision
I use library online resources (e-journals, electronic databases) to find information.	6211	0.039	Reject Ho Significant Differences seen
I create podcasts for my lessons	5716.5	0.01	
I read and comment on blogs created by other teachers.	5578.5	0.042	

P = 0.05 degree of significance

Based on respondents' profile variable of **Sex**, "**Significant Differences**" is seen only in these 3 statements, hence the decision to Reject the Hypothesis since the p-values arrived at are less than the prescribed degree of significance of 0.05.

Yungco and Madrigal (2020) found that there are significant differences in teachers' awareness of ICT use based on sex with men having more or higher ICT adeptness.

As to **Age**, it is only in these statements wherein a **Significance** is seen and the Hypothesis is Rejected. This finding is similar to Galvis (2012), who also found that older teachers struggle significantly relative to ICT use in the classroom.

Table 5.1. Respondents' ICT Adeptness based on Age

Statements	Chi-Square	P value	Decision
I use social media to find information	11.596	0.021	Reject Ho Significant Differences seen
I use mobile phone to access study related information on the internet	14.148	0.007	
I read and comment on blogs created by other teachers.	10.171	0.038	

P = 0.05 degree of significance

Table 5.2. Respondents' ICT Adeptness based on Civil Status

Statements	Chi-Square	p-value	Decision and Remarks
No Significant Differences Seen in all 4 components 15 statements			

P = 0.05 degree of significance

As to **Civil Status**, “**No Significant Differences**” are seen with all 15 statements relative to the four (4) components of ICT Adeptness.

The next three tables will show how ICT adept teachers are based on School Type, School Location, and School Size.

Table 5.3 Respondents' ICT Adeptness based on School Type

Statements	Chi Square	p-value	Decision Remarks
I create audio and video materials and share them with my students as part of their studies.	9.107	0.11	Reject Ho Significant

P = 0.05 degree of significance

As Marcial (2018) explained, too often educators are required to integrate technology into classroom learning without proper training and, despite the obstacles that are always present in any technology integration in the classroom, they still manage to integrate ICT into their training.

With most of the teacher-respondents coming from public schools (N=270, or 86.8%), it is clear why they are ICT adept. However, when it comes to creating audio and video materials, not all the teachers have such adeptness. This is a conclusion that needs to be addressed.

Table 5.4 Respondents' ICT Adeptness based on School Location

Statements	Chi-Square	p-value	Decision Remarks
I use internet search engines to find information	10.613	0.005	Reject Ho Significant
I use email for communication	11.36	0.003	
I use social media to find information	9.131	0.01	
I use social networking sites for group work activities as part of my teaching strategies	7.423	0.024	
I suggest course related podcasts to my students	8.063	0.018	

P = 0.05 degree of significance

Most of the teachers are from Urban schools (N=162, or 52.1%). As we have observed urban schools are more technology advanced than schools from rural areas. This finding validates the conclusion that teachers from urban schools are more ICT adept.

Table 5.5 Respondents' ICT Adeptness based on School Size

Statements	Chi-Square	p-value	Decision Remarks
I use internet search engines to find information	13.581	0.004	Reject Ho Significant
I use social media to find information	12.971	0.005	
I use mobile phones to access study related information on the internet	8.058	0.045	
I read and comment on blogs created by other teachers	8.766	0.033	

P = 0.05 degree of significance

There are again significant differences seen in teachers' ICT-adeptness when they come from schools of different sizes. With most of the respondents coming from big schools (N=112, or 36.1%) it is clear that teachers who are internet challenged would experience some difficulties and not be as conversant as their co-teachers from the big school.

Teachers self-learning process of developing their basic ICT skills and keeping these up-to-date could hinder the capability of teachers in integrating ICT in their classes. This is supported by the study by Figg and Jaipal-Jamani (2017) which found that inadequate technology training creates a barrier for teachers when implementing technology resources.

The main conclusion forwarded by Tables 5.3 to 5.5 is that teachers coming from mostly big public schools in urban areas are more ICT-adept than other teachers.

