

Exploring Teachers' Readiness in Coping With The Challenges Of Covid-19 Pandemic: Basis For Academic Transition Program

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ABSTRACT

The increasing demand for educational transformation caused by the fast-facing technological development was heightened by the COVID 19 pandemic situation. The integration of technology in teaching modalities was considered to address issues especially the utilization of the internet as a tool to deliver the lesson to students. However, these transitions in the educational system have confronted educators to a greater challenge concerning their competencies in the utilization of ICT driven pedagogies to ensure the quality and standards of education (UNESCO, 2018). Blended and other alternative modes of learning often included additional preparation time and instructional elements that can deliver necessary information to students in a flexible condition (UNESCO & IESALC, 2020).

In relation to this challenge, a research study was designed to provide a representation of the status of 200 sample respondents from selected cities in the Province of Cavite as regard the teachers' capability and skills as they cope with the current challenging educational demands to effectively adapt to the changes and reshape the educational system. The result of the study showed that teachers have flexible and student-focus teaching style, highly motivated to engage in an online learning system, and have good time management practice. Based from these results, other competency areas that require additional training can be identified given the three important dimensions of readiness for online teaching as expounded in the study.

Keywords

academic transition, teaching modalities, teachers' readiness, flexible learning

Introduction

The increasing demand for educational transformation causes by the fast-facing technological development was heightened by the COVID 19 pandemic situation. In December 2019, the infectious disease was first reported in Wuhan City of China (Hua & Shaw, 2020). It immediately spread to many countries and territories and led to a global public health emergency declaration. As of March 30, 2020, over 280 million people in Europe were lockdown; 150 million in the United States; 1.3 billion in India (Lippi et al., 2020); and 57 million people in the Philippines (Kodaka, 2020). Academic institutions were greatly affected, as classes, graduation ceremonies, and other related activities were canceled (Al-Taweel et al., 2020). It interferes with the normal delivery of classes in various institutions affecting more than 60 percent of the world's learners (Lagakos, 2020).

The integration of technology in teaching modalities was considered to address these issues, especially the utilization of the internet as a tool to deliver the lesson to students. Online technologies can serve as a significant tool to achieve equity, accessibility, flexibility, and utmost

opportunities in education (Gulati, 2008). It provides a flexible learning environment by enabling the learners to acquire information through asynchronous education (Dogruer et al., 2011). However, these transitions in the educational system have confronted educators with a greater challenge concerning their competencies in utilizing ICT-driven pedagogies to ensure the quality and standards of education (UNESCO, 2018). To lessen the impact, academic institutions behaved differently and identified various alternatives for teachers, students, parents, and management (Dawadi et al., 2020). The educators perform a significant role in managing the pandemic's impact by enhancing their knowledge and capability in applying various teaching modalities and empowering learners. It is not limited to the technical issues in online learning environment adaptation but rather a pedagogical and instructional challenge to meet the demand of 21st-century teaching skills (Ali, 2020). Preparing learning materials and assignments for the subjects requires additional work (Basilaia & Kvavadze, 2020).

Teachers in various fields are accountable for ensuring excellence and quality standards in

achieving the current generation's professional qualification requirements (Marrero et al., 2010). Blended and other alternative modes of learning often included additional preparation time and instructional elements to deliver necessary information to students in a flexible condition (UNESCO & IESALC, 2020). Concerning this challenge, this research was conducted to provide information on teachers' capability and skills to effectively adapt to the changes and reshape the educational system. The study results will be beneficial for educators in identifying the competency areas that require additional training and evaluate the three important dimensions of readiness for online teaching. It can serve as a basis for finding innovative ways to use digital technologies through the identified instruction mode and distance learning material considered in the study.

Literature Review

Education during COVID-19

In response to the novel corona pandemic, more than 100 countries had implemented national school closures on March 18, 2020 (Viner et al., 2020). It is equivalent to 80% of the world's enrolled students. The recent modeling studies on coronavirus predicts that school closures alone would prevent only 2 to 4 percent of deaths (Russell et al., 2020). On the contrary, an immediate impact on children and youth might happen such as loss in learning and increase dropout rates (Saaverdra, 2020).