Conclusions and Recommendations

Profile of Respondents

Most (N=154 or 49.5%) of the respondents are in the age group 21-30; female (N= 252 or 81%), single (N=161= 51.8%), mostly coming from big (N=112 or 36.1%) public schools (N=270 or 86.8%), from urban areas (N=162 or 52.1%).

Respondents' Assessment of their Flexibility in implementing the Now Normal in Education based on the 5 Components of: Time, Content, Entry Requirements, Instructional Approach and Resources, and Delivery and Logistics

With Overall Means of 3.85, it is concluded that “**Teachers are Very Flexible**” in implementing flexible learning in the Now Normal. Findings show that based on: Entry Requirements (4.0); Instructional Approach and Resources (4.0); Delivery and Logistics (3.88); Time (3.8); and Content (3.8). However, teachers were found to be Only Flexible (mean of 3.0) in their flexibility in number of times set for graded student interaction in the classroom; setting a flexible tempo and pace of study for students in the classroom; and flexibility in the manner of providing theoretical orientation for the course.”

This conclusion is arrived at due to DepEd memo of easing of academic requirements for students during this period of pandemic.

Respondents' Assessment of their ICT Adeptness

Teachers' ICT Adeptness in implementing flexible learning was assessed. Teachers are 4.0 or “Always ICT Adept” in their use of: internet search engines and social media to find information;

email for communication; messenger or viber for communication; youtube and others to learn new skills; specific software for their field of teaching; social networking sites for group work activities among their teaching strategies; mobile phones to access study-related information on the internet; and use a tablet computer as part of their teaching resources. However, when it comes to: the use of web conferencing or video chat to communicate with my students on assignments, projects and other course requirements; online library resources to find information; create podcasts for my lessons; suggesting course related podcasts to students; read and comment on blogs created by other teachers; and create audio/video materials and share them with students as part of their studies, teachers were on “Often ICT Adept” with a mean of 3.0.

With the Overall Mean of 3.60 garnered, it is concluded that “**Teachers are Always ICT Adept**” and should have no problem implementing flexible learning in the Now Normal.

Significant Differences based on Teachers’ Profile Variables of: Sex, Age, Civil Status, School Type, Location and Size; and the components of Flexibility: Time, Content, Entry Requirements, Instructional Approach and Resources, and Delivery and Logistics

Based on **Sex**, a “**Significant**” difference is seen between male and female teachers when it comes to their Flexibility.

When grouped as to **Age**, “**No Significance**” is seen in all five (5) components of Flexibility.

As to **Civil Status**, there is a “**Significant**” difference seen only in the Time component, specifically with the statement “In the time period assigned to my students for starting and finishing a course.” The other four components showed no significant difference.

Based on this finding it is concluded that single teachers (N=161 or 51.8%) tend to have differences in assigning time periods for students to start and/or finish a course since single teachers tend to come to school earlier than married teachers who may need more time for their families.

Conclusion arrived at is that whatever is the **School Type**, there is no significant differences seen in how flexible teachers are in implementing Blended and Flexible Learning.

When teachers are grouped based on **School Location**, there is a **Significance** seen in all 5 components of Flexibility. Specifically, “in the time period assigned for starting and ending a course; time set for submitting assignments; and number of times set for graded student interaction.” Also in “planning the topics of the course handled; in choosing key learning materials for the course being taught; and assessment standards and completion requirements set.” As well as in: “attendance, needs of differently-abled students, and cultural and religious diversity of students.” Same with “when it comes to pedagogy and resources in teaching my students; and “with regards to the methods and technology to support my teaching.”

There is a **Significance** seen based on School Size in all 5 components of Flexibility. Especially in, “the number of times set for graded student interaction, and in setting flexible tempo and pace of study for the students in the classroom.” Also in “the manner of providing theoretical orientation for the course, and the assessment standards and completion requirements for the course I am teaching.” Together with “when it comes to required student participation, attendance in class, needs of differently-abled students and the cultural and religious diversity of students.” Likewise with “pedagogy and resources in teaching students, and in choosing the best learning resources for the class, and with the types of help I can provide my students.”