The majority of the academic institutions' learners are from Generation Z and Generation Alpha who have grown up in a globalized environment. This pandemic crisis has explicated the need to upgrade the teaching modalities to better prepare our young learners for what the future might hold. The World Economic Forum (2020) had identified four ways to change the way of educating future generations. It includes educating citizens in an interconnected digital world and technological advancement, teaching the necessary skills for the future, and redefining educators' role in the delivery of quality education.

Shifting to Online Learning

The pandemic crisis strikes at a point when most education systems are not prepared for the world of digital learning opportunities (Schleicher, 2020). In higher education, many universities and colleges have recalibrated the assessment mode using online evaluation and testing tools that are considered new for teachers and learners, and assessments have a larger probability of acquiring measurement error than usual (Burgess & Sievertsen, 2020).

In an article written by Martin (2020). He had identified five important keys that educators must take into account when delivering online instruction. These include explicit and well organize online instructions that provide unconventional online learning activities. Second is excellent content that is relevant to the learner's level of knowledge and skill. He also takes into account the importance of motivation to keeps the learner engaged and on track. The online teacher-student relationship must also be considered, it is advisable to maintain contact with the student through various platforms such as online learning management system platforms, video, email, blogs, and instant group messaging site. Lastly is to ensure good mental health by providing the students' pertinent support and professional referrals.

Methods

The study emphasizes the three important dimensions of teacher readiness on flexible teaching modalities: teaching style, motivation, and time management. Teaching style refers to teaching approaches, principles, and strategies applied by the teachers to impart knowledge and information to students. Teachers' motivation also plays an important role in teaching. According to Budi Utomo (2018), teachers' motivation is crucial to be an effective educator. Motivated teachers are committed to influence the students and integrate learning successfully. Time management was observed to have greater importance during the educational system's transition from traditional to flexible learning mode. It is important for the teaching to be able to productively cope with the new methods of teaching.

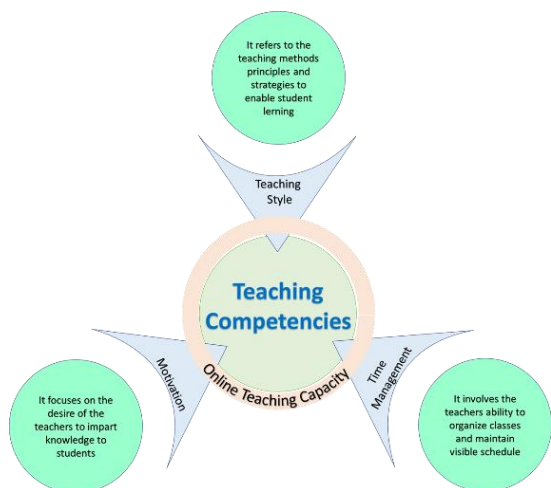


Figure 1. Online Teaching Readiness Framework

Methodology

The study was conducted in selected cities in Cavite. A descriptive research design was utilized to analyze teachers' readiness to face sudden changes in teaching modalities. Descriptive statistics were employed to describe the demographics, academic, and professional profiles of the participants. Moreover, the training needs assessment was conducted using the Likert scale questionnaire.

Population and Samples. The participants of the study were obtained from teachers in basic and higher education programs. The samples were collected consisting of 200 respondents and collected from the participants through the electronic survey method.

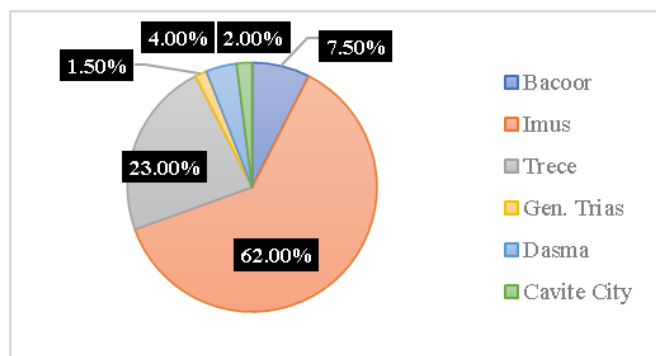


Figure 2. Distribution of Respondents

Research Instrument

An electronic survey questionnaire was utilized as the most appropriate data collection technique for the study. After drafting and developing the

questionnaire, the items were evaluated and reviewed by the researcher. Some parts of the questionnaire in the analysis of teachers' readiness were adopted from the readiness survey instrument formulated by Mercado (2008) and modified according to the aspects required in flexible learning modalities of the current situation. The questionnaire was divided into three major parts namely: respondent's profile, online teaching capability, and teachers' readiness assessment.