With most respondents (N=112 or 36.1%) coming from big schools, it is concluded that teachers’ flexibility is also based on school size since big schools are where the district offices of the Department of Education are situated providing these schools with more technology capability, internet access, and LGU donations of gadgets and internet load for teachers and students.

Significant Differences based on Teachers' Profile Variables of: Sex, Age, Civil Status, School Type, Location, and Size, and their ICT Adeptness

Based on **Sex**, **Significant** differences are seen in the teachers' statements of: "use of web conferencing or video chat to communicate with my students on assignments, projects and other course requirements; use of online library resources; creating podcasts for their lessons; and reading and commenting on blogs created by other teachers."

These study findings lead to the conclusion that the mostly female (N=252 or 81%) respondents are "**Always ICT Adept.**"

As to **Age**, **Significant** differences are seen in the teachers' ICT adeptness in such statements as their use of: "social media to find information; mobile phones to access study-related information on the internet; and web conferencing or video chat to communicate with my students on assignments, projects and other course requirements."

With most of the teachers being in the age group of 21-30 (N=154, or 49.5%), this study concludes that age is a factor in ICT-adeptness of teachers, the younger the teacher, the more ICT adept he or she is.

As to **Civil Status**, there are **No Significant** differences seen whether the teachers are single (N=161, or 51.8%) or married (N=149, or 47.9%). The study concludes that the study teacher respondents are ICT adept whatever his or her civil status is. Again, this is attributable to the many webinars and seminars that the DepEd has been providing its teachers, as well as the DepEd Commons site from where teacher resources for all subjects in Basic Education may be downloaded directly.

Based on **School Type** (86.8% Public, or 4.8% Private, 8.4% Others), only with the statement "I create audio/video materials and share them with my students as part of their studies" wherein a **Significant** difference is seen. The study conclusion is that the predominantly (N=270 or 86.8%) Public School teachers are "**Always ICT Adept.**"

As to **School Location**, a **Significant** difference is seen in the following statements on the teachers' use of: "internet search engines to find information; email for communication; social media to find information; social networking sites for group work activities as part of my teaching strategies; web conferencing or video chat to communicate to my students on assignments, projects and other course requirements." It is concluded that the mostly Urban (N=162 or 52.1%) are "**Always ICT Adept.**"

With regards to **School Size**, a **Significant** difference was seen in the teachers use of: "internet search engines to find information; social media to find information; mobile phones to access study-related information on the internet; and reading and commenting on blogs created by other teachers." It is concluded that the teachers (N=112, or 36.1%) from the mostly big schools are "**Always ICT Adept.**"

The main conclusion forwarded by Tables 5.3 to 5.5 is that teachers coming from mostly big public schools in urban areas are more ICT-adept than other teachers.

Based on these conclusions, presented are the following recommendations:

1. A more equitable distribution of teachers based on their profile variables be taken by future researchers to decrease possible biases.
2. With teachers found to be "Only Flexible" (means of 3.0) in the number of times set for graded student interaction in the classroom; setting a flexible tempo and pace of study for students in the classroom; and flexibility in the manner of providing theoretical orientation for the course; it is recommended that not just academic requirements but the basic education curriculum be reviewed and the Most Essential Learning Competencies (MELCs) be continuously implemented.

3. It is recommended that the best practices of the Department of Education and its partners and stakeholders started during this pandemic be continued most especially based on the study's conclusion that teachers from the public schools (N=270, 86.8%) have been found to be "Always ICT Adept."

4. The Department of Education may want to refer to the significant differences seen in the Flexibility of Teachers based on their Sex and Civil Status, as well as the ranking and placement of teachers based on the School Location and School Size when it comes to its recruitment practices.

5. Although significant differences are seen in the teachers' profile variables of sex, age, civil status, school type, location and size, the study's overall conclusion that the Teachers are Always ICT Adept is very encouraging. The study's overwhelmingly positive results provide acknowledgement and validation that Teachers are very flexible and highly ICT-adept and ready for continuing excellent performance for the Filipino youth in the bring future for the Now Normal.

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