Likert Scale: The Likert scale method is a reliable way to apply the quantitative measure to qualitative variables. In the study, this method was used to evaluate the teachers' readiness in terms of teaching style, motivation, and time management.

Results and Discussion

Online Teaching Capability

In evaluating the teachers' online teaching capacity, the study determines the extent of internet usage of the participant on various gadgets. It was evident that the participants always prefer to use a cellular phone in accessing the internet with a weighted mean of 4.73 (SD = 0.56). They often used laptop (\bar{x} = 4.02, SD = 0.97) but rarely utilized the desktop and tablet with weighted mean of 2.29 and 2.16 (SD= 1.23, 1.18) respectively.

The study also investigates the teachers' capacity to provide various instructional materials and methods online. The result shows that participants have agreed that they can provide the various instructions with a weighted mean of 3.91 (SD=0.86). The highest rating was observed using online handout (4.18, SD = 0.71) and online assignment (4.12, SD = 0.76). On the contrary, the participants have a lower rating on the synchronous instruction mode, such as virtual classes and real-time discussion board weighted mean of 3.59 and 3.64 (SD=0.99 and 0.90), respectively.

The assessment of teachers' computer and internet skills shows that the participants have excellent knowledge of basic computer software and hardware components. Moreover, the participants also have an excellent rating on typing, downloading, and installation of software. On the

other hand, a good rating was observed on file compressing and troubleshooting skills.

Teachers Competency Assessment

The teachers’ competency assessment in the study focuses on three major competency areas which are teaching style, motivation, and time management.

Teaching style. Based on the result, the participants have strongly agreed on performing flexible, student-centered, and effective teaching methods and strategies with an average score of 4.53 (SD = 60). The highest score was observed to emphasize critical thinking and problem-solving activities as important factors that students must develop teaching. On the contrary, the participants have the lowest score on working online with a weighted mean of 4.11 (SD = 0.855).

Motivation. The result evidently shows that the participants have the motivation and desire to impart knowledge to their students with an average score of 4.19 (SD =0.82). They have the

highest rating on their commitment enthusiasm to teach with a weighted mean of 4.78 and 4.67 (SD = 0.46 and 0.52), respectively.

Time management. The result shows that participants are very much prepared to allocate workload and maintain the schedule as teachers with an average score of 4.39 (SD= 0.73). The highest score was observed in setting the goals before starting a task with a weighted mean of 4.08 (SD =0.91).

Comparative analysis of online teaching capability and readiness of the participants when grouped according to profile

Sex. The result reveals a significant difference in the computer and internet skills of participants when grouped according to profile. The male participants were more skilled than female in terms of computer and internet competency aspects of online teaching. However, there was no significant evidence that there is a significant difference in their online learning readiness.

Table 1. Analysis of the difference in online teaching capability when group according to sex

INDICATORS	MANN-WHITNEY U	Z	P-VALUE	VERBAL INTERPRETATION	REMARKS
TEACHING CAPABILITY					
Flexible mode of Instruction	4364.500	-.689	.491	Not Significant	Accept the Null Hypothesis
Computer Skills	3509.000	-2.882	0.00	Significant	Reject Null Hypothesis
Internet Skills	3843.000	-2.024	0.04	Significant	Reject Null Hypothesis
TEACHERS READINESS					
Teaching Style	4553.500	-.208	.835	Not Significant	Accept the Null Hypothesis
Motivation	4550.000	-.218	0.83	Not Significant	Accept the Null Hypothesis
Time Management	4243.500	-1.017	0.31	Not Significant	Accept Null Hypothesis
Teachers Readiness	4491.500	-.366	0.71	Not Significant	Accept the Null Hypothesis

Civil Status. The findings indicate a significant difference in participants' internet skills when grouped according to their civil status. The single participants were observed to be more skilled among others. Furthermore, there was no

significant evidence that there is a significant difference in their flexibility in the mode of instructions, computer skills, and readiness for online learning.

Table 2. Analysis of the difference in online teaching capability when group according to civil status

INDICATORS	CHI-SQUARE	DF	P-VALUE	VERBAL INTERPRETATION	REMARKS
TEACHING CAPABILITY					
Flexible mode of Instruction	1.617	4	0.806	Not Significant	Accept the Null Hypothesis
Computer Skills	9.405	4	0.052	Not Significant	Accept the Null Hypothesis
Internet Skills	9.957	4	0.041	Significant	Reject Null Hypothesis
TEACHERS READINESS					
Teaching Style	.851	4	0.931	Not Significant	Accept the Null Hypothesis
Motivation	.754	4	0.945	Not Significant	Accept the Null Hypothesis
Time Management	1.499	4	0.827	Not Significant	Accept the Null Hypothesis
Teachers Readiness	.612	4	0.962	Not Significant	Accept the Null Hypothesis

Educational Attainment. The data shows a significant difference in flexibility in the mode of instruction and computer skill of participants

when grouped according to educational attainment, and there was no significant difference in their readiness for online learning.

Table 3. Analysis of the difference in online teaching capability when group according to education

INDICATORS	CHI-SQUARE	DF	P-VALUE	VERBAL INTERPRETATION	REMARKS
TEACHING CAPABILITY					
Flexible mode of Instruction	12.326	4	0.015	Significant	Reject Null Hypothesis
Computer Skills	9.568	4	0.048	Significant	Reject Null Hypothesis
Internet Skills	5.803	4	0.214	Not Significant	Accept the Null Hypothesis
TEACHERS READINESS					
Teaching Style	6.945	4	0.139	Not Significant	Accept the Null Hypothesis
Motivation	6.190	4	0.185	Not Significant	Accept the Null Hypothesis
Time Management	4.051	4	0.399	Not Significant	Accept the Null Hypothesis
Teachers Readiness	6.034	4	.197	Not Significant	Accept the Null Hypothesis

Type of Institution. Results have shown that there is no significant difference in teachers' online teaching capability in terms of flexible mode of teaching, computer, and internet skills.

However, there is a significant difference observed in the teaching style between basic and higher education teachers.

Table 4. Analysis of the difference in online teaching capability when group according to type of institution

	MANN- WHITNEY U	Z	P- VALUE	VERBAL INTERPRETATION	REMARKS
TEACHING CAPABILITY					
Flexible mode of Instruction	4264.000	-1.470	.142	Not Significant	Accept the Null Hypothesis
Computer Skills	4423.000	-1.081	.280	Not Significant	Accept the Null Hypothesis
Internet Skills	4309.500	-1.363	.173	Not Significant	Accept the Null Hypothesis
TEACHERS READINESS					
Teaching Style	3998.500	-2.128	.033	Significant	Reject Null Hypothesis
Motivation	4710.500	-0.362	.717	Not Significant	Accept the Null Hypothesis
Time Management	4181.500	-1.709	.087	Not Significant	Accept the Null Hypothesis
Teachers Readiness	4298.000	-1.383	.167	Not Significant	Accept the Null Hypothesis

Conclusion

Online learning is one of the arising solutions to face educational challenges during the COVID-19 pandemic, and the study shows that teachers were observed to have the capability to engage in a flexible learning style of teaching with the aid of technology. They can engage in online teaching. On the contrary, the result showed that teachers are more capable of developing asynchronous teaching materials than synchronous ones.

The three-dimension of online teaching readiness were equally essential in the implementation of the new teaching modalities. The result showed that teachers have a flexible and student-focus teaching style. They are also highly motivated to engage in an online learning system for their convenience. Moreover, the teachers were observed to have good time management practice, which is also deemed an important factor in online teaching.

The male participants were more skilled than the female in terms of computer and internet skills in online teaching, and the young and single generation are more knowledgeable when it comes to the internet. The educational attainment of the teachers also contributes to their teaching flexibility and computer competencies.

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